



Recognition of Space in the Architecture of Sheikh Safi al-Din Ardabili's Mausoleum

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Abstract. Aesthetics is used for better understanding objects and changing perspectives, and in Islamic philosophy, it is directly related to religious principles and beliefs. Therefore, examining and analyzing the principles of aesthetics for understanding culture and art, especially in architectural studies, can be crucial. Spaces in Islamic architecture can be summarized in ten indicators: unity in multiplicity, purposefulness, harmony, geometric values, hierarchy, limits and boundaries, clarity, integrity, ease and fluidity, light and color, reflection and symbolism, and symbolism. On the other hand, the tomb of Sheikh Safi al-Din Ardabili is one of the most important works of Safavid architecture and an exquisite example of Islamic architecture. Thus, through an aesthetic reading of the architectural space in the tomb of Sheikh Safi al-Din Ardabili and examining the ten indicators in various spaces of this complex, the researcher reached the following conclusions: among the ten indicators, geometric values, light and color, hierarchy, purposefulness, and unity in multiplicity were present in creating all spaces of this complex, derived from the thoughts of its architects in different eras. Overall, after examining the tomb of Sheikh Safi, as a unique and complete example of a work in Iranian Islamic architecture, it can be acknowledged that for assessing the aesthetics of spaces in any Islamic architectural work, one can benefit from the mentioned ten indicators.

Keywords: Iranian Architecture, Islamic Wisdom, Islamic Aesthetics, Space, Sheikh Safi al-Din Ardabili Mausoleum

Introduction

Architecture, stemming from human culture and art, represents the quality of the culture and art of its people. Iran, with its architectural heritage dating back several thousand years, demonstrates the fact that at certain times, its culture and art had a distinct and universal language and was emulated by other societies.

In Islamic philosophy, space is examined in relation to the concept of place and divided into horizontal and vertical spaces. Based on this, Islamic architecture emphasizes its focus on



Power System Technology

ISSN:1000-3673

Received: 16-05-2024

Revised: 12-06-2024

Accepted: 27-07-2024

vertical space. This is a space that provides the setting for solitude and inner presence, allowing



for self-discovery and self-awareness for individuals, and has primarily been emphasized in inner spaces. Various indicators can be identified for each Islamic architectural work, with the most important ones being unity in multiplicity, purposefulness, harmony, geometric values, hierarchy, limits and boundaries, clarity, integrity, ease and fluidity, light and color, reflection and symbolism, and complexity. Examining these ten indicators in each Islamic architectural structure provides comprehensive information about its spatial quality.

The unique structure of the tomb of Sheikh Safi al-Din in Ardabil is such that it has served as a model for many Iranian architects and has been utilized concurrently or in later periods in other lands. It seems as though each has come into existence and endured because of the other. Speaking of this structure today is, in fact, talking about an artistic marvel that is evident in its various aspects. Therefore, in this study, the researcher aims to have an aesthetic reading of this complex to examine the marvel of the spaces created in this edifice.

Research Background

Mousa Rajabi Asl delves into a comparative and structural analysis of the patterns and architectural elements in the shrines of Sheikh Amin al-Din and Sheikh Safi al-Din in Ardabil, focusing on the fundamental structures of the patterns and designs in these shrines as well as the symbolic concepts hidden within them.

Habib Shahbazi Shiran, in his article on architectural examination, nature, and function of the Haramkhaneh and Chinikhaneh buildings within the religious complex of Sheikh Safi al-Din Ardabili, endeavors to investigate the nature and function of the Haramkhaneh (one of the oldest surviving structures in the extensive complex of Sheikh Safi al-Din Ardabili) and the Chinikhaneh (a marvelous phenomenon of Iranian art in the 11th century AH) and shed light on dark and hidden angles of the subject through this exploration.

Hassan Mojarabi and Ali Gholami Firouzjani, in their article on the importance and value of the tomb of Sheikh Safi al-Din Ardabili in Islamic architecture and arts (260-735 AH), have highlighted that the tomb of Sheikh Safi al-Din is one of the most significant and valuable works of Islamic art and architecture from the Safavid period. Despite natural disasters like earthquakes, floods, and resulting destruction, it is still considered a top-tier Iranian element, reflecting the visible efforts of Iranian artists and the influences of Azerbaijani and Islamic architectural styles.

Theoretical Foundations

Definition of Space

In a certain culture, "space" has been defined as follows: "a vast place, spacious land, courtyard; the place occupied by the Earth in the solar system" [1]. In both definitions, the term "place" is used, indicating that space has a place, or in other words, it is a place that can be entered; therefore, space is certainly an empty place.



However, the Oxford English culture offers 9 meanings for the word "space," among which the following can be mentioned:

- "A continuous expanse in which objects exist and move.
- An amount of an area that is occupied by a particular thing or taken for a specific purpose.
- The distance between points and objects; a gap or a temporal interruption" [2].

Concept of Space

The first attempts to provide a definition of the concepts of space and place were in the realm of philosophy and were presented by Plato and Aristotle; from that period until today, multiple and sometimes contradictory definitions of these concepts have been expressed in various scientific, philosophical, and artistic fields. Initially, it is necessary to point out the semantic difference between the terms space and place. Although these two terms are sometimes used synonymously and interchangeably, the most important distinction of the concept of space compared to place is its abstract nature. In that sense, space is more about being a location, empty, and void, where no specific connection can be established with it, and it is merely a place for something to exist; whereas place is more specific and intertwined with human characteristics and values.

As mentioned, space is more of a mental matter. The empirical understanding of space confirms that space is not an actual entity but rather a relationship between objects, the container of objects, or the radiation of objects. Additionally, philosophical perspectives, such as phenomenology, differentiate the concept of space and void when discussing behavioral space; in fact, the void occurs when there is no measuring reference point, while space encompasses such reference points, although it is not the points themselves [3]. In ancient Greece, there was no precise term for space, and they used the phrase "distance between" to explain the concept of space.

Plato believed that the nature of space is constant and that it is a receptacle for various forms when objects are present, never taking a form similar to the forms of objects because it does not alter its nature. Aristotle also believed that space is a collection of places and is prior to everything else in a way that can accommodate quantity and quality [4].

Given that absolute Platonic space is incomprehensible to humans except in the presence of objects, the concept of relative space can be interpreted in two ways: the first perspective states that relative space is a part of absolute space that is perceptible in the presence of objects, while the second perspective suggests that relative space arises from relationships between objects and does not exist prior to them.

The existence of space, according to Idealists, is dependent on humans and their attributes; Kant views space as pure intuition that encompasses all objects and the relationships between them; for him, space and time are forms applied by the human mind to phenomena and are not inherent in the external world. He believes that space is not a derived empirical concept from



external experiences but is a priori principles that establish relationships between objects, therefore, the concept of space can only be discussed from a human perspective [5]. Leibniz confirms the influence of the mind in creating space and place, but unlike Kant, he believes that time and space are derivative from bodies and subservient to them, with the existence of bodies being prior to the existence of space [5].

In the Idealist view, space is not independent of objects, and as long as objects are present, space and place can exist; there is no void or emptiness in space, and space derives its essence from the fullness around it. In the Realist perspective, Albert Einstein, through his theory of relativity, unites space, time, mass, and energy. His space has gelatinous characteristics and manifests itself in different forms depending on the observer's velocity [6].

Types of Space

The classification of types of space depends on the field and domain of study. However, based on the content discussed in the concept of space section, space can be divided into two types: absolute and relative (Table 1).

TABLE 1
Classification of different definitions of space [6]

space	Species	Theorist	Definitions
	Absolute space	Aflaton	It is absolute and it is the container of all things, it is shaped and understood by humans.
		Aristo	Space is a collection of places and before everything so that it has the ability to accept quantity and quality.
		Newton	It is absolute and independent of objects and events.
	Relative space	Immanuel Kant	Space exists in the mind as a prior thing, as a pure intuition, so that it has caused all objects.
		Giordano Bruno	It is born from the relationships between objects and becomes understandable for humans.
		Friedrich Nietzsche	It is a combination of forces.
		Leibniz	A system that consists of relationships between things without volume and mental.

Space in Architecture

Poosner (a historian of art and architecture, as well as a German-British architect) and Wright (an architect, interior designer, educator, and writer from the United States) also



perceived space in modern architecture as the distance between walls, but Rath (a architectural historian) considered architectural space to be a combination of three physical, perceptual, and functional spaces" [7]. "This historical trend is consistent with Giedion's classification, who divides the concept of space into three periods: the first period is related to construction, the second period to emptiness, and the third period to the relationships of voids" (Gideon, 1986).

On the other hand, understanding the essence, nature, and foundations of architectural space requires grasping the concept of space in architectural theory. Generally, space has been geometrically defined based on Euclidean geometry, while others have interpreted space as the actual dimension of human existence based on the philosophy of existential space.

Philosophy of Existential Space

"The concept of existential space is based on the notion that every human action has spatial aspects. Human actions take place and therefore require a more or less defined and specific spatial framework in which to occur. This concept has a dual meaning: on one hand, the spatial aspects describe an intersubjective form of life, and on the other hand, they define the specific image and spatial relationships that shape part of one's existence. Therefore, one can discuss general and private spaces of existence. Private space of existence is formed by the mental development resulting from the reciprocal interaction between the individual and their environment. The result is the formation of an image that includes three-dimensional meaningful relationships between objects. This image is not directly related to the perceptual space. While perceptual space is always changing, existential space has a relatively stable structure that serves as a reference background, transforming fleeting perceptions into experiences" (Norberg Schulz, 1974: 42).

Elements of Existential Spaces include:

- Center and Place: Any place where meaning is manifested is essentially a center.
- Direction and Path: Vertical direction indicates ascent or descent, considered as the sacred dimension of space. Horizontal direction signifies the non-transcendental world of human action. The path is a primary characteristic of human existence and therefore one of the most significant symbols.
- Enclosure and Domain: Paths divide the human environment into enclosures and domains that are more or less identifiable. From a specific perspective, domains are places, as they are defined and determined by the confinement or proximity and similarity of constituent elements. Domains have a unifying function in existential space.
- Action and Initial Reaction: The characteristic of a place should be understood as a result of the action and initial reaction of that place with its surroundings, which, relatively, had no purpose in their paths and ultimately acted less combined, but provided a ground (ibid: 42-43).



Space in Islamic Wisdom

"In Islamic wisdom, the definition of space should primarily be sought in cosmological books, and its concept is closely related to place. Two definitions, namely those of Plato and Aristotle, have been advocated by Islamic philosophers" (Forutan, 1388). According to Islamic anthropology, spaces are divided into two categories: heavenly and internal spaces:

- Heavenly Space: This space satisfies the human tendency towards the attractive nature of space, the face of materialism, diversity, and generally manifests in the public and external domain.

- Internal Space: This space creates a setting for solitude and inner presence for humans, providing a state of self-discovery and self-awareness, and has mainly been focused on internal spaces. As a result, due to the internal nature of perceiving space, humans reach a sense of "unity with space" and see their identity reflected in the surrounding mirror.

Factors influencing the internalization of space include: polarity, geometry, shape, texture, color, light, decoration, etc. Polarity and directionality in each architecture and spatial design emphasize specific directions of observation, light, movement, attention, etc. Polarity is one of the most important tools in creating qualitative and meaningful values in space, and any form of concentrative order with axialization and parencitization and regulation of spatial proportions that give direction to space through square, cube, or rectangular cubing are among the most important factors in qualifying internal space. Another essential principle that plays a fundamental role in spatial externality is the intensification of physical (mechanical and physical) movement. Elements forming architectural space in humans intensify and encourage movement and passage. Various linear and undulating geometries, irregular shapes, centerless shapes, and extensions outward from the point of view are effective in spatial externality (Tagavi Bolesi and Roshanas, 1390).

Philosophy and Iranian Islamic Architecture

The importance of meaning in shaping space and architectural firm has led to an approach in architectural design known as semiotics. The view of semiotic architects is like that of other arts, crafts, and human products. The fundamental principles of Islamic thought and worldview can have a general impact on the artist's perspective on the universe and phenomena and specifically on the outcome of architecture.

To present an authentic work in architecture, from the perspective of philosophy and Islamic art, it is necessary for the architect to adopt a method based on practical wisdom of Islam (Sharia) in the first phase in terms of approach and methodology, and to adhere to the fivefold rulings (obligatory and forbidden, recommended and discouraged, permissible) to move towards justice. In the next phase, the artist and architect must have the necessary talent and experience in the subject under consideration so that their artistic endeavor is a process from sublime ideas (existential truths) to the path of artistic endeavor (existential justice); in other



words, placing everything in its appropriate place by utilizing talent and experience and ultimately creating an artistic work.

The most significant indicators embodying meaning from the philosophy of wisdom and art in creating architecture are as follows (Table 2).

TABLE 2

The indicators of the manifestation of the meaning arising from the philosophy of wisdom and art

Row	The manifesting index of the meaning of philosophy in the creation of architecture		Explanation
1	Unity in diversity		In the Iranian architecture of the Islamic period, two important things have always been considered by the designers: A- Any innovation and new work is in better defining the whole (unity) of which design and architecture are considered a part. B- For the parts of the whole, clear definitions are provided, without forgetting for a moment the comprehensiveness of the whole unity [8].
2	Purposefulness		Like all the creations of the material world, each one of which was created for a specific purpose, the Iranian architecture of the Islamic period is also purposeful, and this feature shows itself in the form of placement and attention of all spaces around a center or axis [9].
3	Coordination		This characteristic in the Iranian architecture of the Islamic period is expressed in the form of coordination of spaces with each other, coordination of proportions and ruling geometry, and also coordination of design with climatic conditions [8]
4	Geometric values	Geometry and proportions	According to the principle of Majla's obedience to Mutjali, the universe is headed by light, beauty and proportion. Discovering this proportion means deciphering and discovering destiny and entering the garden of God's knowledge and the perception of divine



			attributes [10]. This concept is expressed in the form of geometric proportions between the whole and individual components, as well as between the components separately.
		Geometry and order	The spiritual nature of the world can be represented in a form that is full of order and beauty. Therefore, geometrical order can represent unity in the midst of multiplicity as a unifying factor [10].
		Geometry and symmetry	Symmetry means the same placement of two components, relative to the axis or middle element. A symmetrical face, in its simplest states, has two similar components that have the same distance and position relative to the axis or center or middle element [11].
		Centripetal geometric pattern	The development of Islamic principles to explain unity through the organization of forms with three natural orders, geometric order and harmonious order with the creative order, is multiplicity in unity [12].
5	Hierarchy		All beings in the universe are connected like links of a chain or steps of a ladder. This hierarchy of access in the Iranian architecture of the Islamic period, from the outer space to the completely private space, as well as the layering of light and shadow and the division of spaces into open, semi-open and closed spaces is the diagram of this idea [13].
6	limit and privacy		Following the existence of hierarchy, the issue of limits and privacy also comes up. This means that to enter the new space, it is necessary to pass through a passage; Like a city gate or a house entrance or a room entrance.
7	Clarity, completeness, ease and fluency		Iranian architecture of the Islamic period, like Saadi's statement, is easy and smooth and at the same time, deep and complex. It appears to be in the simplest possible way, but it has many hidden meanings and layers of concepts and



		secrets that cannot be understood except in the shadow of Moanest and Elft [14].
8	light and color	Light in the Iranian architecture of the Islamic period represents the presence of God. Therefore, in Iranian architecture, light, shadow, refraction of light and filtering of light and color are used [15].
9	reflection	In the thought of Islamic philosophy, according to the concept of similitude and the world of similitude, a bridge can be built from thought to body and heavenly attributes can be given a material form [16].
10	Symbol and cipher	The existence of code and symbol causes' constant discovery and intuition; Something that is abundantly seen in the Iranian architecture of the Islamic period. The use of elements and visual elements as well as the construction of various spaces, in addition to the physical application in order to meet the needs of the residents, each of them has a second meaning and meaning [17].

Aesthetics in Architecture

Peter Smith believes in various types of experiencing beauty and subscribes to three aesthetic systems:

- The first aesthetic system is based on balance, harmony, order, equilibrium, and proportion that the viewer automatically perceives and recognizes as beautiful.
- The second aesthetic system states that complex messages cannot be directly perceived, and in this case, the amount of information must be reduced.
- The third aesthetic system suggests that parts of the brain can react to external stimuli without resorting to consciousness. To feel beauty, one must see many elements together, but because of their complexity and disorder, they are not rationally acceptable and can only be felt as stated (Table 3) [18].



TABLE 3
Three main aesthetic elements in Iranian architecture of the Islamic period

Aesthetic elements in architecture	Position in Islamic philosophy	Position in Iranian architecture of the Islamic period
The light	God is light and light, and heaven and earth came into being from God's light, and creatures benefit from existence due to their proximity to light.	The use of the element of light in architecture is used as an allegory of the manifestation of absolute existence.
Color	Najm Razi equates Amara's breath with the color black, the nafs natiqeh with the red color and the safe breath with the color white. Najmuddin Razi's visualized colors include seven colors, each of which is related to a mental state: white, yellow, and purple, green, blue, red and black [19].	In the architecture of this period, blue, white, black, and gold colors were used, which, in addition to decorating the space, also helped to increase the desirable qualities of the space.
Water	In Islamic philosophy, water is considered to be the source of existence, and at the same time, it is also considered to be a purifying agent.	The presence of water in Iranian architecture of the Islamic period, along with its functional and aesthetic benefits, refers to concepts such as purity, freshness and life. The most use of water in the mystery of this period was in the form of a pond.

Methodology

The present research is of a descriptive-analytical nature with an aesthetic approach. The method of data collection in this research is library-based, and the tool used is extracting information from books and articles, as well as utilizing visual sources related to the subject. An example study in this article is the shrine of Sheikh San al-Din Ardabili.



Analysis and Findings

Shrine of Sheikh Safi al-Din Ardabili

"What is certain is that the shrine of Sheikh Safi al-Din in Ardabil holds a special significance as one of the prominent complexes of the Safavid era; the development of this religious complex, which began in the 8th century AH with the participation of the most skilled architects, calligraphers, painters, tile-makers, stonecutters, and other artists, continued and completed with the advent of the Safavid rule, extending to the 12th century AH, so that with the attention of the Safavid dynasty, this shrine became a religious and national pilgrimage site for the Safavids for several centuries" [20].

The important sections of this shrine include: the outer gate of the shrine, the large courtyard, the courtyard of the shrine, the main parts of the shrine including: the portico, the mausoleum of Sheikh Safi or the Dome of Allah Allah, the mausoleum of Shah Ismail I, the haremkhaneh, the chinikhaneh, the Masjid Jannat Sara, the new chelleshaneh - the martyrdom precinct. Overall, this complex is of extraordinary importance in terms of Islamic architecture, and each of its parts is beautiful and unique in its own right.

In this building, various decorative arts are blended together, from frescoes on plaster to glazed and engraved tiles, and even the ancient art of brickwork. All of these characteristics have made this complex exceptionally important in terms of architectural style. Despite all the exquisite architecture, the epigraphy artistry is particularly commendable and inspiring, as it is not only decorative but also considered a means for human connection with the higher realm and a tool for contemplation on the philosophy of the world's existence and human life.

The entrance portal of the complex (Ali Qapu)



Figure 1. The entrance to the collection of Sheikh Safiuddin Ardabili [21]



According to the latest available image of this building (Figure 1), dating back to 1321, one can well observe the aesthetic components such as symmetry, scale and proportion, light and color, and the overall structure and other elements employed in this building, which masterfully manifest in brickwork, tilework, and muqarnas, as well as spaces filled and empty, ultimately leading to the creation of an inviting and readable entryway towards the main space of the complex" [22]. This entrance portal was dismantled in 1321 due to the collapse of the vaults and the dangers posed to people by the deteriorating structures and was collected by the order of the then governor of Ardabil and after about 80 years, in 2021, it was reconstructed. However, in this article, the author will focus on the original design before its destruction.

Considering the spatial quality of the entrance portal of the Sheikh Safi al-Din complex, the ten indicators embodying the philosophy in the space of this part are as follows (Table 4).

TABLE 4
Review of ten indicators in the collection entry header (author)

An index that manifests the meaning of philosophy in the construction of the entrance of the collection	Explanation
unity in diversity	The presence of two minarets around the entrance gate, brickwork, tiling, and moqrans work, as well as the use of full and empty spaces, the creation of bright shadows, and the coloring and writings of the tiles, are all aimed at creating a space to guide the audience towards the entrance; An inviting atmosphere that highlights the unity and unity of the whole work.
purposefulness	The purpose of making this part of the collection is to create a space to prepare the audience to enter another world. In fact, this gate is the first step to separate the audience from the material world and enter a transcendental world. In other words, the space behind this unique mosque definitely has a higher spatial value.
coordination	The exact proportions and symmetry of the filled and empty spaces and the naqrah houses on both sides of the vertical axis of



		this gate give people a pleasant feeling of security.
Geometric values	Geometry and proportions	Due to not having complete information about the dimensions and sizes of the previous head, it is not possible to check its geometry and proportions in detail.
	Geometry and order	Safavid architecture, in all its works, is an example of an orderly, proportionate and beautiful architecture, which we can also see in Sadar Ali Qapu.
	Geometry and symmetry	If we divide the head in question into two parts around the vertical axis, these two parts are placed on top of each other without any difference, which is a sign of compliance with the principle of symmetry, as one of the main characteristics of Iranian Maari in the Islamic period.
	Centripetal geometric pattern	The spatial hierarchy of the head, in each order, refers to the central point until finally it emphasizes the central point of the gate and the entry point.
	Hierarchy	The main arch invites the viewer to the interior space and to the moqrans works above the pediment, whose filled and empty spaces slowly guide the eyes downwards and the empty space between the tiles (entrance door). All this mechanism creates a visual hierarchy to enter a collection.
	limit and privacy	The indentation of the headland compared to the public level of the passage, first brings the audience into a more private space and then invites him to the entrance gate to evoke the privacy of the space by creating more private spaces in front of the public space of the city.
	Clarity, completeness, ease and fluency	The complexity of the architecture and the motifs and inlays, as well as the complex writings on the tiles and the creation of



	various spaces in a basic space, not only did not cause confusion to the audience, but it was easily understood and digested by him.
light and color	The use of azure and white tiling in the decoration of the headboard shows the heavenly and divine space and represents the spiritual space. On the other hand, the use of new shadow play, at the level of the gate, increases the emphasis on the wash that is all light.
reflection	-
Symbol and cipher	Sardar Al-Qapo is the first time to purify the audience so that it can move from the general level of the city and achieve a higher spiritual level.

Large Courtyard of the Complex

"The second space is the large courtyard of the complex. It is a rectangular enclosed garden with a width of 26 meters and a length of 93 meters, surrounded by tall walls and brick facades" [23].



Figure 2. The yard of Sheikh Safiuddin Ardabili collection

This space serves as the primary approach to the central point of the complex; the hierarchical consideration, the flow of design for ease of use, connection with nature, and the use of water, light, and color elements in designing this courtyard make it more valuable and of higher quality compared to its outer space (which are separated by a wall thickness apart).



TABLE 5
Review of ten indicators in the large courtyard of the complex (author)

An index that manifests the meaning of philosophy in the construction of the entrance of the collection		Explanation
unity in diversity		The presence of repetitive arches on the walls and the use of the principles of the Iranian garden in the construction of this space, despite the multiplicity, are all used in order to create a single unity.
purposefulness		The long path considered in this open space, which is built with brick walls or decoration, various gardens, trees and ponds, are used with the aim of creating a sense of thinking in the audience, so that if the audience is not ready, they will not continue the path. dissuade
coordination		Creating archways of the same size with a constant rhythm on the walls on both sides of the courtyard, building four gardens with two ponds in between, all emphasize the main path leading to the next space (next floor) and invite all elements of the audience to continue on this path.
Geometric values	Geometry and proportions	The ratio between the length and width of the yard can be found in the ratio of the length and width of the gardens and also the ponds.
	Geometry and order	The arrangement of the arches in the same size and shape, with the same distance on the walls on both sides, as well as the construction of gardens and ponds of the same size, shows the stable order in this courtyard, which, despite the multiplicity of elements, has led to the formation of a coherent unity.
	Geometry and symmetry	This yard has delicate symmetry around the longitudinal axis. The only difference



		between the right and left parts of the yard is the location of the entrance and exit; In this way, the entry point is on the right side of the yard and the exit point is in the middle of the yard, with a slight angle.
	Centripetal geometric pattern	Dividing the yard into four parts and placing two ponds among the gardens emphasizes the path and the central point. This is the path that ultimately leads to the entrance gate to the next space.
Hierarchy		After entering the courtyard, the placement of the gardens guide us to a direct path that is accompanied by trees and also arches on the wall. After that, in the middle of the way, we reach two ponds built perpendicularly to the gardens, which is a place to stop. The exit of the courtyard is located at the end of the middle path and at a slight angle to the main path, which indicates entering a new space.
limit and privacy		Entering this courtyard, which is surrounded by walls, is a sign of entering a space that is gradually separated from the outside environment and gradually acquires privacy. This space is not covered and therefore has moderate privacy.
Clarity, completeness, ease and fluency		The simple combination of the path and the gardens next to the pond offers a simple collection that, while being simple and following the principle of repetition, makes its task clear to the audience and shows them the main path.
light and color		The juxtaposition of the earthy color of the brick walls, the green color of the trees and the gardens and water ponds covered with the blue sky has formed an ecosystem that is a small example of nature from which the Iranian garden philosophy is also taken. In



	addition, the play of light and shadow of arches and trees at different hours of the day adds more charm and variety to the courtyard.
reflection	The reflection of the image of the trees and the sky in the water of the ponds is the feature of reflection in the architecture of this yard. The wavering of the elements reflected in the water shows the mortality of the world.
Symbol and cipher	Arches repeatedly show an upward movement and constantly guide the audience to a transcendental point.

Small Courtyard or Sufeh (Entrance, Unroofed Hall, Open Corridor)

After passing through the large courtyard, we reach a smaller courtyard in the next hierarchical level, positioned at an angle compared to the previous space. "The small courtyard is rectangular in shape, and its floor is paved with large stone slabs. From the middle of the west wall of this corridor, a passage leads into the area known as the Chelleshaneh or the open courtyard of sacrifices. This building is connected from the southern part to the main courtyard of the complex" [24].

The hierarchical progression from the main entrance portal to this space, from completely open space to enclosed space, is observed, with this courtyard positioned in the middle of these hierarchies. The use of more diverse color schemes compared to the previous space and the complete symmetry of elements prepare the viewer's mind for entering the next space (Table 6).

TABLE 6
Examination of the ten indicators in the collection section (author)

An index that manifests the meaning of philosophy in the construction of the entrance of the collection	Explanation
unity in diversity	This space is a scaled down version of the previous space, and has the same features on a smaller scale.



purposefulness		In this courtyard, the walls are taller so that the audience's connection with the outside space is reduced and it is ready to enter the next space. It is as if the human soul is gradually purified in this hierarchy and is ready to be present in the final space.
coordination		Like the previous space, the Sefa section has formal coordination with the whole complex and also structural coordination with the geography of the local city.
Geometric values	Geometry and proportions	The golden ratio is observed in the plan of this courtyard, so that it can be said that the rectangle used in this courtyard is a golden rectangle.
	Geometry and order	Geometrical order is evident in the number of arches on the walls and the placement of entrance and exit doors.
	Geometry and symmetry	"The plan of the yard is completely symmetrical and rectangular, which acts as the pre-entrance space to the barn on the west side and the kitchen on the east side, and the main courtyard space on the south side of this space" [22].
	Centripetal geometric pattern	The intersection of two axes, north-south and east-west, which is characterized by entrances and exits, emphasizes the centrality of this space and reminds of the centralist idea of Islamic architecture.
Hierarchy		This space is a space divided into three other spaces, emphasizing the entrance to the main courtyard, whose entrance is located on the main axis (north-south).
limit and privacy		In this space, the walls are made higher to maintain and feel more privacy.
Clarity, completeness, ease and fluency		The main axis shows the main path to the audience and the secondary axis allows him to deviate from the path and take advantage of the other two spaces.



light and color	The presence of light is reduced and the audience deals with controlled light.
reflection	The element of reflection is not seen in this space.
Symbol and cipher	The placement of this yard at an angle compared to the previous yard, despite having a structural and architectural justification, is a symbol of changing the angle from the material world and entering a metamaterial world. This angle change is a sign of turning away from the earthly world.

Chelleshaneh Building

This section of the complex currently consists of a ruined building, or more accurately, a simple unroofed courtyard surrounded by four walls, with the entrance path of the Chelleshaneh opening into it, located in the western part of the small courtyard. Apparently, the closed gates on the northern facade of the main courtyard also allude to a main entrance of the Chelleshaneh towards the central courtyard of the complex. Currently, the only way to visit and enter the interior of the Chelleshaneh is through the entrance in the western part of the small courtyard" (Table 7) [25].

TABLE 7

Review of the ten indicators in the Chelekhane collection (author)

An index that manifests the meaning of philosophy in the construction of the entrance of the collection	Explanation
unity in diversity	The presence of forty cells on two floors in the new chelekhane evokes a large and diverse space that is centered on a central axis and shows the unity of the whole complex.
purposefulness	Chalekhane is derived from the word "forty+e". Chelehansi means sitting in solitude for forty days and nights and doing worship.
coordination	Chalekhane had a religious use and was used as a private space for expression.



		Therefore, its architecture has been planned in a private and closed manner in accordance with this goal.
Geometric values	Geometry and proportions	-
	Geometry and order	-
	Geometry and symmetry	This space also has symmetry in each and every decorative and formal element to induce a circular movement towards a higher goal in the audience through the repetition of elements.
	Centripetal geometric pattern	Using a square plan to build this space, which leads to a dome-shaped roof, prepares the space for people to worship. The centripetal geometry of the square and circle has made the space of Chalehkhana a sacred space suitable for performing religious activities.
Hierarchy		After entering the small courtyard, with high walls, we enter the space of the chelehana with a dome roof. In other words, we enter a private space from a semi-public space.
limit and privacy		This space was a place of expression and gathering, and therefore it had a more private and closed space. The location of the old and new chela also proves this issue.
Clarity, completeness, ease and fluency		-
light and color		The former domed roof of the new challah, which does not exist now, was most likely similar to other examples in the same complex and had windows and openings to let light into the inner chambers.
reflection		-
Symbol and cipher		According to the available documents, the new chelehkhane has forty rooms on two floors and a domed roof, which shows the



	forty days and nights of worship for the exaltation of the soul.
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Main Courtyard of the Complex

"This space is one of the most important and primary spaces of the Sheikh Safi Mausoleum complex, and in terms of beauty, one can refer to the tile work and the combination of brick, tile, stone, wood, and the masterful use of color, wood, and tiles that give a spiritual essence to the space, creating a sense of calm in the viewer" (Table 8) [26].

TABLE 8

Examination of ten indicators in the main hall of the collection (author)

An index that manifests the meaning of philosophy in the construction of the entrance of the collection		Explanation
unity in diversity		The diversity of form and space in this courtyard is the result of the construction of spaces in different periods. But nevertheless, all together form a single set.
purposefulness		The main courtyard is the penultimate stage to enter the buildings of Janatsara, Gonbad Allah Allah and China House, which is considered as the last stage of the audience's presence in this complex.
coordination		The entrance to the courtyard is made from the larger side to emphasize the dome of Allah and the porcelain of the house.
Geometric values	Geometry and proportions	-
	Geometry and order	Each front of this yard has an independent order that leads to the overall order.
	Geometry and symmetry	In general, the yard is asymmetrical; But in every part of it, this symmetry can be found. In the north wall, the arrangement of the cells is done symmetrically, and the east wall is also symmetrical with respect to the vertical axis.
	Centripetal geometric pattern	The presence of a 12-tooth round pond in the middle of the yard, despite its circular shape, has given this space a central shape.



Hierarchy	The main courtyard is actually the last time to enter the main spaces.
limit and privacy	This space is surrounded by high walls and the main buildings of the complex and has created a more private space than the previous spaces.
Clarity, completeness, ease and fluency	-
light and color	The use of porches in the north wall in a rhythmic way and a big porch symmetrically on both sides of the west and east of the main courtyard using tiles and a beautiful and large wooden lattice without the use of nails has doubled the beauty of the courtyard. The head of the entrance door of the shrine has a long and narrow cylindrical shape with tiling and the use of marble stone, and on both sides of the sitting room and a wooden door with silver coating.
reflection	The middle and different pool of the main courtyard is a place to reflect the images of the walls and buildings. This pond is made in the shape of a circle so that an image of the buildings of the complex can be seen from all sides.
Symbol and cipher	The 12 teeth of the middle pond of the courtyard refer to the 12 imams.

Masjid Jannat Sara

"The Jannat Sara building is an octagonal symmetrical structure with a brick dome and recessed ivans, and muqarnas of stucco materials, which are beautifully combined with the dome and the body of the building. Due to the antiquity of this building relative to the complex, tile materials were not used, but due to the proportion and symmetry, and the use of recessed windows around the dome and windows in the ivans of the body of the building, this structure receives sufficient light. The combination of red brick with white gypsum work on the exterior facade of this building gives a special beauty and appearance to the eastern facade of the building, and in the western part of the building, the combination of lapis lazuli and turquoise



tiles, Islamic lines, and wooden lattices have given a special elegance to this building" (Figure 3, Table 9) (Sheydaei Sola, 1396: 35).



a)

b)

Figure 3. (a) Janat Sera Mosque, (b) Interior of Janat Sera Mosque

TABLE 9

Review of the ten indicators of Jannet Sarai collection (author)

An index that manifests the meaning of philosophy in the construction of the entrance of the collection		Explanation
unity in diversity		The octagonal form with wooden windows on the sides that ends in a circle indicates the movement towards a single point.
purposefulness		The purpose of building this space is to create a sacred environment and this quality is crystallized by turning and reaching the central point at the highest level of the building.
coordination		The closed space of Jantesara, the use of many windows on different levels, the use of an octagonal form and also the dome roof show the harmony of the building with the climatic conditions of Ardabil city.
	Geometry and proportions	The general dimensions of the space, the height of the floor to the ceiling, the dimensions of the windows and other dimensions and sizes of Jantesara space, form a proportional collection that looks pleasant and pleasant in the eyes of the viewer.



Geometric values	Geometry and order	The use of a regular octagonal form and windows with the same dimensions at certain heights have created a stable order in this space.
	Geometry and symmetry	Due to the use of an octagonal form and a dome roof, this space has symmetry around all axes.
	Centripetal geometric pattern	The circular movement of this space finally ends at the central point of the dome, which represents the concept of unity in Islam.
Hierarchy		Jantsera, after passing through the outer courtyard, the side courtyard and the main courtyard, presents a closed space to the audience, which is in indirect connection with the external environment despite the various windows and openings, and in this hierarchy, gradually invites the viewer to enter the This space has been prepared.
limit and privacy		The privacy of Jantesara space is more compared to the previous spaces; So that the audience feels safe and secluded in it, so that his attention is drawn to its centripetal and sacred geometry.
Clarity, completeness, ease and fluency		The clarity of expression and ease of use of this space is clear in its structure and form. The entrance of Gentesara is located at the eastern end of the main courtyard and draws the audience towards it.
light and color		This building is designed in such a way that during the day, light enters the space through the windows around the dome and the openings in the porches, and minimizes the need for artificial light. The rotation of light from morning to sunset in the interior of this building indicates the passage of time and life.
reflection		The reflection of the grid of windows on the floor of this mosque, which with the rotation of the sunlight, brings a different show to the fore at every moment, is considered one of the beauties of this space.



Symbol and cipher	The regular octagonal form, the endless rotation around it, which finally reaches the circular form, is a symbol of the exaltation of the human soul from the earth to a higher and immaterial level.
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Sheikh Safi Mausoleum or Gonbad-e Allah Allah

"The structure related to the mausoleum of Sheikh Safi or Gonbad-e Allah Allah is a cylindrical tower with a dome on top of it, which has a brass dome. The outer surface of the building body is adorned with the words 'Allah' and 'Allah' with turquoise tiles between the laid and vertical bricks. The mausoleum of Sheikh Safi al-Din is connected to the southern corner of the royal platform and is linked to the mausoleum of King Ismail" [5]. The Sheikh's tomb in the center of the octagonal courtyard, inside the mausoleum, is covered with a carved wooden chest and exquisite calligraphy work. The mausoleum is built of brick, lime mortar, and gypsum.



Figure 4. (a) Dome of Allah, (b) Tomb of Sheikh Safi.

The use of circular forms, domed ceilings, working the word 'Allah' on the exterior of the mausoleum in turquoise color, the use of limited windows to produce the necessary light, all contribute to the spiritual design of this place (Table 10).

TABLE 10

Examination of the ten indices in the Gonbad Allah Allah Collection (author)

An index that manifests the meaning of philosophy in the construction of the entrance of the collection	Explanation
unity in diversity	The presence of many internal motifs and decorations as well as the decorative details of the external body of this building are all in line



		with the unity that the cylindrical form of the building guides the audience towards the dome roof.
	purposefulness	The Dome of Allah is actually a tomb. The ratio of level to height inspires the ascension of the soul to the sky and adds to its spiritual aspect.
	coordination	The words of Allah on the outer body, which is worked in a standing and lying position, next to the domed ceiling and the dark and narrow space inside the building, are all in line with the definition of a tomb.
Geometric values	Geometry and proportions	The disproportion of the building's height and diameter has turned the tomb into an exceptional building whose purpose is to emphasize the height and vertical movement of the soul upwards and his ascension.
	Geometry and order	-
	Geometry and symmetry	The cylindrical form of the building indicates the complete symmetry of the building in form, motifs and decorations in the outer body and inner shell.
	Centripetal geometric pattern	Choosing a cylindrical form with a domed roof strongly emphasizes the Islamic centrist style.
	Hierarchy	-
	limit and privacy	Gombad Allah Allah is considered an extremely private space. This building has only one entry way and a light opening, and this is a sign of avoiding the material space and focusing on the spiritual world.
	Clarity, completeness, ease and fluency	-
	light and color	Taking advantage of an opening for the entry of light, playing with light rays in the dark interior environment has made Gobdullah Allah become a spiritual and transcendental place.
	reflection	The reflection of light on the narrow and high interior space, and the change of its angle with



	the passage of hours, shows the passage of life and finally the complete darkness of life.
Symbol and cipher	The small and elevated space of this part of the collection well refers to the exaltation of the soul after death; The path of the human soul is upward to the spiritual world, and the cylindrical space guides us everywhere to the central point in the domed ceiling of the tomb.

Porcelain of the house

"Porcelain of the house is irregularly octagonal-shaped from the outside, with five sides clearly defined, and the other parts attached to the courtyard building and other structures. This complex has four royal seats with stucco muqarnas facades, and the designs and images on them are formed by Slimi motifs and beautiful flowers, in addition to being executed in harmony with the stucco surfaces" (Figure 5; Table 11).

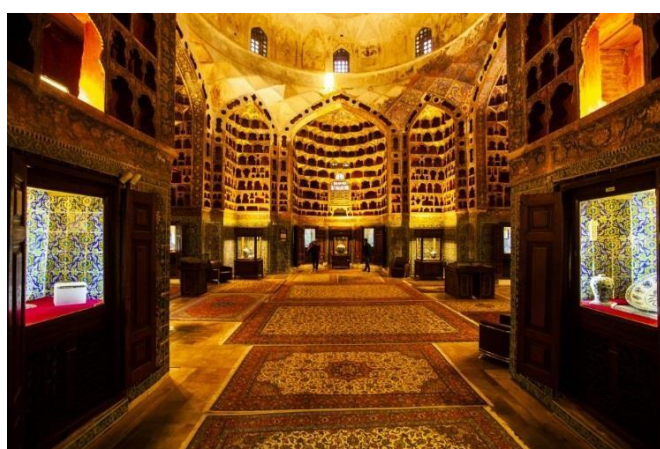


Figure 5. Porcelain of the house.

TABLE 11

Examination of the ten indices in Porcelain of the house (author)

An index that manifests the meaning of philosophy in the construction of the entrance of the collection	Explanation
unity in diversity	In this collection, all artistic techniques are mixed together; from inscription and non-inscription decorations; Plastering by layering and killing, tempering and gilding up to the



		seven-color mosaic tiles are all in the service and unity of architecture and exaltation of human spirit and thinking.
purposefulness		This place, which leads completely asymmetrically to Qandil Khana, was originally a gathering place for dervishes or a ceremony hall (gathering hall) which was used during the era of Shah Abbas to preserve the porcelains donated by the Emperor of China to Shah Abbas I.
coordination		According to Zare, both the old and dilapidated appearance of this building and its inconsistency with the rest of the tomb's facilities are a proof that its building dates back to before (perhaps the 14th century AD/8th Hijri) (Hinz, 1362: 14).
Geometric values	Geometry and proportions	-
	Geometry and order	The juxtaposition of holes in different dimensions and sizes, on different levels, has instilled order and order into the space, which makes the audience feel happy and relaxed by being in the middle of it.
	Geometry and symmetry	Perhaps one cannot see in Ibn Bana a similar exact symmetry to what was observed in other parts of this collection. This is due to the irregular octagonal plan of the building, part of which is integrated into the space of Qandilkhaneh.
	Centripetal geometric pattern	Despite using an irregular octagon, it can be said that the main hall of this building has a centripetal form that ends in a circle and a dome in the roof area.
	Hierarchy	The entrance to the china house is through a corridor that connects the entrance to the main hall.
	limit and privacy	This building, which was the gathering place of dervishes and then changed its use to a place to store valuable dishes, was considered a private place and therefore has a special limit and privacy. Especially during the time of Shah



	Abbas, this building was turned into a valuable safe of the Shah and people were forbidden to enter it.
Clarity, completeness, ease and fluency	-
light and color	The body of a part of the Chinese wall of the house up to a height of about 5.5 meters is covered with tiles, which are painted and glazed later. In these roles, Chinese red, light green, cobalt blue and turquoise colors are more prominent than other colors. The impact of the sun's rays on these colors makes the interior of the mansion shine and become brighter.
reflection	Due to the presence of numerous holes in the octagonal vaults for storing porcelain dishes, the sound reflection has been minimized and it has become so-called acoustic.
Symbol and cipher	-

Conclusion

Through the examination of these criteria in the Sheikh Safi al-Din Ardabili Complex, the author concluded that among the ten indicators, geometric values, light and color, hierarchy, purposefulness, and unity in density were present in creating all the spaces of this complex, stemming from the thoughts of its architects in various eras. Emphasis on the element of unity and singularity in various forms (such as emphasis on the unified path, emphasis on the unified entrance, emphasis on the focal point in the dome, emphasis on the unified opening, etc.) is a theme that is recognizable in all the spaces of this complex. Additionally, no space was created without purpose and merely for beauty, even though initially, despite the abundance of decorations, this idea may confuse the viewer's mind. Purposefulness in the construction of spaces is a subject that is heavily emphasized in Islamic architecture. Symmetry, proportion, order, and the use of a centric geometric pattern have always been the roadmap for architects in constructing Islamic buildings, and in this complex, these geometric values have crystallized in various ways in the structures. Hierarchy and privacy in the form of creating open, semi-open, and closed spaces, as well as the alignment of entrances with each other and the arrangement of spaces at angles to each other, have manifested in the Sheikh Safi al-Din Complex. Space coloring through the use of colored tiles and placing openings at specific angles to direct sunlight to desired points for creating bright shadows, is another aspect of the spatial aesthetics of this complex, especially in the Chini Khaneh. Overall, after examining the Sheikh Safi Complex, as an exquisite and complete example of an Islamic Iranian architectural



complex, it can be acknowledged that for assessing the aesthetics of spaces in any Islamic architectural work, one can benefit from the aforementioned ten indicators.

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Power System Technology

ISSN:1000-3673

Received: 16-05-2024

Revised: 12-06-2024

Accepted: 27-07-2024

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