URBS ET ORBIS:

(RE)CHARTING THE CENTER, (RE)POSITIONING THE LIMITS

Aleksandra Stupar [1], University of Belgrade, Faculty of Architecture, Belgrade, Serbia

The paper examines the concept of finiteness and its implications on urban space focusing on the relation between urban(ized) environment, social context and spatiotemporal perception. Furthermore, it analyzes and evaluates various roles which the notion of the center and the limit has had through history - representing an inseparable part of traditional city planning or being completely transformed in order to transmit and express contemporary identity. Considered as a residue of a particular mythical narrative and a distinctive feature of the first philosophical speculations, this concept was rooted in primordial technical matrices of archaic and classical cities, but its latest manifestation has distorted previous models. Consequently, the original significance has been manipulated - shaping a new urban geography as a post-modern, multi-scale setting for our future life.

INTRODUCTION

Since the dawn of civilization, the notion of the limit (boundary) and the center has always been an omnipresent constant - molded by different beliefs, materialized in various scales and embedded in the mythical as well as the rational system of thought. From the pre-historic shelters, megalith structures and first urban settlements, to the powerful urban nodes of the modern network society, the concept of finiteness i.e. centralization and delimitation represented an important intellectual stimulus, both within philosophy and built environment. At the same time, it was the *locus classicus* of every myth and its application revealed a significant interrelation of mythology, ideology, philosophy and urban structure. However, during the centuries, the limit and the center have lost their magical meaning and the rituals of demarcation have gradually become a mundane public performance deprived of cosmic prerogatives.

[1]Bulevar kralja Aleksandra 73/II, 11 000 Belgrade, Serbia
 stupar@rcub.bg.ac.rs

Nevertheless, our unconscious inheritance still influences our needs and behavior, seeking a new envelope which should protect us from the uncountable stimulations of the third millennium. Therefore, the notion of the limit and the center is redefined, offering a new anchor in the tempestuous landscape of global flows.

Delusive limits and virtual centers - are they sufficient to mark off the urban future?

THE MYTHICAL ORIGINS

Representing a fundamental category of any conceptual relation within a mythical mind, the finiteness ('border') could be conceived as a root of primeval opposition - a distinction to the *sacred* and the *profane*. Consequently, everything is subordinate to it: space, time, quantity and quality of things. Additionally, every segment of mythical space reflects the quality of the whole, underlining the micro-macrocosm unity. Therefore, the myths of creation, although stemming from diverse geographical and cultural backgrounds, are a clear demonstration of this analogy recognized in the structure of the universe, the earth and the human.

The Creation

According to a large number of mythical narratives, the act of creation represented the end of emptiness, darkness and confusion and the beginning of existence. Starting spontaneously - from the original void, the expanse of water or a cosmogonic egg, the process resulted in an organized and self-structured system with several entities and a specific hierarchy (Long, 1963).

The egg, as the primordial entity in Egyptian, Indian, Chinese, Tibetan and Japanese mythology, symbolized a perfect, self-sufficient totality, composed of male and female principle. When the egg was opened or split, its halves became the Heaven and the Earth (Siberia, Borneo, ancient Greece) or they revealed a deity - like the Chinese Pangu (or P'an Ku)[2]. At the same time, some myths

[2]According to the myth, Pangu pushed the earth and sky apart and continued to grow three meters every day. After he died, his body formed the world - the flesh became the soil, the hair gave the vegetation, the eyes transformed into the sun and the moon. Rivers and seas originated from his fat, while the parasites on his body became human beings.

emphasize the role of a creator-god[3], a primal couple[4] or a giant[5], but most of them actually combine all these elements. The exception of this practice can be found among Buddhists, Taoist and Confucians, who perceive the world as the work of spirits. However, no matter who takes the leading role, the process of creation depicts a complex path of transformation whose final result represents the Universe, composed of the basic elements - the Earth, the Heaven/Sky, the rivers/water, the stars, the Sun, the Moon and the Man.

Therefore, it is evident that from the hymns of the Rig Veda, through ancient Egyptian and Mesopotamian mythologies, to the first cosmogonies of the ancient Greeks, the mythical cosmo-anatomy and mytho-geography introduced the essential principle of the mythical logic - *pars pro toto*, using the clearly definable and delimited entities, as well as the notion of the limit and the centre.

Delimitation of Reality

The first boundaries on the Earth were the environmental ones - rivers, mountains or seashores. The discovery of fire led to the second important element of spatial and social demarcation since the hearth represented a new center of social gathering and protection. Gradually, the space became the place, getting its identity and role through limitation and accentuation, establishing shelters and sanctuaries - at first within the natural frames and then rearranging them according to human needs. The land was circumscribed as a proof of new division and community initiation, while the gigantic stones were used as a direct connection between the terrestrial and the celestial, being the symbol of community, its durability and technological development. On a larger, monumental scale, the same symbolic was given to menhirs. They were usually organized as alignments or circles (Carnac, Stonehenge) creating an exceptional scenery for the sacred rituals with the magical and cosmic role (Kostof, 1995). Therefore, each one of them was and still is a unique

monument of human efforts, a mundane projection of imagined cosmic order and, above all, the materialized notion of the limit and the center which confirmed Man's place on earth.

The urban revolution, which started between ten and five thousand years ago in the valleys of the Nile, the Tigris and Euphrates and the Indus, brought a new material interpretation of the concept of finiteness as well as its mythical backup. The ancient tradition narrates that the act of city-making - its initiation, planning and building, was a work of gods. However, later on, the first autocratic rulers, enlightened by a divine prophecy, became the transmitters of gods' intentions. They respected the heavenly instructions and emulated the celestial model which was a guarantee of the successful and long lasting reign (Djukic and Stupar, 2001).

The first planned cities, such as Mohenjo-Daro in the Indus valley, reveal exactly the logic of the cosmic harmony (Jansen, 1991). Oriented along the north-south axis, this city had an orthogonal layout divided into twelve blocks (1200x800 feet), with three wide streets running north and south and two streets crossing them. The grid plan, which probably followed the system of twelve lunar months, was not the only one in the pre-Classical antiquity. For example, some of the cities in the Fertile Crescent, like Babylon at the time of Hammurabi, also accepted the ordered urban layout. However, their patterns were not so rigid and precisely coordinated. Most of them applied the elements of the 'cosmic harmony' only in the plans of temples and palaces, since they were the first and the most important signs of divine prominence and glory.

At the same time, the image of a city was based upon two symbols - the enclosure and the center. According to the traditional interpretation, all enclosing forms are considered as the symbols of the Great Mother, responsible for protection, sheltering and nourishment. Additionally, they could be also seen as a clear representation of fertility which is related to the symbolic of the womb. On the other hand, a center, as a symbol, represents a totality, the origin of all existence and the intersection of macrocosm and microcosm. It is, as well, the point around which everything revolves, uniting the cosmos vertically and horizontally.

Having these two symbols united and combined, the ancient city had no chance for

failure. The future, although quite turbulent, was in front of it.

The Magic of Diagram

The process of a city foundation was accompanied by various magical rituals necessary to ensure the well-being of the ruler, city and its citizens. The result was a properly oriented, ordered and symmetrical layout of the new microcosms, used as a frame for social and ideological organization and division.

The urban limit was often materialized as a wall structure which had a protective role caused by military reasons or even by the local weather conditions (for example the city of Amarna in Egypt). However, some cities from the Indus valley (Mohenjo-Daro, Harrapa) remained without city walls, which was probably the result of their mostly peaceful existence and surrounding. Being orthogonal (Sumerian - Uruk and Nippur; Egyptian - El-Amarna) or circular (Hittite - Zincirli, Assyrian - Quala), the city walls also clearly displayed a high level of technological development and astronomical knowledge. Simultaneously, they followed the mythical and astrological guidelines set up by previous generations.

The cities of the Near East civilizations projected their cosmology on spatial hierarchy and urban structure. For example, the city of Nippur had, according to the city plan found on a clay tablet (1500 BC), a strong fortification wall with access to the river. The temple of the supreme god, who was the protector of the city, was placed near the canal and represented the metaphorical, physical and visual center. The zone around the temple, which was the actual religious, political and economic heart of the city, also had its own delimitation - a wall representing the last line of defense.

During the history, two basic models of temples evolved in Mesopotamia - the urban and the ziggurat type, which - each in its own way - were able to create the experience of transition between the sacred and the profane. The first one used the axial progress through open and enclosed spaces towards the elevated sanctuary, while the second one was based upon the vertical ascent, symbolically connecting the earth and the heavens. However, as soon as a king received the prerogatives of a divinity, the palace became the focus of the city. As an accurately structured complex, it was placed within the citadel, usually situated at the top of the plan. In this case, the whole city was playing the role

---

[3]For example - Ptah, Ra or Amen-Ra and Atum - Khepri (Egypt); Anu, Apsu or Marduk (Akkad); Brahma (India); Yahweh or Elohim (Israel); Wele (Bantus, Kenya); Eskeri (Siberia).

[4]In Japanese mythology, the primal couple, Izanagi and Izanami, brought into the world the islands of Japan and numerous gods and goddesses.

[5]Prajapati (India) or Ymir (ancient Germany).could be used to illustrate this model.

of ceremonial scenery – a dramatic approach was provided, while the ritual climax was hidden behind the palace walls (Polock, 1999).

The historical advent of the autocratic rulers also brought the exploitation of the autocratic diagrams in the shape of heavenly circles. They were often used by Assyrians, Persians, Parthians and Sassanians and one of the best known examples was the city of Ecbatana (715 BC), which had a wall system made up of seven differently colored concentric circles representing the planets. The ruler and his suite occupied the central zones, while the ordinary people lived beyond the city walls (Kostof, 1991).

The first Sassanian capital, Ardashir-Kurra (3rd century AD), also followed a circular pattern, only this time the key of symbolism was to be found in astrology – the city had a radial organization with twelve main segments which carried the names of the zodiac. Again, the order of the universe was transposed into a terrestrial reality, announcing the power of the king and prophesying a prosperous future.

Quite to the contrary, the cities in the Ancient Egypt used the benefits of their natural surroundings to become a genuine materialization of the basic principles of the universe – as they knew it and perceived it. The urban settlements were mostly orthogonal and their orientation was conditioned by the direction of the Nile and the paths of the rising and setting sun (Gates, 2003). Therefore, it is not surprising that the hieroglyphic sign for city, 'niout', has a shape of circle (the limit/enclosure) with the cross-axis (the center/coordination). Influenced by the religious believes based on the eternal stability and regular natural cycles, the Egyptian cities were not planned and built just for the living but also for the dead.

The ideal city diagram in the old Hindu tradition consisted of concentric circles intersected by eight radial directions. The similar pattern was followed by some holy cities in the South and East Asia during the Middle Ages. The site for their construction was carefully identified by geomancy while the sacred diagrams were also used for orientation. The city had several concentric streets, four main gates marking the cardinal axes and a center - with the main palace and the temple. Sometimes, like in the case of the holy city Srirangam in South India, the city had seven walled concentric areas and a cross-axis marking the cardinal directions. The sanctity of

the concentric segments was higher as they were closer to the holy center of the diagram.

The more spiritually advanced version of this model was the symbolic diagram of mandala. Depicted as a circle enclosing a square with a central symbol, it represented an *imago mundi* - the microcosm and integration, as well as a circumscribed area free from negative influences. It was based on 8x8 squares (celestial world on earth) or 9x9 squares (enclosing the universe). For Hindu people, the absolute order was lying in the square form which was the archetype of the ideal order of the universe. Being the perfect measure for man, it emitted the supreme principle of Brahma, the creator, who organized the world and was capable of total destruction.

Having all these divine premises, the mandala was used as a city diagram in order to create the centrally organized ideal city. The priests were responsible for the selection of the most suitable variant for every future city, applying the suggested layouts with a great attention and respect. The mandala shapes also directed social division – the center was reserved for the privileged ones - government, religion and higher castes, while the lower castes were placed in the peripheral zones.

The Chinese cities emphasized the north-south axis and their structure was very precise in order to establish a connection between the universe and the ruler. Based upon the cosmology in which the earth was a cube and the heavens were round, capitals were set up according to the points of compass and strictly ordered by the official codes. Of course, the primal cosmic scheme was again the work of the mythical figure, Yu, who was the first dynastic emperor. In the case of China capital(s), the center of the universe, placed in the imperial palace, was moving together with the capital and the ruler. However, the spatial arrangement simply followed two basic models which appeared in the first millennium BC - the earlier one, with the palace complex at the north end of the central axis (Chang'an), and the second one, with the palace placed in the city center (Beijing).

Certainly, it was not always possible to apply one of these cosmic models in their original purity, but the idea remained and survived various transformations caused by landscape, rhythm of everyday life and humane activities (Steinhardt, 1999). Finally, the Ming dynasty introduced again the strict rules of the cosmic model in Beijing. They used the ritual text from

the first century BC which described the foundation ritual of the king Zhou. According to this text, the ruler is the one and only person responsible for the birth of a new capital, setting up the city form and orienting the main quarters. The first step of the city foundation was limitation, i.e. the building of the main orthogonal wall, with three gates on each side. Then the main axis (north-south, east-west) were established connecting the city gates, while the center of this composition belonged to the complex of the emperor's palace, with its own protecting and delimiting wall. The palace was oriented southwards in order to face the region of the 'Red Phoenix' which symbolized summer and fire. The temple, commemorating the ancestors, was placed in the east sector of the capital ('Blue Dragon'- spring and growth). Altars consecrated to the soil and harvest were situated in the west part, called 'White tiger' (symbolizing autumn, wars and memory), while the north sector, with its black color representing winter, was the place where markets and commerce were situated (Kostof, 1995).

Mostly oriented towards the secular aspect of everyday life, the Chinese cities respected the officially prescribed rules which could be found in the documents made by the Han dynasty. However, the story about the limit and the center could be seen in a different, larger scale as well.

The example of the Great Wall (3rd century BC) represents a symbol of delimitation, unification, protection and duration simultaneously being a border between both the outer and the inner world. It is a monumental structure of defense and, certainly, an impressive communication line. Maybe in this case, there was no intentional 'cosmic' link between the earth and the sky but, as we discovered in the 20th century, the visual connection is more then efficient and obvious - a work of the man indeed got closer to the eye of god(s).

The grandeur also happens to be an important attribute of the ritual scenery on the other side of the world, in Teotihuacan in the Middle America. (1st century BC - 8th century AD). Unlike some other contemporaries, the city, placed in the flatland and surrounded by mountain ranges, did not have any artificial boundaries. Instead, the layout of its main elements was sufficient to demarcate the place and establish it according to the cosmic and natural order. Therefore, the main south-north axis with the Sun and the Moon pyramids in

the north and two monumental groups in the south[6], made its orientation synchronized with the position of natural and symbolic landmarks - the volcano of Cerro Gordo and the path of the sun during the summer solstice (Davies, 1982).

Evidently, each one of these examples confirms the ancient mode of existence, based upon universal wholeness and cosmic rules which were not always readable in urban fabric. In spite of this, the echoes of the mythical narratives, as well as the material evidences, testify about the entanglement of irrational and rational, making their invisible threads touchable and still resonant. Driven by the powers of nature and inspired by the words of the gods, our ancestors were playing their heroic role somewhere between the limit and the center. However, the time of gods was ceasing and the humanity needed some new explanations.

RATIONALIZING THE MYTH

The mythical and religious patterns of comprehension were gradually substituted by the first secular (philosophical) systems - the ancient Greek concepts of space, time and place. Yet the notion of finiteness had a central place and the mythical finiteness of the time was replaced with the finiteness of ethical and esthetical categories.

Becoming the source and the vital sprout of all Western metaphysics, the idea of finiteness was rooted in the primary and thorough dichotomies - of *périas/àpeiron, eunomia/ dysnomia, ethos/hybris* and, surely, ideal/material. Additionally, it was the duality of sacred/profane, light/dark and cosmos/chaos, which stood as its stem. Both ancient myths and the cosmogonies of the Pre-Socratic philosophers narrated upon universal genesis, but, while the myth described primordial events in *illo tempore*, the Pre-Socratic philosophy comprised the activity, the force that was no more attached to a being (Freeman, 2003).

However, the mythical legacy could still be recognized in philosophy in the form of principles that structure reality - Heraclites' *logos,* Parmenides' *èòn,* Pythagorean *number,*

Empedocles' *philía* and *neîkos,* or Anaximander's *nous.* These concepts were pervaded by the finiteness, which is immanent both to mythical and rational mind. Nevertheless, the distinctiveness of the Pre-Socratic philosophy was in going beyond the myth and replacing mythology by an intellectual premise.

Materializing the Thought

According to Tales, every conceivable thing in cosmos is finite, and the world is *one* and *limited.* Since material reality always has a limit - as do the body - the finiteness is the first principle of human kind and of its culture. As such, it was also applied in the structure and layout of Greek colonies, which were spreading throughout Asia Minor during this period. Therefore, the ancient Greek *poleis* - colonies in Ionia and Sicily, were often characterized by determined planning. It reflected and underlined the conceptual division between infinity and finiteness through the acts of limitation, demarcation and subdivision.

The well-known example of this practice is Miletus, rebuilt in 480 BC on a rigid geometrical grid pattern, with a total coordination of urban activities within consistently organized urban blocks (Kostof, 1991). Designed by Hippodamus of Miletus, the city respected the land configuration and the shape of the peninsula, while its urban matrix was divided into three main sectors (residential clusters). Applying his own idea about the 'ideal city' populated by three classes of inhabitants - soldiers, artisans and farmers, Hippodamus also classified the urban land into three groups - sacred, public and private. The preferred tripartite subdivision was based upon the theoretical knowledge of geometry, which also influenced a comprehensive, well-ordered planning framework. The so-called 'Hippodamian system' was, consequently, noticeable in cities of Piraeus, Rhodes and Thurii.

There are some speculations (Akkerman, 1998) that the plan of Miletus also influenced the work of Plato, especially the concept of his ideal city-state Atlantis. It consisted of three classes of citizens (ruling guardians, warriors and laborers), but its spatial organization is quite different and related to Plato's ideas of orderly cosmology. Consequently, the uniform, concentric diagram reveals the acropolis (the center) surrounded by a circular wall and twelve concentric divisions which should house different groups.

In reality, the planned Greek cities mostly followed the orthogonal matrix, which proved to be a good stage for the future progress - controlled and predetermined. Every city had a spiritual center - *acropolis,* and a mundane one - *agora,* signifying the privileged position of gods and emphasizing the equality among mortals. At the same time, the grid was quite acceptable for the Greek perception of democracy and the limitations were mainly caused by the nature i.e. the surrounding and its resources. Therefore, the notion of the center and the limit was transferred to a larger scale - shaping a new spatial order of settlements in which a city could become the center of a group of urban nodes or a capital of a state.

In the Hellenistic realm, every city was treated as a place of artistic excellence and a lavish setting for the increasing personal and public wealth. However, the founding of a new colony/city was still a mixture of different elements, including the mythical and religious ones. According to the description given by Diodorus in the late 1st century BC (Kostof, 1991), the first step was the ritual consultation of an oracle, and after that the whole set of pragmatic positioning actions was to follow - the location of a spring, the erection of the city walls and determination of the grid system of streets and blocks. Additionally, each city had its own home God or Goddess and the legends about the mythic city founders remained. For instance, according to one of them, Cecrops was responsible for the foundation of the Athens' ancient Acropolis, while Theseus united twelve states of Attica and established Athens as the capital. Furthermore, another mythical hero - Ilus, son of Tros, set up Troy (Ilium) but the city walls were built by the gods - Poseidon and Apollo.

The Romans also continued to use a mixture of mythical narratives, rituals of delimitation and practical knowledge. It was, in a way, an assemblage of Etruscan and Greek influences and advanced Roman construction and composition techniques. Moreover, they accepted the pattern of the Etruscan foundation rite (*fondatio*) which consisted of several related actions - *inauguratio, contemplo, orientatio, limitatio* and *consecratio* (Jannot, 2005). For the Romans, the most important element was the *sulcus primigenius,* the first furrow, a ritual performed with a bronze plough attached to a white ox and a white cow. Although later considered more as a part of pragmatic superstition, it represented a way of

---

[6]The first group (The Great Compound to the west) was probably the administrative center with the marketplace, while the second one was the temple of Quetzalcoatl, the creator and the god of vegetation.

demarcation whose result was the *pomerium*, a strip of land associated with the city walls and marked as an inviolate zone. The privilege to move this sacred limit was given only to the conquerors that added new territories to the Roman Empire and expanded its influence.

Apart from Rome, allegedly founded by the mythic figure - Romulus, other Roman cities usually were 'labeled' by more profane origin. Based upon the influence of *castra* - military camps, new cities with their centuriation grid were positioned at the crossroad of the main north-south and east-west axis (*cardo* and *decumanus*). They had square city blocks and more or less unified architectural appearance.

The Roman town planning was also under the influence of Stoicism and Cicero's principles of the natural order, shaping the urban environment with well-defined spatial configuration and elaborated links between all elements of the urban space. The public center was accentuated by the complex of forum with a basilica and a temple, while other public buildings created various nodes - for entertainment, commerce, administration and religious purposes.

The notion of the center and the limit was again manifested on the level of the Empire, with Rome as its epicenter, well connected even with the remotest towns and frontiers. On the other hand, maybe the most complex symbol of this powerful imperial 'machine' was the Pantheon (built around 120-27 AD) which materialized the analogy between the Empire and the Cosmos. Structured by many units and various materials from all over the Roman world, this unique monument was a strong political and religious statement of pervading unity, transmitted by the architectural language.

The decline of Rome, the embracement of Christianity and the creation of another center - Constantinople, opened some new perspectives of the space perception. In the meantime, the Stoic notion of Cosmopolis, where gods and men were fellow-citizens, was transposed into the Augustinian 'The City of God'. It was the divine city of worshipers and a model of the moral and cosmic equilibrium which emphasized the integration of the terrestrial places within the cosmic structure. However, the circumscription of Constantinople somehow recalls elements of ancient rites. According to the fifth-century historian Philostorgius (Maclagan, 1968), the Emperor Constantine traced the line of the

walls himself with his spear, explaining their extent by the fact that he was lead by 'Him who walks ahead'. Constantine also laid out the plan of the city center, where, apart from the great forum, palace, public and official buildings, a special place was given to the Milion - a mile-post from which all distances were measured.

Elaborating the Ideas(s)

In Europe, during the early Middle Ages, the ideas of the ancient Greek philosophers, as well as the Augustinian doctrine, were gradually substituted by defense considerations. As a result, the urban tissue, well adjusted to the topography, became a total opposite of formalized diagrams. It revealed an irregular urban pattern concentrated around the castle or the church, creating a compact and limited structure with a city square delineated by the public buildings of the new society. The only escape towards the infinity and divine heights was possible through a religious dimension and therefore facades of Romanesque and Gothic churches underlined this effect with their appearance. However, by the end of the 13th century, geometry and astronomy reached a new level, which had a great impact on the planning of new towns, especially in Italy and France. These cities, usually placed within close proximity to a dominant city-state, were built on an orthogonal scheme. It often included a very precise social stratification and distribution, which was also visible in the land division i.e. in the size and position of blocks and lots (for ex. Terranuova and San Giovani).

The Renaissance, with the flourishing art, architecture and science, marked the revival of classical thought which further evolved in the work of Alberti, Filarete, di Giorgio Martini, Leonardo da Vinci and Palladio. The urban space became geometrically articulated, based upon the notion of the perspective and the vanishing point (Alberti). At the same time, the correlation between the human body and the city was again activated. The radial city plans were favored as a continuation of the classical principles of urban design, as well as the paragon of the humanist city and society. In reality, most of them remained as drawings and concepts of imaginary, ideal(ized) cities (for ex. Filarete's Sforzinda) and utopian communities (Campanella's Civitas Solis and Andrea's Christianopolis). The only exception to this centralized view was the utopian city of Amaurote (Thomas More), rooted in the Plato's

ideas, but with the egalitarian democracy as its fundamental order (More, 1964).

However, during the late Renaissance and early Baroque, cities became a reflection of the centrist states, crowned by the undiluted absolute authority of a king. Simultaneously, the modern science, mathematics, geometry, physics and astronomy shaped the new comprehension of the nature and the universe, explaining the solar system, its laws and configuration. The concept of finiteness was perceived from two standpoints - political and scientific. They were united by the paradigm of the geometrically perfect world which had to be planned, symmetrical and ordered around a focal point. Furthermore, the critical thinking in modern philosophy and methodology, introduced by Descartes, also marked a new era of the reasoning and space perception, established upon analytical geometry and space coordination. Consequently, Cartesian philosophy, with its premise of dualism of matter and mind, also influenced the distinction between the perceptual and the conceptual aspects of beauty, encouraging the formalization and geometrization of space. Therefore, the prevailing urban patterns were orthogonal or radial, but unswervingly linear, with expansive vistas.

Paradoxically, even in the world of rising science, the ruler was, for a moment, metaphorically identified with the life-giving center of the human universe - the Sun. Yet, the rational thought was again stronger then any other belief and it continued its enlightening role.

The functional geometry, followed by practical questions of urban life, gradually became the imperative of the 19th and 20th century. Embraced by the architects as the most efficient tool of urban planning and the most prominent symbol of technological progress, Cartesian geometry and a mechanistic approach seemingly liberated the modern world of all natural obstacles and limitations. Moreover, the notion of the limit and the center was raised to another level - mostly economic and political. Unfortunately, the absolute harmony and balance, which should have been the result of applied rules, somehow vanished in the process of rapid urbanization. Finally, the purity of the idea (followed especially by the International Style in the 20th century) became quite meaningless in the ever-changing world, full of multiple divisions and pulsating centers.

Getting out of hand, the city, as a nucleus of our civilization development, mutated into an uncontrollable force, constrained only by its own sustainability.

CHANGING THE LIMITS

Spanning the millennia, the idea of finiteness and centrality has been transmitted and applied through various urban models. However, the challenges brought by the economical, political and cultural globalization have generated a completely new comprehension of space and time relations, as well as a changed perception of the ancient dichotomies.

Dematerializing the Space

The recently established control and command role of world cities (Friedman, 1986; Sassen, 1991; Mollenkopf, 1993) goes beyond national borders, opening countless channels of communication and interchange through global streams. The contemporary urban nodes reinforce themselves by the advanced technologies, evolving into the complex units of increased global efficiency. The importance of 'place' is minimized, while various networks and matrixes directly or indirectly shape multiplying faces of the growing 'global community'. Guided by the post-modern rhythm that supports disjunctions and continuous fragmentation our reality becomes an ambiguous whirl which contracts space and time.

Fortunately, in spite of its complexity and confusion our world still cannot disregard some essential physical limitations even though their perception is drastically changed. The modern, technologically advanced space-time continuum has nowadays multiple centers while the nature, shape and visibility of its confines depend on numerous variables. Consequently, the classical geography is ignored and the heliocentric system seems to be replaced by the city-centric one, described in the set of five new Atlases of City Network Connection (Stupar, 2008). Based on the Peter Taylor's concept of World City Network (Taylor, 2004) this 'landscape of globalization'(or 'world of connectivity') reveals just one of many parallel universes able to blur every center and stretch numerous folders – to infinity.

Circumscribing the Flows

Entangled in the fusion of the debatable Cartesian space, the poststructuralist thought and the ontology of movement, flows, fluids and folds, the global society and its urban geography have gradually overgrown the inherited reality and its linear character. Therefore, it is possible that the future emanations of our cities will become non-scalar and non-linear boundless entities, capable of intense transformations. Meanwhile, the intensified interaction between global citizens, activities and spatial formations, as well as their proclaimed integration and interconnectedness, produce numerous side-effects – from personal isolation to numerous phobias (De Cauter, 2004). Thus, overprotection of our real and virtual envelopes usually causes spatial and social inclusion of privileged ones, while the exclusion of others becomes the collateral damage of the latest demarcation method.

In spite of numerous challenges which we are facing, the notion of the center and the limit has not completely disappeared from our lives saturated by multilayered transformations and mutations. It is directly or indirectly embedded in scientific debates about the future of a universe, its contraction or expansion[7], new cosmological models and scenarios, or tackled by the theories developed in human geography[8], science and technology studies[9], mathematics and computer science[10].

Epilogue or Prologue?

The city of the 21st century, in spite of all its doubts, novelties and demands, follows the logic of old foundation rituals setting up its own center(s) and limitations. Consequently, the global initiation is marked by new city gates (airports, railway stations) and powerful economic and information contact zones. These global connectors, with attractive architectural envelopes and multi-scale character, define the actual position of a city in the global/regional hierarchy, temporarily anchoring its center(s) and extending or contracting its global influence.

The urban genome, seen as a comparative advantage or valuable *genius loci*, additionally reinforces a city image. It modifies collective memory (Boyer, 1995; Zukin, 1995)

---

[7]Discussions about scenarios such as 'big crunch', 'big bang' or 'big rip'.
[8]Non-representational theory (Thrift, 1996, 2000)
[9]Actor-network theory (ANT) (Latour, 1987, 2005; Law, 1999)
[10]Complexity theory (Byrne, 1998; Cilliers, 1998)

transmitting the preferred or often re-created messages of urban history. If necessary, the (urban) landscape should also be thoroughly purified and fulfilled with new, attractive activities and numerous excitation/inhibition points which present generators of capital, entertainment, consumption and promotion. However, besides these mundane impulses, the latest urban incarnation also contains 'oasis' dedicated to spirituality which, frequently, destroy their own mystical aura but increase the area of influence using extremely profane methods and the media.

Obviously, the process of globalization transposes the concept of finiteness into another framework and perspective but, as always through history, it mirrors and indicates the condition of our society, the most recent ideas, scientific speculations and existential doubts. The hyper-modernity, with all its opposing rules, bifurcating realities, synthetic concepts and fragmented future undoubtedly channels the next phase of urban (r)evolution and the new instant, ready-made city is about to appear. However, will it have a center and a limit?

CONCLUSION

The synergy of new flows and different modes of urban reality finally modified a large number of inherited physical and symbolical patterns, challenging the ancient concept of finiteness. The contemporary coordinates are elevated high above the three-dimensional image of traditional orientation, their new significance overflows new layers of reality, but the delicate equilibrium between geography and non-geography, place and non-place, human and non-human is still a utopia.

Additionally defined and (de)limited by numerous streams, frames and networks, our urban world and its nodes remain the most complex human artifact, continuously exposed to the process of space-time aggregation. At the same time, the relation between the center and the limits is no longer perceived as an eternal and unchangeable dichotomy. Its importance is raised to another level, applied on numerous scales but, being a variable instead of a constant, it causes increasing confusion and disorientation.

Technological progress, ideological background and the contemporary historical frame do not negate the idea of finiteness. They upgrade its understanding, verify its multi-dimensional recognition and continue the well-

known mythical thread. After all, the key element of this ancient balance is still unchanged – a human being, as the center of the unique microcosm, always limited by its material body.

Is *urbis* our orbis?

References

Akkerman, A., 1998, *Place and Thought: The Built Environment in Early European Philosophy*. London, UK: Woodridge.

Augé, M., 1995, *Non-places: An Introduction to an Anthropology of Supermodernity*. London, UK: Verso.

Augé, M., 1999, *An Anthropology for Contemporaneous Worlds*. Stanford, CA: Stanford University Press.

Boyer, C. M., 1995, *The City of Collective Memory*. Cambridge, MA: MIT Press.

Byrne, D., 1998, *Complexity Theory and the Social Sciences: An Introduction*. London, UK: Routledge.

Castells, M., 1994, European cities, the informational society, and the global economy. *New Left Review*, Vol. 204, 18-32

Cilliers, P., 1998, *Complexity and Post-Modernism. London*, UK: Routledge

Davies, N., 1982, *The Ancient Kingdoms of Mexico*, England: Penguin Books

De Cauter, L., 2004, *The Capsular Civilization*. Rotterdam, The Netherlands: NAi Publishers.

Đukić, A. and A. Stupar, 2001, Brief Insight into Historical Urban Transformations - Design of Public Spaces vs. Myth, Ritual and Ideology, *Spatium* 7, IAUS, Belgrade, 19-23

Foucault, M., 1986, Of other spaces. *Diacritics*, Vol. 16, 22-27

Freeman, K., 2003, *Ancilla to Pre-Socratic Philosophers: A Complete Translation of the Fragments in Diels, Fragmente der Vorsokratiker*. Boston, MA: Harvard University Press.

Friedmann, J., 1986, The world city hypothesis. *Development and Change*, Vol. 17, 69-83.

Gates, C., 2003, Ancient Cities: The Archaeology of Urban Life in the Ancient Near East and Egypt, Greece and Rome, London, UK: Routledge

Jannot, J-R, 2005, *Religion in ancient Etruria*, Winsconsin: University of Wisconsin Press

Jansen, M., 1991, Mohenjo-Daro - a City on the Indus. In M. Jansen, M. Mulloy and G. Urban (eds.) *Forgotten Cities on the Indus*, Mainz am Rhein: Phillip von Zabern, 145-165.

Kostof, S., 1991, *The City Shaped - Urban Patterns and Meanings Through History*. London, UK: Thames & Hudson.

Kostof, S., 1995, *A History of Architecture: Settings and Rituals*, New York, NY: Oxford University Press

Latour, B., 1987, *Science in Action: How to Follow Scientists and Engineers Through Society*. Milton Keynes, UK: Open University Press.

Latour, B., 2005, *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford, UK: Oxford University Press.

Law, J.and J, Hassard, editors, 1999, *Actor Network Theory and After*. Oxford and Keele, UK: Blackwell and the Sociological Review.

Long, C.H., 1963, Alpha: *The Myths of Creation*, New York, NY: George Braziller

Maclagan, M., 1968, *The City of Constantinople*. London, UK: Thames and Hudson.

Mollenkopf, J., 1993, *Urban Nodes in the Global System*. New York, NY: Social Science Research Council.

Mor, T., 1964, *Utopija*, Beograd: Kultura.

Pollock, S, 1999, *Ancient Mesopotamia: The Eden that Never was*, Cambridge: Cambridge University Press

Sassen, S., 1991, *The Global City: New York, London, Tokyo*. Princeton, NJ: Princeton University Press.

Steinhardt, N., 1999, *Chinese Imperial City Planning*, Honolulu: University of Hawaii Press

Stupar, A, 2008, Living in the Technopolis: Between Reality and Imagination, *Spatium* 17/18, IAUS, Belgrade, 21-26

Taylor, P., 2004, *World City Network: A Global Urban Analysis*. London, UK: Routledge.

Thrift, N., 1996, *Spatial Formations*. London, UK: Sage.

Thrift, N., 2000, Afterwords. *Environment and Planning D: Society and Space*, Vol. 18 (2), 213-256

Zukin, S., 1995, *The Cultures of Cities*. Oxford, UK: Blackwell.