Panayiota Pyla

Constantinos A. Doxiadis and his Entopia:

Promises of a moderate utopia and a humanized modernism

Abstract

This essay summarizes the history and politics of Constantinos Doxiadis's urban vision which flourished internationally after the Second World War, reinventing architects planners as scientists, technocrats, and development experts, while renegotiating modernism's rationalism and individualism. Focusing on "entopia," Doxiadis's vision of an ideal urban fabric, the essay exposes the social and formal ambitions of Doxiadis's theory of Ekistics, and analyses his firm Doxiadis Associates' alignments with new postwar discourses on international socioeconomic development and environmental management. Entopia provides the basis for a critical reflection on Doxiadis's version of modernism, his emphasis on multi-disciplinarity, and his conceptions of global "harmony," all of which resonate with current socio-political, urban and environmental predicaments.

Key-words Doxiadis — Entopia — Development

Constantinos Doxiadis (1913-75) launched his architectural and planning practice in the mid-1950s, collaborating with international funding institutions and national governments to design housing complexes and urban plans, larger master plans and infrastructures around the globe¹.

By the late 1960s, his Athens-based Doxiadis Associates opened branches in the USA, Africa and the Middle East, and became famous for its distant and methodically organized campaigns. Doxiadis himself was hailed in popular publications such as *Life* Magazine and *The New Yorker* as a "busy remodeler of the world" or a "world designer" who changed the lives of millions (Life 1966, Rand 1963). A photograph taken towards the end of his life is guite emblematic of Doxiadis's life-long attitude towards modern architecture and urbanism. The photograph shows Doxiadis pointing at a drawing that depicts an ideal "Mediterranean Metropolis", approximately around 2100 AD, and the didactic posture exposes his own self-image as a modernist hero outlining definitive solutions aimed at contemporary urban predicaments. Much like is modernist predecessors, Doxiadis proudly assumes an objective distance, yet the image also hints at the particularity of Doxiadis's ambition: Having unveiled his practice between the 1950s and '60s, when earlier modernism had already come under scrutiny, Doxiadis projected a different visionary ethos. Unlike earlier modernist heroes such as Le Corbusier or Ludwig Hilberseimer who gazed at cities from Godlike altitudes, Doxiadis was "closer to the ground," both literally (in terms of the photo's vantage point) and metaphorically.

This essay analyzes the ways in which Doxiadis pursued an alternative modernist strategy for the Post-WWII era, advancing an urban vision that highlighted the importance of the architect and planner as agents of global



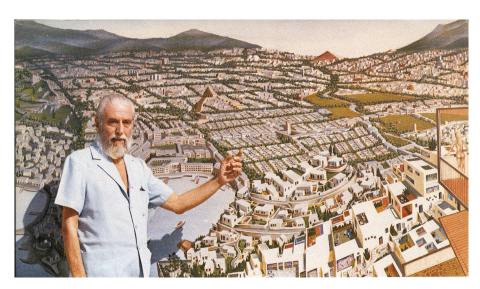


Fig. 1
Photo of Doxiadis in front of "entopia".

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reform, while renegotiating the excesses of individualism and rationalism. The following pages analyze Doxiadis's emphasis on the multi-disciplinary considerations of the design process, and the global scale of urban issues that would allow the architect to challenge the individualism and unpredictability of the signature-designer and to connect architecture with brave new global causes that emerged in the postwar era, namely, technoscientific progress, socioeconomic modernization, and soon or later, environmental protection.

Architects redefined

Doxiadis's architectural and planning proposals for a better future were invariably in contrast with post-WWII urban problems, which he meticulously highlighted in his writings and speeches. A prolific writer and charismatic speaker, he analyzed urban predicaments at United Nations and World Bank meetings, at prestigious American and European Universities, on radio shows in various countries, and in professional journals and popular magazines, often warning about the chaotic expansion of cities and an imminent destruction of the human habitat. He articulated two major causes for this global urban crisis. On the one hand he blamed the postwar development apparatus (international institutions and governmental organizations which embraced the drive for socioeconomic development right after the WWII, professing a need to integrate the non-industrialized world into the postwar economic and political structure of the global North) for placing its emphasis on economic criteria rather than the physical environment. On the other, Doxiadis also blamed architects and planners for failing to respond to the burgeoning tasks of postwar reconstruction and international development (Doxiadis 1945, Doxiadis 1963). What was needed, Doxiadis argued, was for architects to reconceptualize the architectural profession and to reinvent themselves as global planners and development experts, who could lead the effort to modernize the planet (Muzaffar 2012, Pyla 2013b). His first book (Doxiadis 1963), Architecture in Transition was unveiling precisely this point. The new architect/development expert that Doxiadis envisioned had to be at once more ambitious and more realistic. Ambitious, in the sense that one had to think big—taking architectural issues to a planetary scale, to consider interdisciplinary issues, and to project long-term solutions. Realistic, in the sense that one had to steer clear of utopian visions, rejecting the individualism of artistic self-expression and recognizing the inevitability of contemporary global



socioeconomic trends.

Let us examine Doxiadis's redefinitions of the architect in more detail, starting with his call to enlarge the scope of the profession. Having established himself as a player in the scene of international development consulting (after being a coordinator for the Marshall Plan aid in Greece, he takes part in United Nations and World Bank Technical Assistance missions, and he becomes consulant to several newly established nationstates in the postcolonial world), Doxiadis proposed that the architect collaborates more extensively and systematically with scientists, technocrats, state powers, and international development institutions. This proposal echoed the Taylorist ethos of the Athens Charter, the 1933 manifesto of modernist urbanism that advocated for a rational and efficient urbanism to be carried out by a central state power under the guidance of expert planners². Doxiadis embraced the social optimism of this technocratic model which appeared even more appealing after the Second World War, when the daunting tasks of reconstruction, rehousing, and urbanization in many parts of the globe increased the need to objectify, chart and analyze needs, resources, and social relationships.

Doxiadis was also critical of earlier modernist definitions of the architect in other respects. Much like Sigfried Giedion himself who, by 1941 had called for healing the split between "thinking and feeling" (Giedion 1941), Doxiadis also criticized prewar CIAM's mechanistic conception of function, by speaking for the need to fulfill "the totality of human needs" (Doxiadis 1963, p. 24). Doxiadis's efforts to transcend functionalism did not follow those post-WWII trends that turned to symbolic representations or aestheticism (e.g., Utzon); and did not reject the professional disciplines of architecture and planning in favor of the vernacular (e.g., Rudofsky). Instead, Doxiadis joined the ranks of those postwar architects who tried to humanize modernism by establishing new alignments with the conceptual framework of science. To this end, Doxiadis developed an altogether new science of his own. He called it "Ekistics" and he characterized it as "the "Science of Human Settlements" aimed to coordinate the input of economics, geography, sociology, anthropology, and other disciplines, in order to better address extra-technological and non-functionalist concerns in the design and building of the physical environment. At a time when the social sciences were flourishing, Ekistics tried to systematize the connections between architecture and planning on one hand and psychology, sociology, and anthropology on the other, searching for clues on how to reconcile functionalism with humanistic concerns, and how to amend the rationalization of architectural production.

Ekistics' multidisciplinary ethos was captured in a diagram that became like a trademark for Doxiadis Associates. Titled "Ekistics and the sciences directly contributing to it," the diagram represented Ekistics as a science in its own right, with "economics," "social sciences," "political sciences and administration," "technical disciplines," and "cultural disciplines" contributing to it. The idea of incorporating the input of social sciences to increase architecture's social instrumentality was of course not uncommon in postwar architectural discourse; social scientists themselves initiated such collaborations in an effort to grasp the impact of the physical environment on human behavior and social patterns. Ekistics, however, aspired to bring these interdisciplinary collaborations to the domain of physical planning; and the ultimate goal was "Development," the bigger circle circumscribing all processes, as though it allowed nothing to fall outside its



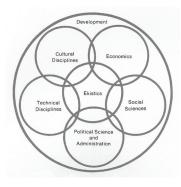


Fig. 2
Doxiadis's diagram, illustrating Ekistics' multidisciplinary ethos (Archive Files 33840).

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Fig. 3
A photo from the first Delos
Symposium in 1963, with
Doxiadis and Buckminster Fuller
(Photographs 31253).

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logic! Meanwhile, the diagram's static and symmetrical relationships may have ignored the complicated incommensurabilities among disciplines. Nonetheless, Doxiadis addressed these problems by supporting a dialogue among different disciplines through the organization of the Delos Symposia: annual week-long events (1963-75) that were initially modeled after CIAM meetings, although the invited participants belonged to the most diverse backgrounds in terms of geographic origins and disciplines.

Those meetings moved together with the work at the Doxiadis's office and his overall activity, not necessarily having an immediate correspondence with the theories and methods of Ekistics, or DA's enterprise (Wigley 2001, Richards 2012, Pyla 2015, Shoshkes 2013).

Apart from the claims in terms of scientific authority, what made Ekistics and Doxiadis's arguments about architecture and development particularly palatable to international institutions and national governments was the promise that Ekistics could build interventions more amenable to local cultural preferences. Even if Ekistics was believed to embody scientific truths with transnational applicability, Doxiadis also advocated the need to respond to each locale's needs and conditions. To this end, Doxiadis Associates' operations in different countries were accompanied by field research and surveys on local climatic conditions and construction methods, demographic distributions, material choices and costs, or the thermal benefits of building elements. Very often, members of Doxiadis Associates would also produce diaries and sketches, abundant photographs and fantastically detailed maps which demonstrated considerable sensitivity to the spatial qualities of streets and spaces, the role of climate and light or the details of construction. Nonetheless, these manifestations of the locale had to be reconciled with an overall preference for formal regularity and economy of means, not to mention DA's contempt for monumental and sculptural extravagance³. This tension between the particularity of the locale and DA's commitment to rational ordering runs through the entire work of Doxiadis Associates (DA) around the world. The success of Doxiadis in securing commissions in so many different contexts often stems from the way he finessed this tension, through his visionary rhetoric, but also through his



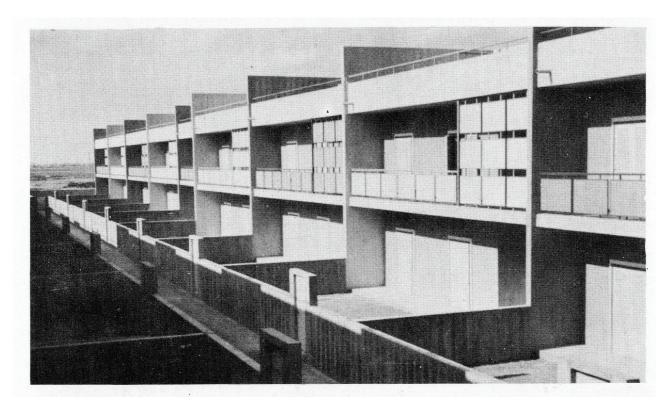


Fig. 4
Doxiadis Associates housing in Baghdad, 1958 (Archive Files 35839).

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interpersonal skills as well as his own quasi-western identity⁴. Current scholarship has sometimes seen these processes of tailoring of the locale with the suspicion of orientalizing strategies (Pyla 2008, Daechsel 2015). Yet one can still discover a variety of nuances in DA's interventions that compare favorably to top-down nation-building and modernization interventions of mid-20th Century (Pyla 2013c).

Cities re-ordered

As Doxiadis moved comfortably in many development circles, what seems to have distinguished him from many other fellow "experts" was his emphasis on the sepatial and physical dimension of socioeconomic development, namely, urbanization and the overall transformation of the physical environment. Influenced by postwar t\rends in regional planning that tied urban industrialization to economic growth, Doxiadis accepted the expansion of cities as irreversible, and also recognized the modernization potentials of rural development (Phokaides 2018). Meanwhile, Doxiadis emphasized the rational and orderly transformation of the physical environment (rather than industrialization) as means to modernization. His concept of "dynapolis"—a city that grew dynamically, with the passage of time—was one of many neologisms aimed to reconceptualize urban growth. Similarly, his regional plans (eg., the structuring of the Volta River Triangle), or his outlines for rural development in Africa, aimed to guide a rational and orderly transformation of the physical environment (Petros 2018, 2013, Provoost 2015, Pyla, Papadopoulos 2014). All these planning strategies were based on Ekistics' principles on the intertwinement of buildings and communities with transportation and communication networks, social patterns, and natural landscapes. Furthermore, just as they surveyed the locale to highlight detail and peculiarity would also support macroscopic research on larger regions, even in the absence of official commission or external funding, in order to highlight Ekistics concern with larger urban conglomerations. Doxiadis spoke of Ekistics as a science, not of architec-





Fig. 5
One of the covers of the Ekistics Magazine (December 1974), which demonstrates the five elements that constitute Ekistics' definition of human settlements.

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ture or planning, but of "human settlements" precisely to encompass the multiplicity of scales of the built environment. The planning for restructuring Baghdad in 1958 was cast in the context of a national housing program for Iraq; the "Detroit area project" was inserted in the larger picture of a "great lakes megalopolis"; or the design of Pakistan's new capital Islamabad, in 1961, was cast in the global network "ecumenopolis"—a coordinated network of cities (and natural areas) envisioned by Doxiadis himself as covering the entire globe by the end of the twenty-first century (Pyla 2009, Katsikis 2013). All these projects were in a way anticipating the social and formal vision of "entopia" as it will be explained below.

In Doxiadis's rhetoric, the restructuring of human settlements was a matter of a realistic acceptance of the dominant postwar trends; the challenge then, for the architect/planner, was not to halt metropolitan development, but to manage growth so as to temper the effects of urbanization and the impact of modernization (Doxiadis, Douglass 1965). Of course, Doxiadis's "realistic" compliance with dominant socioeconomic trends, implied specific political preferences. Even if Doxiadis would frame his enterprise as apolitical and technocratic, his projects aimed to facilitate the integration of the so called "underdeveloped" countries into the postwar economic and political structure favored by the US government, the United Nations, and other development institutions. Similarly, his rhetoric on the role of the architect (discussed above) and the overall logic of "growth" in Ekistics' analyses did allude to capitalist expansion. All these are of course intertwined with the geopolitical antagonisms of the cold war, even if they also maintained their own nuances, as we will see below.

One case in point to show the extent of Doxiadis's alignment with the discourse on international development in the 1960s, is the long term character of his plans, that addressed time spans of centuries into the future. The short-term development programs of the previous decade of the 1950s (of the decade before the 1950s) had already proven to have failed to lessen the 'North-South' gap. Unlike the war-devastated countries of Europe, which were able to achieve an impressive momentum of growth in half a decade after the war, developing countries were, by the 1960, believed to require long term planning, and development experts were increasingly shifting their focus to what Barbara Ward (a well-known British economist and one of the closest friends and collaborators of Doxiadis, who attended his Delos Symposia) had called "a wiser sense of development in half a century" (Ward 1966). The long term planning in Ekistics' research programs validated and reinforced the tendency to extend the time frame of development.

The idea of the plausible "Mediterranean Metropolis", to which Doxiadis was pointing in the photo mentioned at the beginning of the essay, was a manifestation of an "entopia"—a term coined by Doxiadis—to distance his vision from utopia's unrealizable aspects, while holding on to visionary ideals. Doxiadis had understood modernist urban utopias as describing "not goals to be attained but goals to dream of" (Doxiadis 1968a, p. 56); and with a play on the etymology of utopia (ou topos means "no place") Doxiadis created the neologism, "entopia", which, as he explained, meant "in place of" precisely because his urban vision striking a balance between ambition and realism. Unlike Radiant City or Broadacre city, which were, in his words, "utopias which cannot or should not be implemented for various reasons", his proposition combined "reason with dream" (Doxiadis 1968a). In his mind, the proposed "Mediterranean Metropolis" organized



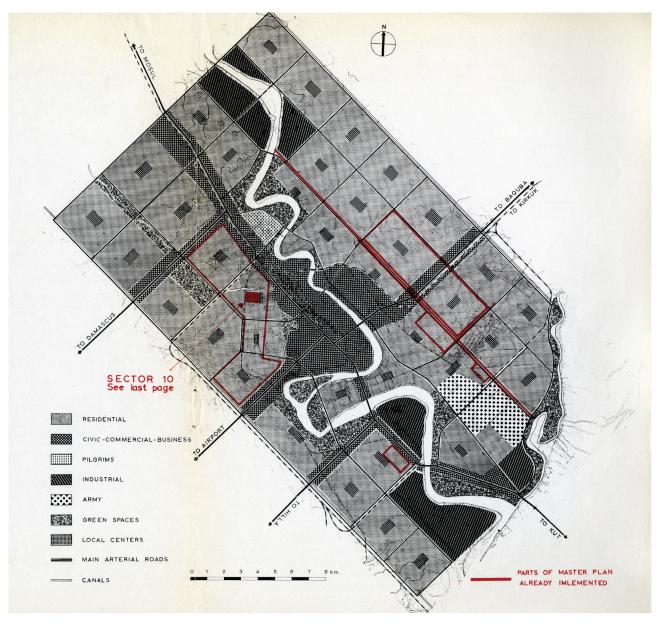


Fig. 6
DA plan for Baghdad (DA
Monthly Bulletin, n. 9, Jannary
1960).

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the urban fabric according to an aesthetic he favored; it hinted to the alignments that he wanted to make in terms of socioeconomic visions, even if it did not fall into their logic as we will see below.

The notion of "entopia" indeed summed up the design and planning principles Doxiadis advocated. That rendering was produced by Doxiadis Associates and it represented a "harmonious physical environment" that attempted to temper the effects of industrialization and modernization and preserve human scale in cities. What did "harmony" mean? Much like the plans for Baghdad, Islamabad, and elsewhere around the world, an harmonious urban environment, for Doxiadis, meant emphasis of low densities, avoidance of tall sculptural buildings, and overall, a rather anti-urban attitude, favoring a sprawling metropolis. This aesthetic of order gave prominence to the readability of the plan and it will be pushed to its limits in the future Mediterranean Metropolis by the underground placement of modern transportation means of transport, highways would be replaced by what Doxiadis called "deepways". Factories were also to exist underground, either under public installations or below green open spaces. It is as though harmony would be achieved by placing all intrusions of mechanization out of sight! Apparently, factories were understood as purely utilitarian ele-



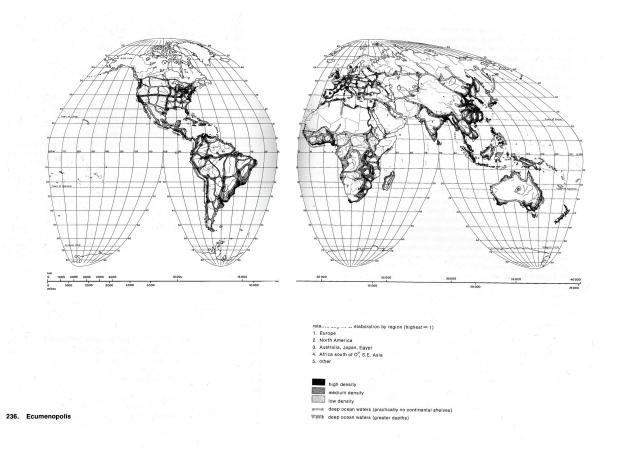
ments, and not as places inhabited by countless workers, and this is ironic in that it echoed the rigid logic of zoning of the Athens Charter, that had not acknowledged the multiplicity of uses in spaces of "work" or "circulation". Another irony in Doxiadis's Mediterranean Metropolis is the immense costs of the energy that would be required to keep the intrusions of mechanization out of sight and transfer roads and cumbersome mechanical systems underground: was this a fair price to pay for creating visually orderly cities? (Doxiadis 1968b).

Society harmonized

One may refute the above critique by proposing that, despite Doxiadis's proclamations that he would keep a distance from earlier modernist utopias, his "entopia" was not meant to be taken literally, but rather, it served the purposes of a radical manifesto: to critique the present and shock people into action. Even if one accepts entopia as such a conceptual tool, however, one still wonders about its aesthetic of order and the ways this aesthetic was also transferred to the logic of social ordering. The rendering showed a sprawling metropolis that was organized as a blend of communities obeying to common zoning laws. Some communities, such as the ones on the hill to the left, were old communities that would be preserved, apparently out of respect for traditional patterns of living; others were composed of new buildings, apparently for purposes of economy and efficiency. Most communities were open to all religious groups, whereas some were religiously homogenous, ostensibly to accommodate distinct religious needs. This unsophisticated inclusionary strategy is perhaps best exemplified by the incorporation of a nudist community right to also accommodate those

Fig. 7
DA plan for Ecumenopolis (C. A. Doxiadis, 1975, Building Entopia, p. 234, fig. 236.

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special interests. All in all, entopia's social ordering advanced an uncomplicated version of pluralism which assumed that social tensions would be resolved, and even though each community would have "its own special character," all would be "integrated into a harmonious whole" (Doxiadis 1966, Doxiadis 1974). Ultimately, "Entopia," was the epitome of Doxiadis' optimism for a peaceful egalitarian future where ethnic, racial and gender struggles would be perceived through the prism of a cosmopolitan idealism that rendered politics obsolete.

Environment balanced

Entopia's aesthetic of order, along with the rhetoric of serenity and harmony that accompanied Doxiadis's description, also hinted at his environmental vision. As environmental concerns were becoming widespread by the late 1960s, Doxiadis also began to reconceptualize his long standing effort to contain and manage urbanization and industrialization, in terms of environmental exigencies. In light of environmental problems, entopia promised to restore the "balance of the human environment," and to reclaim the physical qualities of past settlements. The rhetoric on balancing nature and society, that Doxiadis advanced, especially in his last book, Ecology and Ekistics, was quite telling about the way he perceived the environmental problems of the time and their solution.

In Doxiadis's urban vision, the ecological exigency was not tackled with sophisticated technologies, such as those suggested by Buckminster Fullers, the enclosure of cities in domes or the proliferation of geoscope projects; rather, what constituted the builders' ecological task, was the selective recovery of lost physical qualities, their enlightened reorganization, and large-scale dissemination (Martin 1997).

Like social problems, environmental concerns would be tackled through advanced scientific management, and not necessarily with advanced technology. Effectively, the image of a "balanced" urban settlement was just as much an appeal for balancing architecture *itself*, for detaching it from the formal excesses of modernism—extravagantly tall buildings, narcissistic signature designs and techno utopias. Of course, Doxiadis's proposal *also* involved radical technological interventions—for the reshuffling of population and transportation networks, and the creation of enormous underground structures. Yet the resulting settlement entopia had an seemingly low-tech familiarity consistent with Doxiadis's claims to prudence and pragmatism.

Conclusion

The rendering of entopia was a rare mode of representation for Doxiadis, and uncharacteristic of an approach which favored charts and diagrams to communicate its ideas. Yet this drawing succeeded in summing up Doxiadis's role as a champion of middle solutions: At a time when modernism was under scrutiny, Doxiadis attempted to *reform* rationalism, rather than a reject its ethos and principles. And at the time the development discourse was flourishing, Doxiadis attempted to temper its social, spatial, and environmental impact, rather than challenge its economic paradigm. For all of its emphasis on middle solutions, however, Doxiadis seemed committed to the benign possibilities of centralized management with great zeal, and embraced too quickly perhaps, the assumption of that modernization and development would overcome the unequal social contours of either local societies or geopolitical dynamics.



Despite the limitations of his apolitical declarations, Doxiadis's vision centered on an attempt to combine the "best of both worlds": The questioning of early modernist practices, and the consideration of the potentials of scientific rationality; the promotion of socio-economic development and the guarding of the social justice and environmental protection; the consideration of local particularities, and the adoption of supranational concerns. Perhaps even more important was Ekistics' sharp focus on the physical environment as the basis for contemplating the tensions between a global developmentalism and local cultures, in ways that resisted dominant views of globalization as well as sustainability. This is why, Doxiadis's search for a more nuanced approach to global predicaments deserves a fresh look: The history of ekistics can offer a critique to the current valorizations of globalization as a global monoculture of market and information networks; and simultaneously, Doxiadis's thought challenges those sustainable development trends that unequivocally resurrect technoscientific rationality as a definitive solution to environmental exigencies: because despite its pitfalls, Doxiadis was rather astute in identifying the significance of the physical space, and for challenging the economistic views of development and environment.

Notes

¹ This discussion of Doxiadis's Entopia also provides a general overview of Doxiadis's practice, for the purposes of FAM Magazine's "Forgotten and Unknown Architects." For more details on the author's research on Doxiadis see primarily Pyla Pyla (2009), p- 6-35; Pyla (2013), p. 167-189.

² The Athens Charter had drawn on Frederic Taylor's *Principles of Scientific Management* (1911) that trace back to Saint-Simon's proposals for the rational engineering of social life; as such, the Athens Charter captured the technocratic preoccupations of CIAM members in the 1930s. See McLeod, M. (1983). "Architecture or Revolution; Taylorism, Technocracy and Social Change." *Art Journal*, Summer: 132-147.

³ For a detailed analysis of the ways in which Ekistics' methods translated to a specific project see Pyla (2007), Pyla (2008).

⁴As *The New Yorker* insightfully observed, Doxiadis's nationality as a Greek, freed him of the colonial stigma and may have contributed to his appeal to his clients in the global South. For the crucial role Doxiadis's own persona played see also Also the book (in Greek) by Philipples D., Φιλιππίδης, Δ. (2015).

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Panayiota I. Pyla holds a Ph.D. in Architecture from the Massachusetts Institute of Technology (2002) and a Master's of Science in Architectural Studies also from MIT, where she was awarded the Outstanding Graduating Student Award (1994). Pyla received a professional degree in Architecture from Rensselaer, where she was awarded First Prize for design thesis, along with the AIA School Medal (1991). In 2002 she joined the University of Illinois at Urbana-Champaign, as an Assistant Professor teaching courses in architectural design and in the theory of modern architecture-urbanism. From 2006 to present Pyla is at the Department of Architecture at the University of Cyprus. Her essays and research articles appear in several edited volumes and academic journals, including the Journal of Architecturral Education, the Journal of Planning History, and DoCoMoMo.

