



"ECUMENOPOLIS" REVISITED: THE PATTERN OF A GLOBAL CITY

Cristian PAŞCALĂU

Babes-Bolyai University, Cluj-Napoca, Romania e-mail: babelrealm@yahoo.com

Abstract: Nowadays, paradigm shifts and perception of how rapidly information and its provisional technologies expand may offer suitable bases for understanding the worldwide social consciousness that citizens from almost every country develop. On such account, this study focuses on a challenging topic, namely the idea of a planetary megacity. We revisit the concept of *ECUMENOPOLIS*, coined in the late '70s by Greek architect and urban planner C.A. Doxiadis. In addition, we stress some sociological, anthropological, and ethical implications that such a concept opens for discussion. Moreover, we grasp the fractal dimension that ekistics imply, considering the scales and the parameters according to which human settlements are designed. The implications of Doxiadis's project of a planetary city reach far beyond topographic and architectural frameworks, expressing philosophical and semiotic issues, keeping record of the place of man in the natural environment and his transformational work over nature in settling an entire civilization.

Keywords: Doxiadis; urban planning; human settlements; ecumenopolis; ekistics; global connectivity.

Preliminary remarks

Our study revisits, from a descriptive viewpoint, Constantinos Doxiadis's concept of *ECUMENOPOLIS*, by means of bibliographical research. It takes a great deal of effort to understand the intricate design of a global city. In this respect, *ECUMENOPOLIS* requires a multileveled network design, in which planetary space-time perception projects a whole new base for social spatial consciousness. Such an issue grants far more possibilities to understand and express new means for channeling which may be regarded as the most important paradigm shift of our times: moving from an individualistic perspective of things towards a planetary one.

People all over the world feel themselves as a part of a greater community, a planetary one. This change of status is underlined by a change in the way of thinking. The great expansiveness that our planet is nowadays facing may change the entire way in which each individual understands his place in the set of worldview, believes, rules, society, or cultural environment. The perspective of a global city unfolds all these planetary changes from an anthropological perspective and shapes our post-future networks. Undoubtedly, a widespread progression in this direction is more and more open to public perception. Concepts such as globalization, new (economic, political, military, and so forth) world order tend to establish a pattern of continuity and integrative upper-class projections. At this point, the image of ECUMENOPOLIS takes a visionary role into the intricate fabric of the new world order and its connectivity. Therefore, it becomes a key-concept for a prerequisite in any post-human theory. In fact, the concept of ECUMENOPOLIS has already been assumed, in other terms, within debates regarding media and the society of information. For instance, Marshall McLuhan speaks of a "global village" in his popular book *Understanding Media*. Urban planner Constantinos Doxiadis coins such concepts as anthropolis, dynapolis, until reaching the term of ECUMENOPOLIS:

We are moving from the megalopolis to the universal city, where all the great cities of the world will be interconnected in one system, the ECUMENOPOLIS. (Doxiadis 1968, 458)

In direct correspondence to the extensive growth of population, the development of cities is reaching now a climax that may be considered one of the most specific phenomena of our century. This phenomenon leads to a radical change of humanity's vital frame. In the midst of this process of urbanization, a significant role is taken by megacities (Tokyo, Caracas, São Paolo, Rio de Janeiro, Ciudad de Mexico, or Lima). The urban extension is due not only to a steady demographic development, but also to a hyperactive commercial trade and a keen necessity for multiple communication routes among people. This extension has reached a whole new level in the 21st century, by enclosing not only traditional cities, but also entire areas in between. Large surfaces have given birth to what Jean Gottman called megalopolis¹, a giant city formed around a metropolitan area

¹ See, in this respect, Jean Gottman, Megalopolis: The Urbanized Northeastern Seaboard of the United States (New York: Twentieth-Century Fund, 1961), Since Megalopolis: The Urban Writings of Jean Gottman, trans. Robert A. Harper (Baltimore: Johns Hopkins University Press, 1990), and Beyond Megalopolis (Tokyo: The Community Study Foundation, 1994).

from multiple urban nuclei that tend to unite by continuously extending its peripheries and preserving the natural landscapes (fields or forests) areas in between. The population living in those areas has gradually adapted to an urban lifestyle. A megalopolis is a phase of gigantic conurbations (a concentration of industrial cities, commercial and residential centers in which all of them preserve their distinct individuality), emphasizing a continuous string of big cities. Such types of megalopolises are Birmingham – Manchester – Liverpool – Sheffield – Leeds – Bradford, Kobe – Tokyo, Boston – Washington, Amsterdam – The Hague – Rotterdam, among others.

It is not difficult to understand why Doxiadis believed this process of concentration of cities would develop at such an extent that vast regions formed a single urban settlement, without the free spaces of a megalopolis. Calling this city of the future *ECUMENOPOLIS*, he saw its starting point in the North-East of the United States of America. How can be interpreted this trend of urbanization? It is undoubtedly that cities represent a priceless foundation of contemporary civilization. At this point, there is no reason to criticize the modern building of cities, but the way in which they take place. The chaotic rhythm and unsustainable development cannot offer the welfare of cities.

Ed. Bonnefous² stated that rapid urbanization would destroy the natural landscape and have direct repercussions over the cities, by breaking their unity and coherence, by transforming them into heteroclite residential blocks of streets, buildings, and business centers. As urban space expands itself, the city loses its nature and originality. A great part of its inhabitants reach its center only at rare occasions, as they live and work at the peripheries. Nevertheless, this suburban world has become, over the time, predominant. In the USA, for instance, the population migrating from rural territories or neighbor countries was rapidly absorbed in these suburban areas. while the core cities became lost and insignificant. In order to enter Paris, for instance, one has to cover a vast surrounding area, which offers many commercial centers and communication nodes; all wrapped over dozens of miles among home residences. An issue related to the great extent of urbanization is car traffic. In Los Angeles, for instance, in spite of modern highways, two friends living at distant neighborhoods could spend at least two hours until they met. The transportation problem is a primary matter of concern for urban developers:

² Eduard Bounnefous, L'homme ou la nature? (Paris: Hachette, 1971).

We are wrong in many respects when we deal with movement and the city. I will concentrate here on three very basic errors. The *first problem* is that we speak of "transportation." Therefore, we assign the tasks to transportation experts, forgetting that Anthropos does not live by transportation, but by movement. After all, he walks in order to do the most important things in his life; he walks to develop his muscular system, he walks around inside his home, he walks to his bed, he walks to meet his fellow human beings, he even walks to his car. (...) The *second problem* is that the existing transportation networks lack overall coordination. They have not been conceived as integrated systems coordinating the airways with ferry-boats, etc. as they should have been. (...) Our networks are not unified. They are simply connected by auxiliary lines. The *third problem* is that the word "transportation" implies only persons and goods. Thus, we forget the existence of water (clean or otherwise), moving in pipes: of gas, oil and electricity; of the movement of messages; the telephone system; and so forth. As a result, we waste a lot of space and networks. (Doxiadis 1974, 377-78)

In addition, French writer Philippe Saint-Marc³ warned that even if modern industry, which is responsible for air and water pollution, and the accumulation of waste or the noise, would keep the world clean, it could not create space. This is not an act measurable from the viewpoint of human genius, which is why free spaces have to be used in a rational way. Bonnefous speaks further about human attempts to exit from the tentacles of a megacity by building home residences in the middle of green areas, discarding all the environmental protocols that are necessary for ecologic preservation. With this in mind, we may notice why the status of nature is outbalanced by that of the megacity. Many cities, reflecting their living society, were built out of stone, concrete and glass, compromising all the green areas that previously surrounded and enriched them:

Man, society and functions are the contents of human settlements; nature and shells form the container. While our subject matter cannot exclude any of these elements, it cannot be limited to any one of them or study any in depth. It is the interrelationship of the five elements which forms human settlements. (Doxiadis October 1964, 188)

A huge amount of high buildings took over the past two centuries the main role for the landscape of the future, in a chaotic architectural design process. Collateral issues have made their presence, such as big noise, modern diseases, massive agglomeration of people who were forced to live in small rooms, the disappearance of green areas that could provide aesthetic frames and physical lines

³ Philippe Saint-Marc, Socialisation de la nature (Paris: Stock, 1971).

of defense against modern stress. Generally speaking, megacities are under the influence of climatic changes, with severe repercussions for citizen's health and lifestyle. For instance, all over the place, noise invades and pervades cities, streets and airports, restaurants, night clubs, and so forth. Many people have to use sleep pills or tranquilizers, even after their windows had been closed. All kind of vibrations may be causing not only a temporary discomfort, but also physical and physiological traumas (deafness, derangements of the nervous system, or lung hemorrhages). Taking into account the specific machinery of the new technologies, we may think that a megacity condemns its inhabitants to a permanent noise: of the vehicles, the dissonances of megaphones which are working at superpower, supersonic planes, and so forth. Urban agglomerations have also brought an increase of flu epidemics. Some diseases that are extremely rare in the rural areas become extensively frequent in megacities. For instance, lung cancer or flus are now reaching a higher rate in cities. On the other hand, stress, neuroses, or asthenia seem to be exclusively related to inhabitants of city areas. Another ethical issue is labeled by criminality, mental illnesses, alcoholic psychosis, and drug addiction.4

ECUMENOPOLIS as a global city

By bringing upfront these sociological, ethical, and ecological issues, it is noticeable that the newborn child of urbanization (megalopolis), and its promised giant (ECUMENOPOLIS), afflicts our post-human thinking with a great dose of pessimism. We have to admit, though, such a pessimistic view arises not from a state of facts, but rather from a dramatic lack of perspective, which tends to establish a thinking pattern which dismantles hopes and values. The ways in which cities can be developed must enclose natural space and human condition. Urbanization is a far too serious issue to be let at the mercy of particular interests, profits, or cupidity. Urban development will not bring humanity's demise, but its wealth. To achieve such a goal requires rational settling, efficient building design, and preserving nature:

Our new task is not to live in a shrunken world, but to live at many scales simultaneously. The city on human scale does not shrink. It will be there for as long as man retains his natural characteristics. (Doxiadis 1967, 71)

⁴ Eduard Bounnefous, L'homme ou la nature? (Paris: Hachette, 1971).

Brasilia or Islamabad⁵ may stand for excellent references in respect to the given process. They are cities based on the interconnections between ecology and architecture. Therefore, improvisations must be replaced by sustainable plans for development. All these efforts stress out the unceasing human desire for building an ideal city⁶. An ideal city continues to burn many architects' imagination, in their constant effort to embody comfortable living areas, in which free people work together for a unified society:

We should start by conceiving the economics of a society, the social goals of the society at a given moment, and then see how those goals can be achieved by mobilizing and utilizing all resources for the largest possible number of people. (Doxiadis 1959, 326)

The City of the Future was the first research project launched by Constantinos A. Doxiadis in 1960⁷. It is no doubt the City of the Future research project was conceived as a project in development, susceptible to changes both in theory and practice, as its first assumptions could be replaced by new ones, and its effective implementation would recall many variables to be dealt with. Basically, the City of the Future aimed to offer a realistic, yet at the same time, visionary projection of a planetary human settlement that would incorporate Doxiadis's idea of human quality of life and welfare. By deduction, Doxiadis pursued the idea of a global welfare starting from human settlements redesigned and put together in order to sustain a spatial environment suitable not only for everyday living purposes, but also for a global connectivity that would steadily develop over time, causing an unprecedented cognitive and perceptual mutation in each human individual.

Being conceived as a project in development, the City of the Future labeled a starting point with predictable variables concerning the

⁵ Doxiadis was the master-architect in planning the city of Islamabad.

⁶ In Doxiadis's words: "Aristotle said the goal of the city is to make man happy and safe. I can't think of a better definition." Man builds cities, and cities shape man: the interplay of that relationship has been his lifelong fascination, and he has refused to be either trammeled by tradition or beguiled by the future. He is a coeval thinker: looking back, probing ahead, but with his attention focused on the possibilities of the present - in the end, the only point on the continuum of time available for action. He is a builder, but with more than mere stone or steel. For his gift is not only to shape the contours of cities, but of minds as well: "When I plan a city I look on it as a growing organism not to be strait-jacketed. We estimate the growth of a city far beyond the year 2000."

⁷ For an extensive discussion on this topic, we point out to Myrto Antonopoulou-Bogdanou's presentation: https://www.doxiadis.org/Downloads/City%20of%20the%20Future.pdf

future, assumptions that raised connecting frames to end points on short, middle, and long term. With this in mind, researchers designed patterns of probability, taking into account many variables. Among those variables, we state the following: population (increasing or decreasing rates, local and global density or distribution), resources (water, energy, food, minerals, and so forth), climate, topography, population incomes. technology development, cybernetics. education, or health. Afterwards, projections were made in order to refine the initial design, and to give the concept a proper sense of practical accuracy. The City of the Future was labeled by more or less synonymous terms: DYNAPOLIS, ENTOPIA, ANTHROPOPOLIS, and, finally, ECUMENOPOLIS.

At a deeper level of interpretation, the project itself and all the scientific efforts involved in achieving it express a creative way to restate the ancient Greek quotation that "Man is the measure of all things". Therefore, all the achievements of Doxiadis in the field of urban planning are meant to express this statement, which has become a strong belief and a center point for the entire research revolving this project. We presume that all the practical work in designing cities or settlement areas that Doxiadis has done ever since the project was set in motion reflects his global way of thinking, his main idea of designing a city of the future.

Unfortunately, due to Doxiadis's premature end, this brilliant idea of a project set up for reexamination and readjustment on the measure of its development was never fully realized. However, the model of *ECUMENOPOLIS* takes into account the functions of a planetary structure transposed within the level of worldwide policies. From its roots we understand this type of city as a global settlement and a hyper-sign, an inner manifestation of conscious energies underlying its innovative cultural status.

In fact, ECUMENOPOLIS stands for a post-human version of world vision, an anthropological environment containing the background onto which megatrends and sustainable creative possibilities can be depicted. Being projected space-time frame on а ECUMENOPOLIS instantiates the rules, which are in fact loosely changing and essentially creative, which are to be coped with in the process of acquiring a new planetary sense of consciousness. This is the main reason why so many levels work together in the actual process of developing an idea that was highlighted even since ancient times (only to mention Plato's The Republic, Thomas More's Utopia, Campanella's The City of the Sun, Bacon's New Atlantis). The utopian nuclei gives ECUMENOPOLIS a status of global networks and constellations, arranged on the measure of the interferences in assembling smaller networks, which work together as necessary interfaces between individuals and society. The polyhedral nature of *ECUMENOPOLIS* implies examining all those interfaces in order for one to be able to establish the cohesive levels and to engage one's research towards emphasizing the conceptual configurations that generate coherence as the landmark of individual and societal identity. In this regard, Doxiadis comes up with the notion of *entopia*, by which he grasps the individual and the social need for acceptance and integration to higher levels of awareness: "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"8.

In this respect, ECUMENOPOLIS may be regarded as a metaphoric concept that reveals the entire planet as an intricate structure, a massive device imposing a new sense of environmental development, a deep subjacent multileveled network, as well as a fractal configuration.⁹ Information expansiveness in the digital age, connected to huge technological development, may be coined as a chain reaction with a great impact on human consciousness, hence its needs to reshape its floating identity. Our world has become a "global village", in which each individual being compelled to acquire essential pieces of information and reach his potential. The global consciousness evolves, being shaped by information, as the universal language of communication. The needs for almost instantaneously receiving and decoding information grow fast. Individuals are encouraged to adapt themselves to this new era of technocracy. The factors that underpin this ongoing growth and expansion of information are, among others: globalization; development; the nature of technology; crave for competition. Media (nowadays taking its peak in electronic format) has a determinant

_

⁸ Constantinos A. Doxiadis, *Building Entopia* (Athens: Athens Publishing Center, 1975).

⁹ This model has been elaborated on several years of researches in the field of sociology, ekistics, and urban planning. In this respect, several scientific works are dealing with the issue above stated, all written by C.A. Doxiadis: *Dynapolis: The City of The Future* (Athens: Doxiadis Associates, 1960); *Emergence and Growth of an Urban Region: The Developing Urban Detroit Area* (Detroit: Detroit Edison, 1966); *Urban Renewal and the Future of the American City* (Chicago: Public Administration Service, 1966); *Ekistics: An Introduction to the Science of Human Settlements* (New York: Oxford University Press, 1968); *Anthropopolis: City for Human Development* (New York: W.W. Norton, 1974); *Building Entopia* (Athens: Athens Publishing Center, 1975); *Action for Human Settlements* (New York: W.W. Norton, 1976). Analyzing his texts, design drawings, and settlements, we may conclude their surface implies morphogenetic vectors sustaining fractal strategies of detecting and interpreting the formal tissue of the urban projects, which contain a great sense of integration.

role in spreading information throughout the Globe. This is a significant stage in the growth of anthropological settlements. A correlative need for changing the means in which the great amounts of information are processed and distributed rises new issues in this era of a technetronic society¹⁰, when information has become a fundamental resource, and the possibilities to access it shape human society at new levels of expansiveness. Online communications are capital in the society of the future:

The networks are going to be absolutely mechanical and automatic, interconnecting the cells by transportation and communications, forming enormous organisms with the cells as basic units. The human city will be very big, but it will consist of two categories of parts, the cells and the networks. (Doxiadis 1966, 317)

ECUMENOPOLIS reveals its fractal nature from what Doxiadis proposed as scale unit measurement:

The modern city should be a synthesis of the human scale and the mechanical scale. Smaller units, which can be planned on human dimensions, should be based on the human scale, while larger areas are based on the mechanical one. (Doxiadis 1964, 363)

As a global projection, *ECUMENOPOLIS* presupposes, in order to uncover the strategies through which it unfolds, unidirectional and hexagonal patterns:

The only way to solve the problems of the city of the present is to conceive a pattern which will permit the natural growth of the city without allowing the new additions to break up the already existing pattern. The dynamic city must by necessity possess a central part arranged in such a way as to be able to expand, without breaking into the other parts of the city. An analysis of the possible forms a city center may assume points to a solution that will permit free expansion along a predetermined axis. This axis will comprise the original central core of the city and its new development on both sides and along the central core. Such a city will follow a geographical direction and its expansion will be mainly unidirectional. (...) The city of the future is conceived as a city built and developing at various rates along a system of perpendicular axes. This systematic development, however, has to become an integral part of the overall area around the city and, from a planning point of view, to the overall development of the whole nation, based on a system of hexagonals. The hexagonal system is beyond doubt the best and most economic pattern for the organization of space and the interrelation of settlements among themselves. (Doxiadis 1960, 14 & 16.)

¹⁰ In an era when the human communication systems are strongly shaped by the culture of cyberspace and hyper-reality, when persons are considered to be statistical nodes of information in a global 'neural' network, some trans-humanist futurologists seek downloading human minds into computers, in order to cheat individual body demise.

However, the main objective of urban planning is to make access and communication means easier for as many people as possible, without risking a future miscalculation in respect to the city full deployment:

The kinetic fields define the distances people desire to cross in order to come together. How can we build a settlement that both brings people together in community and keeps them apart in their personal privacy? The role of the city is to give all people all possible connections in an organized way. The two goals for the city of today should be freedom of movement in all directions and the total time-distance between any two destinations should be minimal. (Doxiadis 1967, 428)

Needless to say, human ancient legacy should be preserved:

The future is a continuation of the past. We cannot eliminate our biological, social, economic and cultural inheritance. We have, moreover, to look to the past and the future, for they are a continuum and anyone looking in one direction gets confused. (Doxiadis 1972, 407)

This cultural inheritance ought to be integrated within modern architectural design. Doxiadis has made an extensive research on ancient Greek cities and clearly pointed out their stunning architectural patterns.

Under these circumstances, *ECUMENOPOLIS* is a global city project designed on the measure of speed, interstellar flying, artificial communication satellites, and the dynamic life rhythm, a city for the new man, who is constantly submitted to a greater and greater quantity of information and, by default, to the amazing perspectives raised for future development:

Goals can be set for the five ekistic elements and for different ekistic units and for different organs of the city. They should always be expressed in terms of physical space and time budgets in relation to how the citizen spends his 24 hours. (Doxiadis 1967, 432)

Consciousness does not exist above or outside the world. Even the idea of pure consciousness has at its core a conceptual pattern. Therefore, architecture is an instrument for aesthetic beauty and fully achievement of the human creative potential. From this point of view, the visionary design of Doxiadis is a phase of shaping a universal language of architecture, which will eventually reach its climax along with humanity's fulfillment. Doxiadis pursued a philosophical, anthropological, sociological, scientific, and ethical conception, seeking a way for all mankind to redeem. It is no

exaggeration to state that a collective redemption is projected in the works of Doxiadis, having its point of departure in the objective beauty of the planetary urban design.

Moreover, urban planning and the organic development of individuals and societies are truly complementary. The aesthetic result is perfectly identical, in spite of the distinct means of expression and ways of representation. Establishing a relationship of identity between architecture and society is Doxiadis's main goal, claimed as a civilizing role for society. Architecture receives a transcending status for all social categories. Architectural design molds eternal principles or axioms in the progress of mankind. All these objectives start from the idea that our era, being essentially an era of reason, technology, and science at highest levels, has to create an architectural design able to express and project it in the memory of the future. The appeal for this kind of architecture has been made under the impulse of innovative experiences globally achieved, beginning with reflections upon the importance of spatial context, mathematical and combinatory equations, the relationship between ideographic symbolism, and so forth. The maxim of quantity explains the rational use of space, as a grounding criterion for sustainable urban development. Doxiadis explores the great possibilities offered by multidisciplinary research (cybernetics, information theory, kinetic art, abstract painting, or electronic devices) in his attempt to reach a new level of community global settling. In this respect, Doxiadis has taken a visionary path. Nevertheless, it would be a great equal Doxiadis's conception with experiences that are based not on strictly rational and scientific principles, on practical and militant goals. We make this statement in response to those who criticized Doxiadis in his late activity. His conception could not possibly state a demise, a shock to the traditional urban planning system, but a personal philosophy, a result of a lifetime work in this field, which is connected to the most natural and noble human dreams, the most beautiful and optimistic wishes in a world of peace, wide open for progress.

However, a global society that is shaped by speed, marching towards fulfillment in an asymptotic movement on the scale of the present, needs to reassume past in order to reach the future:

In order to understand our whole system of life we have to look to the past and to the future with thousands of heads, with lenses of all sorts, catching everything from small to big, on all possible scales from the DNA of human settlements to the whole container, the earth. (Doxiadis 1972, 407)

The immediate consequence and, in our opinion, the most radical one for this subject matter, is the access to a vision of different cultures tied together by the conceptualization of a Cosmos of values in multidimensional linguistic and cultural patterns. Thus, urban planning finds a realization in the efforts of storing the products of human knowledge, by transforming a social fragmented experience into an expression of a globally unified existence: "The errors of master plans and regional plans are that they are two dimensional or, in the best cases, three dimensional. What we need are four dimensional programs." 11

Otherwise, there is a great risk they take in bad planning, chaotic or random building process. Urban planning claims inferential travelogues and interpretative efforts so that a project could be successfully implemented. Urban planners have to detect all sorts of parameters such as context, empirical ways for build an organized architecture, or the situational pattern. 12 Under these circumstances, urban planning is firmly guided by field analysis, which is on its turn thought as a foreground for deeper intuitive projection and, by combining intuition and experience, for an intellectual theoretical standing point.

City networks are connected through common values, direct or indirect communicative sequences, qualitative relationships established between inhabitants. On this account, we are able to assume that the goals which underlie human needs could never be governed by fixity:

The world wants the facts of the problems (or the diseases) to be superimposed with facts on alternative solutions and the methods by which these were selected. (...) I think we should feel obliged to show clearly both the present and the future problems. We must express these in human, understandable terms; then present the alternatives. Not a single solution, but alternatives. (Doxiadis 1967, 433)

¹¹ Constantinos A. Doxiadis, "The Rising Tide & the Planner", *Ekistics* 7, no. 39 (January 1959): 8.

¹² The tasks urban planners are dealing with show a semantic field whose parameters are the project itself, the historical context, the individual, the society, and the codes. The city represents not only the physical building blocks, but also a core of cognitive, emotional and imaginative reactions of its inhabitants. When we talk about the historical context, for instance, we in fact refer to the current and potential state of affairs; we detect individuals' social, cultural and aesthetic climate, as well as their current conventions and trends. No city is closed, but invites the developers to cooperate, within a double historical dimension: the effective production of the city and its further deployments, taking into account specific discontinuities, among which we can state the syntonic movement of generations.

In fact, these issues are understood according to a general dynamic of the cognitive processes which enable social, economic, ecologic, cultural, linguistic, and ethical integration for each actual or potential inhabitant. If we were to take into account only the basic viewpoints that are involved in a cohesive urban device, we would be able to better understand the complexity and the intricate nature of the global communication patterns arising at every step in a citizen's travelogues. As urban organizers, these connectors ensure an adequate trajectory for urban development, and they accomplish multiple tasks within the inner dimensional, as well as local or global levels of integration. That is the reason why the complexity of ECUMENOPOLIS stresses once again the fact that cities are global networks of human interactions, and that an arbitrary separation between the planet as a whole and its megacities could never drive urban planners find the deeper meaning of unity for different urban zones. Instead, what this global model proposes is to tackle the complex network connectivity that covers all the phenomena involved in the process of urban integration.

Having an open structure for further development, a city creates a kind of superposed reality in the light of which communication and relationships between its inhabitants emerge. This reality cannot be analyzed only in terms of profit or restrictive management. Profit and restrictive management are variables that do not explain the maximal projection of urban planning, and this fact alone stands for the gaps they might create in the midst of our societies. In proper terms, a sustainable urban development can only be reached in the process of rational planning, in which the architect guides his work by synergic techniques, regardless the pragmatic attempts for consider urban life a common value for society.

Contextually, the biggest challenges for the urban planners in the post-human age are related to the technological development and the changes in people's mentality. Therefore, urban planners should be more concerned on providing as much spatial awareness and fulfillment as possible; on the other hand, they should be selective in regard to the sense of desolation that many urban inhabitants experience nowadays. A megacity may be considered a vast repository of population, communication nodes, institutional networks, leisure areas, much of which being extremely valuable, but too often misplaced or outbalanced.

Megacities give the opportunity for capturing time and space, marked by development in human thought, environmental secularization, sophisticated living and working areas. A planetary city presupposes a subjacent "order out of chaos" formative process.

In fact, it deals with a dynamic of self-replicating patterns: a city sends to another city which sends to another city and so forth, in an infinite chain reaction of systemic configurations and interconnections.

Therefore, the concept of *ECUMENOPOLIS* can be understood both in institutional and psychological-cultural terms. Conceived as a suigeneris planetary settlement, ECUMENOPOLIS would translate into reality a project that has been expressed in many of Doxiadis's lectures about global sustainable development. On this account, Doxiadis proposes a new maximal science, ekistics, which should deal with theory and practice in the field of human settlements. urban planning, rational use of the planetary space and resources, steady development on the bases of cultural heritage and scientific information, among other explicit goals. This project entails a cosmic view that integrates mankind at a global scale, which makes Earth as a home that needs to be preserved for future generations. ECUMENOPOLIS expresses a version of Earth as our global shelter, as a unit that integrates into cosmic levels of perception. Its subjacent philosophy revolves around the inhabitants of the future and their capacity to work and freely move in many places at once, and process information according to new patterns. In Doxiadis's view, the transgression from locality to globalism is the current phase in mankind's deployment, providing a big picture to be focused on. That is the reason why more and more inter-, multi- and trans-disciplinary researches are taking place in the world, involving scientists from ostensibly different fields of activity.

Concluding remarks

To sum up, the project of ECUMENOPOLIS showed promising (although not overall feasible) advantages, namely: visionary pattern in a progressive global urban development, theoretical and empirical researches in current urban management, coherent organic architectural planning, fractal design strategies, man as a central point of reference, global networking and inclusion for megalopolises and mega-regions, multiple communication access points in response to the needs for the Information age, easy transportation techniques for creating sustainable environmental equilibrium, and more natural free space for ecological preservation. However, the biggest challenges for such a city in our age remain: architectural design assessment, unexplored questions about global politics, economics and law control, human rights, cultural and linguistic inclusion, and, last but not least, linguistic unifying policies. In any case, Doxiadis's project took many shapes since its

roots, many of the ideas and the proposals expressed late back in the seventies remaining mere utopias.

References:

- Bounnefous, Eduard. L'homme ou la nature ?. Paris: Hachette, 1971.
- Caves, RogerW. Encyclopedia of the City. London, New York: Routledge, 2004.
- Charboneau, Bernard. Le jardin de Babylon. Paris: Gallimard, 1969.
- Doxiadis, Constantinos A., "The Rising Tide & the Planner", *Ekistics* 7, no. 39 (January 1959): 5-10.
- Doxiadis, Constantinos A., "The Key to Housing in Developing Areas", *Ekistics* 8, no. 49 (November 1959): 316-331.
- Doxiadis, Constantinos A., "Dynapolis: the City of the Future", *Ekistics* 9, no. 51 (January 1960): 5-20.
- Doxiadis, Constantinos A. *Dynapolis: The City Of The Future*. Athens: Doxiadis Associates, 1960.
- Doxiadis, Constantinos A., "A Framework for a New Discipline of Human Settlements", *Ekistics* 18, no. 107 (October 1964): 188-191.
- Doxiadis, Constantinos A., "The Ancient Greek City and the City of the Present", *Ekistics* 18, no. 108 (November 1964): 346-364.
- Doxiadis, Constantinos A., "Anthropocosmos: the World of Man", *Ekistics* 22, no. 132 (November 1966): 311-318.
- Doxiadis, Constantinos A. *Emergence and Growth of an Urban Region: The Developing Urban Detroit Area*. Detroit: Detroit Edison, 1966.
- Doxiadis, Constantinos A. *Urban Renewal and the Future of the American City*. Chicago: Public Administration Service, 1966.
- Doxiadis, Constantinos A., "Human Settlements: Challenge and Response", *Ekistics* 23, no. 135 (February 1967): 67-72.
- Doxiadis, Constantinos A., "Function and Structure of Settlements", *Ekistics* 24, no. 145 (December 1967): 427-434.
- Doxiadis, Constantinos A. *Ekistics: An Introduction to the Science of Human Settlements*. New York: Oxford University Press, 1968.
- Doxiadis, Constantinos A., "Energy and Human Settlements", *Ekistics* 26, no. 156 (November 1968): 455-459.
- Doxiadis, Constantinos A., "The Two-Headed Eagle (From the Past to the Future of Human Settlements", *Ekistics* 33, no. 198 (May 1972): 406-420.
- Doxiadis, Constantinos A., "Movement and the City", *Ekistics* 37, no. 223 (June 1974): 377-380.
- Doxiadis, Constantinos A. *Anthropopolis: City for Human Development*. New York: W.W. Norton, 1974.
- Doxiadis, Constantinos A., and John G. Papaioannou. *ECUMENOPOLIS: The Inevitable City of the Future*. Athens: Athens Center of Ekistics, 1974.
- Doxiadis, Constantinos A. *Building Entopia*. Athens: Athens Publishing Center, 1975.
- Doxiadis, Constantinos A. *Action for Human Settlements*. New York: W.W. Norton, 1976.

- Gottman, Jean. *Megalopolis: The Urbanized Northeastern Seaboard of the United States*, New York: Twentieth-Century Fund, 1961.
- Gottman, Jean. Since Megalopolis: The Urban Writings of Jean Gottman. Translated by Robert A. Harper. Baltimore: Johns Hopkins University Press, 1990.
- Gottman, Jean. Beyond Megalopolis. Tokyo: The Community Study Foundation, 1994.
- McLuhan, Marshall. *Understanding Media: The Extensions of Man.* The MIT Press, 1994.
- Saint-Marc, Philippe. Socialisation de la nature. Paris: Stock, 1971.

AUTHOR BIO:

CRISTIAN PAŞCALĂU is a university assistant at the Department of Romanian Language and General Linguistics, Faculty of Letters, University of Babeş-Bolyai, as well as a peerreview member at Herald Publishing House, Bucharest. He published several studies on cultural semiotics and the universes of discourse. He translated into Romanian J.G. Martínez del Castillo's book *La lingüística del decir: el logos semántico y el logos apofántico (Lingvistica rostirii: logosul semantic și logosul apofantic*, Argonaut & Scriptor, 2011). His academic interests include: linguistics and philosophy of language, cultural semiotics, lexicology, and semantics.

Article history:

| Received: Received in revised form: 19.03.2021 | Accepted: 19.03.2021 | Available online: 16.08.2021 |
|------------------------------------------------|----------------------|------------------------------|
|------------------------------------------------|----------------------|------------------------------|