



Landscape: A Holistic Approach to Space

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Ehsan Keramati Niaragh, Morteza Hemmati,
Mohamadreza Forouzandeh, Seyed Amir Mansouri,
and Nima Rezaei

*Where is the life we have lost in living?
Where is the wisdom we have lost in knowledge?
Where is the knowledge we have lost in information?*

T. S. Eliot

Summary

Understanding and awareness of the concept of space as the platform for the manifestation of human life has continually been a controversial topic among scholars of architecture and urban studies. A review of the literature in this field

E. Keramati Niaragh (✉) · M. Hemmati · M. Forouzandeh · S. A. Mansouri
Department of Fine Arts, University of Tehran, Tehran, Iran
e-mail: hemmati.m@ut.ac.ir

M. Forouzandeh
e-mail: frouzandeh@ut.ac.ir

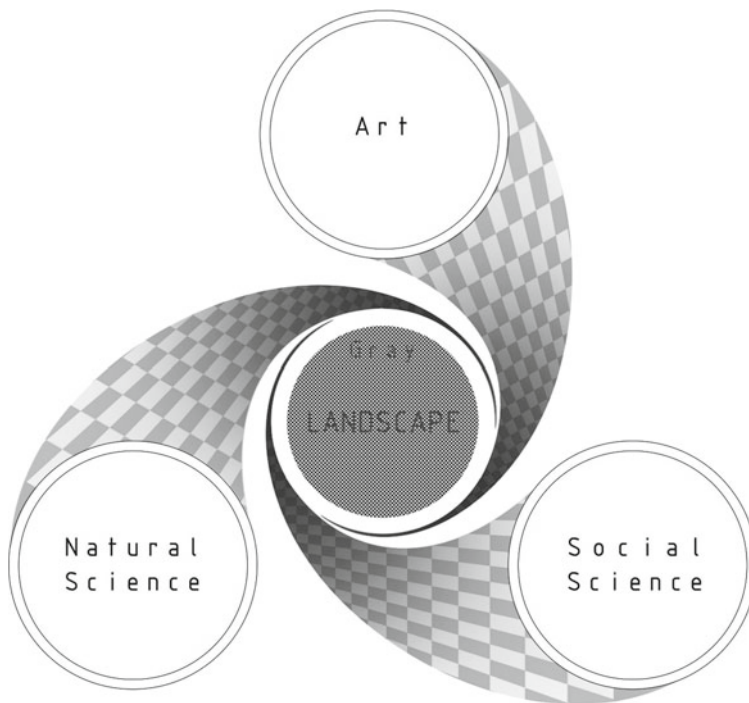
E. Keramati Niaragh · M. Hemmati · M. Forouzandeh · S. A. Mansouri · N. Rezaei
Integrated Science Association (ISA), Universal Scientific Education and Research Network (USERN), Tehran, Iran
e-mail: rezaei_nima@tums.ac.ir

E. Keramati Niaragh · S. A. Mansouri
NAZAR Resaerch Center, No. 23 Dr. Qarib St., Azadi St., Tehran, Iran

N. Rezaei
Department of Immunology, School of Medicine, Tehran University of Medical Sciences, Tehran, Iran

N. Rezaei
Research Center for Immunodeficiencies, Children's Medical Center, Tehran University of Medical Sciences, Tehran, Iran

demonstrates that numerous scholars have attempted to interpret the concept using different knowledge areas, including natural sciences, social sciences, and art. It has led to distinct interpretations of the concept. However, evaluating these findings reveals that each of these approaches, due to its rational base, can partially explain the concept of space, which is not considered a comprehensive insight of the the space as a subjective-objective concept. On the other hand, it seems that landscape, being formed from the interactions of three other approaches, can offer a holistic approach toward the entirety of space, leading to the most comprehensive interpretation. This chapter attempts to evaluate and compare four approaches toward the space concept to determine the most accurate and practical one. It reveals that all three approaches of natural sciences, social sciences, and art lack the conceptual bases required to evaluate the space concept accurately. While, over 500 years, the landscape approach evolved into a concept that can simultaneously interpret the subjective and objective aspects of the space, making it, at least at present, the best-suited approach for the holistic study of this phenomenon.



A landscape approach resulted from conceptual interactions, having various approaches of social sciences, humanities, and arts that make it a multifaceted one, can present a holistic approach that simultaneously considers subjectivity and objectivity of space (subjective-objective).

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1 Introduction

Consider the phenomenon of “city” as one of the finest achievements of human civilization. How can the city be described? Is it an arbitrary sequence of the letters comprised in the word? Or perhaps descriptions such as: “*an empty space surrounded by masses of structures,*” “*a societal space for promoting civilization,*” or even “*a sky blotted out by a mass of looming shadows*”? However, which description offers a correct interpretation? Considering that the attempt man has made to describe the phenomena surrounding himself is limited to language, the “point of view” of a phenomenon becomes particularly significant in this regard. However, the evolution of human knowledge through its 2.5 million-year odyssey demonstrates that it has diversified into a multitude, different branches to be able to describe phenomena, rather than bringing forth a uniform and holistic description of them.

Schemata¹ are constantly developing and expanding as human beings continually describe identical phenomena in numerous ways. Modern academicians have reached a consensus regarding the division of human knowledge into a trinity of the natural sciences, the social sciences, and art except for philosophy. It is a part of an endeavor to ontologically and epistemologically examine knowledge’s nature. Hence, scholars in each area might investigate the same phenomenon and arrive at different, sometimes contradicting definitions. Each of the descriptions mentioned above of the phenomenon of “city” could represent the predominant approach in each knowledge field. The description “*an empty space surrounded by masses of structures*” could represent the natural sciences relying on visual elements while “*a societal space for promoting civilization*” can represent social sciences. The last description, “*a sky blotted out by a mass of looming shadows,*” represents an artistic approach as suggested by its extravagantly dramatic and metaphoric tone. These examples could demonstrate man’s endeavors and experiences regarding space interpretation, aiming to understand his surrounding environment better. A glance at the historical evolution science in its three main fields and the emergence of specialized subfields concerned with the study of space such as ecological and geographical sciences, sociology of space, environmental art, etc., further reveals humanity’s quest for understanding and interpreting his surrounding environment.

Moreover, when issues of a more specific space such as urban space are to be studied, areas of study such as “urban planning,” “urban engineering,” “traffic sciences,” “urban sociology” need to be employed as specialized divisions of the main three scientific fields. Despite their superiority in explaining certain aspects of space, each field and their approaches have deficiencies as well, and none of each could present a comprehensive, “holistic” understanding of space. In light of the points elaborated, “Landscape,” as an independent discipline with a novel perspective formed through its evolutionary history, aims to introduce the objective

¹ Schemata are packets or maps of data based on an individual’s experience regarding their environment which is systemized through continual evolution and revision to optimize data reading and to improve suggested options by a cognitive analyst [1, 2].

and the subjective understanding of space in a uniform and “holistic” approach. This chapter seeks to delve into “landscape” as a “holistic” approach toward the space concept by investigating each main branch of science and its atomistic approaches to space.

2 Natural Sciences

The first area of human knowledge to be discussed is “natural sciences.” However, before proceeding, it will require us to contemplate what type of human knowledge can be considered science? Moreover, to which division of science does natural science point? These are some of the most fundamental questions of the human mind since the beginning of our existence. Following the Modern Period, they have branched off into a fully fledged subdivision of philosophy called “philosophy of science.” Until now, the continuance of this academic discipline demonstrates man’s inability to define the concept of “science” fully; however, many thinkers have strived to draw a distinct line between science and other human knowledge areas since The Golden Age of Greece. The initial great thinker was Aristotle, who divided human knowledge into natural sciences and metaphysics. Modern science as we know it, however, came into being in the seventeenth century, where its foundations occurred on the observation of objective facts. What made the emergence of modern science possible was the immense contributions of great “experimentalists” such as Galileo and Newton, who strived more for experience and observation [3]. Modern science thus focused on observation. Subsequently, science successes throughout the seventeenth, eighteenth, and nineteenth centuries were so awe-inspiring, leading to the foundation of a school of thought known as “logical positivism” by a group of thinkers from the University of Vienna, known as the Vienna Circle, in the 1920s. Logical positivism, itself a by-product of modernism, asserted that the only way a statement could be proven scientific was through direct observation or logical proof. Through the minutely devised standards of methodology introduced in their manifesto, logical positivists not only pioneered the concept of “scientific methodology” [4] but also completely erased the remnants of metaphysical discourses in the realm of science, albeit, temporarily [5]. Consequently, humanities and other study areas founded in abstract concepts rather than concrete facts observable and testable in the physical world were by degrees cast out from the scientific realm.

Despite the numerous remarkable breakthroughs of science from the Early Modern or Renaissance Period to the Modern Period, excessive emphasis on observation and the supremacy of objectivity in the Modern Period led to humanity’s gradual detachment from its living environment. This is due to the natural sciences’ atomistic approach toward phenomena as systems infinitely breakable into smaller parts whose totality can then be examined and determined by studying its comprising parts through observation and experiment [6]. Being one of the two main schools of thought in the objectivist paradigm, this point of view is

referred to as “inductivism” in scientific philosophy. The other school, “falsificationism,” emphasizes objectivity and testability of observations. However, it did not attribute the generation of identical results from a single phenomenon to the said results being irrefutably true. Falsificationists, thus, called for constant skepticism toward scientific findings on the part of the scientific community. Therefore, natural scientists can only consider each observation as the best temporary option on which they could rely. Accordingly, the more general and falsifiable, yet unrefuted, an assumption, the more scientifically valuable it is. There is, however, a later group of falsificationists who cast doubt on the truthfulness and reliability of observation itself and believe that the scientific community relies too much on observations in experiments and research. Thus, Karl Popper describes the falsificationist notion of the unreliability of observation: *“The empirical basis of objective science has thus nothing “absolute” about it. Science does not rest upon solid bedrock. The bold structure of its theories rises, as it were, above a swamp. It is like a building erected on piles. The piles are driven down from above into the swamp, but not down to any natural or “given” base, and if we stop driving the piles deeper, it is not because we have reached firm ground. We simply stop when we are satisfied that the piles are firm enough to carry the structure, at least for the time being”* [7].

According to the proponents of this branch of falsificationism, observation does not precede understanding, and in scientifically driven observations, human understanding, and precedes observation. Consequently, upon observing identical phenomena, different individuals cannot make the same observation despite the raw data being objective and identical. It lies in the process of understanding that works as a filter or vessel dealing with raw observational data and varies from individual to individual.

In the second half of the twentieth century, the notion, which is still widely popular, observation is the only key to science and research, was challenged and criticized. Post-modern thought prioritized human subjectivity over culture, history, and the environment.

The same historical trend is observable concerning space. Thus, it has been examined as merely another natural world element in an atomistic and divisionary manner. The emergence of new disciplines such as “traffic science,” “urban ecology,” and “urban planning” can be attributed to the hegemonic dominance of the atomistic point of view toward the phenomenon of the city in the Modern Period. As post-modernist culture came into being and the consequent emergence of new concepts regarding space such as “place,” the objective and atomistic perspective of modernism toward space and the division between objective space and the subjective human understanding of it began to fade. As a result, space could be approached from a humanistic perspective based on humanity’s understanding of history, culture, and the world. Such could occur free from natural sciences’ restraints because their unquestionable reliability [8] and superiority over other kinds of knowledge was challenged. It suggests that relying solely on the natural sciences’ empiricism when examining space would reduce mere structural objects. Consequently, as constituent elements of space, landscape, and spatial structures will be regarded as the “totality” of space.

3 Social Sciences

The choice between “social sciences” and “humanities” for this chapter’s title proved to be a challenge reminiscent of the dilemma faced by the scholars of this area throughout its evolutionary history². Wilhelm Dilthey (1833–1911), the founder of modern humanities, upon his categorization of the different branches of science, pointed out that social sciences, regardless of their titles, i.e., spiritual, cultural, or social sciences, are distinct from natural sciences. Thus, there exist different methodologies governing these sciences when serving their goals. “*History, political economy, the sciences of law and of the state, the studies of religion, of literature and poetry, of art and music, philosophical worldview*” are revolving around the same ultimate goal, that is, the understanding and the study of a single subject: man [9].

The controversial disagreements between scholars who conservatively stay within the limits of reproducible objective facts and those firmly attached to theoretical syntheses founded upon historical and ethnographical beliefs have been perpetually going on. Social sciences claim to be test-retest reliable like the natural sciences. They can refute or confirm the link between two individual or social phenomena through empiricist experimentation without unfounded explanations. Despite this, social scientists have been progressively concluding that individuals’ experience plays a greater role in their behavior and feeling than environmental factors. Moreover, current methods of measurement are not accurate and effective enough to precisely examine the private understandings. It has led to the emergence of a problematic tendency for the quantification of all constructs [10]. As Dilthey points out, the ultimate human sciences subject is the human spirit and mental states, which he refers to as the objective reality of understanding or lived experience [9]. One can assume that a great part of human phenomena is subjective, which led to the development of sequential research methods as relative measurements suitable for qualitative research. Despite this, some scholars tried to discover a link between individuals’ biological and psychological states as this proved to be easier to quantify than other methods. The abovementioned narrative of the emergence of the social sciences, or human sciences, demonstrates how natural sciences forced their observation and induction-based methods on the former to be allowed into the realm of science. Despite this, as social sciences developed further, it became evident that there are other qualities and aspects of human existence whose study and understanding would not be possible with conventional scientific methods and would not bear any scientifically valuable results in terms of practicality [10]. As Dilthey points out, the human world is filled with values and meanings while the natural world—of the natural sciences—does not concern itself with such things [9]. In other words, social sciences had to make the sacrifice of limiting their area of study as not all of it was compatible with the

² The significant difference between the two fields is related to the function and critique of productions; however, to concentrate on the arts field in this chapter, this section was considered as a social science, which varies from academic one, including sciences related to humanities as well.

scientific method. This shows that social sciences are not alone sufficient to examine all aspects of human phenomena effectively. It has to filter out human and social phenomena. We cannot appropriately measure them through scientific methodology.

In light of the characteristics discussed above, social sciences tend to have a subjective approach toward space and focus on space's human or social components. The expansion of the territory of humanities regarding their qualitative and quantitative methods has led to the development of new combinations in the study of space, which has further enriched the terminology of space and helped shape new insights. Upon perusing the recent literature about space, one encounters various novel combinations such as the study and reading space as language or the role and function of space in fulfilling human needs by providing security, identity, and behavioral norms. Other research areas such as the study of space as personal, social, private, or collective territory also owe their existence to space with concepts borrowed from social sciences. As such concepts found their way into the literature of urban studies as the collective living space for human beings, previously unknown and unexplored aspects and dimensions of urban space were revealed to experts and scholars of the field, ultimately leading to better-informed decisions on planning and executing levels.

4 Art

Artists who create artworks are mere individuals rather than scientists. It seems that the ambiguity, intangibility, indefinability, and the intimation of transcendence found in work of art have impressed upon scientists that they are not adequately equipped to examine art [11]. Moreover, science has not generally shown great interest in art. For philosophers, however, art and properly explaining it has been a subject of great interest and labor. One of the first such attempts was Plato's, who dismissively categorized art as *poiesis*³ or *mimesis*, i.e., imitation: a mere representation of reality. When his "Theory of Forms," an idealistic theory asserting that all physical objects are mere reflections or copies of ideal originals in the world of ideas, is taken into consideration, his dismissive and occasionally hostile treatment of art is only logical as he believed that the most masterfully crafted work of art to be a mere copy of an object in the physical world which itself is an inferior copy or reflection of the ideal [12]. Aristotle was not as harsh in his art treatment and found therapeutic and utilitarian functions to stimulate and purify dangerous sentiments through *Catharsis* safely. The interpretations as mentioned above of these two great Greek philosophers regarding the essence of art left such a colossal impression on

³ Aristotle believed art to be a part of the three formal and abstract activities of humanity and their relevant results. *Theoria*: which is concerned with the theoretical knowledge of man and his understanding of the relationships between things, *praxis*, which refers to man's activities in order to satisfy his desires, and *poiesis*, which is an unoriginal and imitative activity concerned with representations of the outside world. Aristotle attributes art to this category [12].

western thought that the duality of “form” and “content” continues to haunt critics and artists alike to this day [13].

Granting all this, when an artist begins the creation process, he or she forgets objective reality and strives to create art, free from the restraints of practicality, resulting from a previously encountered phenomenon as a cohesive whole. In reality and on the contrary, art begins when reality, history, or human experience, cannot be communicated through the employment of linguistic signs, scientific, logical, and philosophical conceptualizations. As Mansouri points out: “*The complexity of understanding work of art is due to its holistic nature,*” which artists achieve with reliance on intuition and revelation [14]. As a result, attempts to understand and interpret this holistic phenomenon have continually dealt with fundamental challenges despite the scholarly community’s great breakthroughs in poetry, music, painting, etc. Baumgarten asserts that the reduction of phenomena to their basic substance and components is futile. It might provide insight into each component but will do little to help us understand the whole [15]. Heidegger, too, preferred a holistic approach and warned against the danger of deviation from truth through endeavoring to theorize work of art [16] methodologically.

As discussed earlier, even though art lacked compatibility with scientific standards, due to the influence of art and artists on society, scholars could not be completely dismissive of them with their modernist scientific standards of valuation. Consequently, substantial effort has been made in the global academia to better structuralize and organize theoretical inquiry into the subject; steps toward understanding art in the different areas of the two natural and social branches of science to logically and scientifically regulate art study. Naturally, these attempts, parallel to the rapid expansion of the territory of the social and natural sciences and their novel quantification methods, brought the study of art into a new reductionist stage. This objective point of view endeavored to find meaning and beauty outside the limit of human understanding in the physical external world. Although inductivist and quantitative methods in certain fields of the humanities and art were helpful, this was not true about all of them. As a result, branches with qualitative methods developed in that period and led to serious discussions concerning art’s philosophical and psychological aspects. Moreover, natural scientists and researchers focused their studies on the techniques and factors contributing to artistic creation. Furthermore, the progressively significant role artists played in modern society, the functionalist aspect of art became yet another reason for art to be admitted into the world of science as something to be studied for its social, behavioral, neurological, etc. significance [14]. What is remarkable is that the artist continually performs the act of creation through the intuitive employment of their subjective and physical totality of self rather than through rationality and logic, which makes the understanding of art impossible through only natural and social sciences. All contrasts, such as un-learning and learning, forgetting and remembering, uncertainty and certainty, have to be equally considered during the creative field. Hence, during artistic work, the artists have to forget all of the academic processes they have learned so far [17]. The artist has to refer to his existential experiences, rooted in unconscious touch, to create an artwork.

Now to perceive space through the lens of art, phenomenology can be of great help. In an artistic experience, a unique interaction occurs; the artist marks space with their desires and understands the essence of space that engages in a dialectic interaction between their objective and subjective selves and space. Such a process unites objective and subjective structures, merges them, and gives our existential experience cohesion and profound meaning. As Pallasmaa points out: A work of art is thus a series of compact reflections of the experience of existing in the world [17]. Suppose artists when become aware of themselves and their city through this bodily and existential space experience. It leads to an internalization of the urban space in them. This fluid and immediate perception manifest itself in color, light, shadow, musical echoes, etc., as a sentimental representation of space in the artwork.

5 Landscape

The landscape is a relatively new discipline among the abovementioned territories of human knowledge, namely science, humanities, and art. Yet, its interdisciplinary situation distinguishes it from most other disciplines. Its methodological framework is scientific, has goals and subject matter in common with humanities, and its creation occurs as intertwined with art. This relatively distinct character is attributable to its roots and philosophical evolution throughout the last five centuries. Consequently, to better understand the landscape as a holistic approach, it would be beneficial to assess its interactive relationship with social and natural sciences and art throughout its evolutionary history.

Scholars mostly agree on the birth of landscape both as a word and a concept originated from renaissance-related intellectual changes [18–20]. The landscape was first used as a word in the late fifteenth century when the Dutch intended to describe a natural environment and a painting. In this period, landscape emerged with the advent of the classical modern, and within the aesthetic approach of man toward nature, the physical world's discovery, and the distinction between it and the world of phenomena in Europe [21]. As Roger points out, until then, no perception of what we now call a landscape existed, and no trace of such a concept can be found in the literature. In other words, the landscape was a visual invention of the fifteenth century [20]. Parallel to the invention of the perspective technique and modern geometry principles, which helped artistic representation go beyond mere symbolism and subjectivism, the landscape concept attracted more attention. In this period, the term landscape was employed to refer to a sensualistic and subjective artistic concept synonymous with the “aesthetically motivated selection of a natural scene” by the artist previously not common in the art of painting.⁴ This mindset

⁴ Prior to the Renaissance Period, artistic depictions of a selected natural scene for aesthetic purposes were not common since the art of painting had been generally reserved for mythological, theological, and abstract themes. Roger attributes the works of artists such as Jan Van Eyck and Robert Campin to the emergence of the concept of landscape in this period [20].

toward landscape, amid the eighteenth-century human dominance over nature simultaneous with the systematic and global destruction of landscapes in modern and industrial cities and the emergence of Romanticism in art and literature—and their strong aversion to the predominant modernization and their proponency of an affectionate point of view toward nature—led to the creation of emotive works of art in which not only natural scenes were selected as subjects but were also charged with “sensualistic subjective values.”

In the late nineteenth century, amid the decline of the long dominance of positivist ideas and their insistence on the division between the subject (man) and object (the world), significant changes took place in the scientific world. During this period, relativity physics, through its demonstration that any specific observation is relative to the observer’s position, rendered the notion of absolute and immutable objectivity obsolete [22]. The principles of classic modernist physics and their proponency of the separation of subject from the object were consequently challenged [21]. At the same time, the employment of scientific methods in different disciplines for the conquest and understanding of the New World changed the concept of landscape. With the emergence of scientific research, Darwin’s findings, and the naturalistic explorations of Von Humboldt, the landscape was systematically defined as an independent and perceivable albeit visually oriented phenomenon [23, 24], and its study became an academic discipline. It was first used in this context by Alvin Oppel [25] as a technical term in cultural and human geography concerned with subjective and social symbolic structures of different landscapes. In 1890, the term “cultural landscape” was first used in geography [26] amid the progressively increasing intermingling of social sciences and landscape.

The most fundamental change regarding the concept of landscape in art and philosophy took place in the twentieth century amid the emergence of phenomenology, which revolutionized our understanding of the relationship between subject and object (perceptive and what is perceived). Scholars such as Husserl, contradicting Descartes and Locke’s dualism, demonstrated how the content of perceptual experience goes beyond what is visually perceived but rather includes the context of assumptions, memories, connotations, and predictions, which infinitely enrich experience [27]. Simmel asserts that landscape begins to form when a group of natural phenomena on the earth’s surface is perceived in a unified manner [28]. Merleau-Ponty, in his phenomenological examination of perception, repeatedly refers to the example of landscape and its perception [21]. This approach views landscape as a type of place⁵ characterized by inseparable and intertwined objective and subjective dimensions. Bernard Lassus confirms this indivisible characteristic of the landscape [30]. Berque validates it by defining landscape as a type of place formed due to the interaction between man and environment possessing biological, ontological, and logical attributes [31]. Swaffield additionally points out: “*Landscape not only represents a perceivable phenomenon which can be seen with the*

⁵ Place is a subjective-objective concept characterized with not only quantitative and physical attributes, but also non-physical ones such as the emotional response of its audience. Schultz describes it as a “subjective and objective phenomenon” in a holistic sense [29].

eyes but furthermore represents abstract ideas or connotes vivid imaginations of the mind” [32]. Accordingly, as an indivisible synthetic product of the subjective and the objective, the landscape is a phenomenon whose understanding is only possible through a holistic approach.

Conclusively, the most overt characteristic of landscape, as a discipline, is its scientifically regulated holistic approach toward space. On the one hand, landscape, through its adoption of the three major territories of knowledge, namely: natural sciences, humanities, and art, forms an approach that can be practically beneficial, not only theoretically, in the creation and interpretation of space. This interpretation was favorable to architectural and urban scholars. It defined the space as a summation of historical and physical characteristics without fundamental alteration of perspective to classical space. In contrast, holistic view—As mentioned, one of the characteristics of landscape definition—does not distinguish between two objective and subjective aspects in space but considering them two interpretations of a single truth rather than two independent aspects (Fig. 1). Therefore, in the context of landscape interpretation, the city, as space, is not a mere culmination of physical and objective characteristics but also the perceptual understanding of it through its symbols by its inhabitants.⁶ In this approach, urban space is not interpreted solely through the measurement of its physical properties but also through examining the collective memories of it shaped by its inhabitants throughout its history.

6 Discussion

In light of the points elaborated earlier, space, as a phenomenon, can be examined through four different approaches. It is worth pointing out that employing each of these approaches will lead to a different interpretation because they have inherently different rational foundations. The fundamental issue is finding the most effective approach to offer a more comprehensive and accurate description of space as a multi-dimensional phenomenon. As pointed out before, the natural science approach is one of the most commonly adopted approaches in studying space and enjoyed extensive popularity among architecture and urban studies scholars in the Modern Period. However, thanks to its inherent logical tendency to separate the objective from the subjective and paying close attention to the latter aspect of different phenomena, natural science has not yet provided a comprehensive image of space as a subjective-objective phenomenon. Such a scientific approach has led to catastrophic human-environment interactions and serious reconsiderations among scholars concerning this approach’s fundamental bases. Moreover, these experiences demonstrated that the classic natural sciences laws can no longer be

⁶Symbols themselves are subjective-objective phenomena possessing formal attributes and semantic dimensions in relationship to the minds of their audiences whose understanding of symbols is possible only through holistically approaching them. In order to interpret urban landscapes, it is therefore vital to have a holistic approach as a great many of the constituent elements in the landscape of a city are symbolic ones.

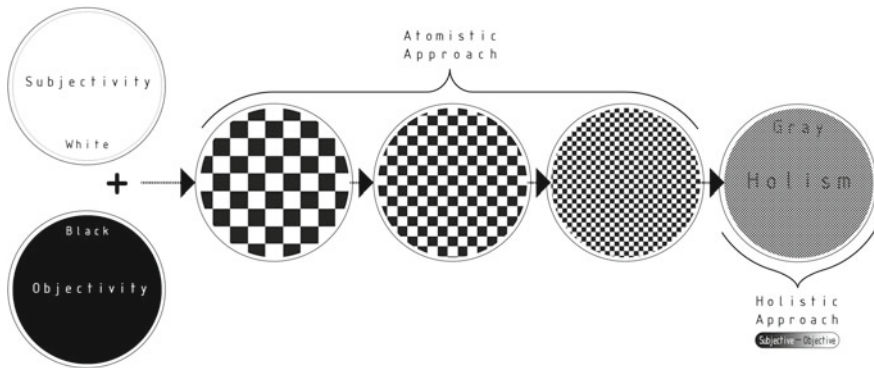


Fig. 1 Atomistic approaches interpret space by integrating its subjective and objective aspects; however, holistic approach does not distinguish between two aspects, for numerous truths of space synthesize subjectivity and objectivity in new dimension. So, interpretation of this new dimension is solely achieved by holistic approach

held to be absolute and immutable facts and could be subject to revision and change when approached from a holistic critical perspective.

Another popular approach toward the phenomenon of space is that of social sciences, which can consider subjective concepts (or certain subjective concepts) and go beyond the limit of objective reality. However, social sciences can only study concepts confirmable or refutable with scientific methods. Likewise, it excludes subjective issues falling outside this territory. On the other hand, through their simultaneous yet separate examination of phenomena' subjective and objective aspects, social sciences can occasionally offer a divisible sum of the two akin to a separable totality. Contrary to the formerly mentioned approaches, the artistic approach has an inherently holistic tendency toward its treatment of issues and can simultaneously examine the subjective and the objective. Despite that, and because art lacks the scientific methodology required to examine phenomena' quantitative properties, its interpretations of space cannot be as comprehensive and methodic as natural sciences. Finally, the landscape approach as a product of conceptual interactions between the natural and social sciences and art can be regarded as a multifaceted approachable to provide a holistic insight into the objective and subjective aspects of space (Graphical Abstract). Landscape, through a synthesis of these two dimensions, can create a new conceptual dimension referred to as the subjective-objective, enabling us to interpret concepts previously incomprehensible to us, or at best, partly understandable.⁷ As a result, one might interpret space as a totality comprised of physical and non-physical dimensions through the landscape

⁷ The emphasis of scholars and experts on the uniformity of landscape as a discipline is due to the fact that subjective-objective phenomena are formed in a new context of conceptualization absolutely untranslatable through atomistic approaches. What is represented as an interpretation of a uniform totality by atomistic approaches is not only not a translation of parts of a whole, but also a conceptually different and fundamentally contradictory one.

approach. Such treats space as neither a solely physical phenomenon nor an abstract, subjective issue as there exists a dynamic and concurrent link between the two making them inseparable.

7 Conclusion

Interpreting space has been a perpetual challenge for humanity and has produced numerous mutations of itself under the influence of different approaches throughout history. The study and interpretation of this concept have been subject to the impact of different inquiry fields like natural sciences, social sciences, and art. However, it seems that none of these approaches could provide a comprehensive interpretation of all its aspects and dimensions. As with natural sciences, space reduces to an objective phenomenon whose different dimensions are only measurable and open to exploration through a limited number of factors. Since measurability is an inseparable and fundamental aspect of modern science, the abstract and qualitative aspects of space cannot be adequately examined through natural sciences' employment alone.

Moreover, humanities, committed to studying those abstract and subjective concepts compatible with scientific methodology, seem unable to simultaneously explain the objective and the subjective aspects of space due to its atomistic perspective. Despite possessing the means for a holistic examination of both the subjective and the objective aspects of phenomena, art does not explain all its aspects and properties, namely the quantitative ones, since it lacks methodological means. Nevertheless, the landscape approach, which is a synthesis of the interactions among all three fields mentioned above of study throughout history, has developed certain inherent properties required for holistically approaching and interpreting various and intertwined subjective and objective aspects of space as a multifaceted, multi-dimensional phenomenon.

Core Messages

- Evaluation of various approaches of natural sciences, social sciences, and art reveals that each of these approaches, due to its rational base, can partially explain the concept of space, which is not considered a comprehensive insight of the space as a subjective-objective concept.
- The landscape is an interdisciplinary approach that uses the methodological framework of scientific approach has goals and subject matter in common with humanities, and its creation occurs as intertwined with art.
- The most significant landscape characteristic is its scientifically regulated holistic approach toward space which is attributable to its roots and philosophical evolution throughout the last five centuries.

- The landscape is a multifaceted approachable to provide a holistic insight into the objective and subjective aspects of space which, through a synthesis of these two dimensions, can create a new conceptual dimension referred to as the subjective-objective, enabling us to interpret concepts previously incomprehensible to us.

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Ehsan Keramati Niaragh graduated with a BA in Architecture and an MA in Landscape Architecture from the Mohaghegh Ardabili University and the College of Fine Arts (University of Tehran), respectively. After graduation, he had continued designing and research in the Landscape area at Nazar Research Center. He has been an organizing committee member of USERN since its foundation and has participated in Artistic Activities and Consultations (Designing and construction of USERN Prize). He collaborated in urban development projects at the City of Knowledge (University of Tehran and Tehran University of Medical Sciences). His architectural and landscape projects were awarded/ appreciated in national and international competitions. Ehsan also has publications in the landscape area. He has been professionally active in art performances (painting, graphic design, and statue) awarded/appreciated at national and international levels.



Nima Rezaei gained his medical degree (MD) from Tehran University of Medical Sciences (TUMS) in 2002 and subsequently obtained an MSc in Molecular and Genetic Medicine and a PhD in Clinical Immunology and Human Genetics from the University of Sheffield, UK. He also spent a short-term fellowship in Pediatric Clinical Immunology and Bone Marrow Transplantation in the Newcastle General Hospital. Since 2010, Dr. Rezaei has worked at the Department of Immunology and Biology, School of Medicine, TUMS; he is now Full Professor and Vice Dean of International Affairs, School of Medicine, TUMS, and Co-founder and Deputy President of the Research Center for Immunodeficiencies. He is also the founding President of the Universal Scientific Education and Research Network (USERN). He has edited more than 30 international books, has presented more than 500 lectures/posters in congresses/meetings, and has published more than 800 articles in international scientific journals.