

Original Research

## A Study of the Architectural Design of Contemporary Museums in Iran

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### ABSTRACT

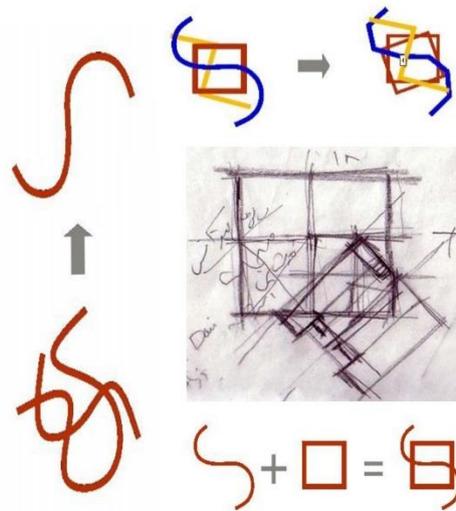
This study examines architectural design in contemporary museums in Iran. Our current understanding of the world - and even of ourselves - is still small. Just as scientists have spoken for centuries about the quantity of nature as a kind of reality - without regard for human capacities - so architects and critics have spoken of architecture as if it were a phenomenon separate from man. They look at proportions, size, weight, and so on, as if everything existed by itself, and regardless of the role of human mental and physical nature, it can be good, right, or wrong. Architecture is associated with many points such as dimension, proportion, balance, etc., the existence of which has no room for denial. For example, if a question arises about the length of a corridor or the height of a building, it is very simple to measure that corridor, or to determine the height of the building in question based on its plan. But if we want to discuss its spiritual and philosophical dimension, it is another category; the method will be different. Therefore, issues such as place, time, perspective and culture of a particular period are raised that are not possible with simple physical measurements. There is an interesting field of study called semantics that has provided a way to resolve disputes related to intangible issues. In other words, it is a way to find a special point or points that when discussing and comparing intangible issues, such as spiritual and spiritual factors.

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**GRAPHICAL ABSTRACT**

**Introduction**

It is obvious that man wants beauty. And to reach those centuries, he has used his taste and talent and has found his desired beauty in the form of various arts [1-3]. For many years, art was in the sphere of power that ruled the people's society, and art flowed only in channels that were the will of the rulers of society, but the widest and most meaningful part of art is the part that has served religions [4-7]. Divine power and religious teachings, which are the full mirror of God's commandments, have been an important and influential factor in the creative minds of artists and have led to the emergence of artistic masterpieces in the world over the centuries [8]. If we look at the various arts and their ups and downs throughout history, we see that the masterpieces created have usually been either in the service of rulers and powerful people or in the service of religion.

This trend has continued in more or less many parts of the world and has remained stable to some extent [9]. But it can be said that with the growth and development of the human-centered culture of the West, which is rooted in the culture of ancient Greece and Rome, this major orientation of the arts, which used to be often in the service of government or religion, has undergone fundamental changes[10]. With the development and spread of the negative thoughts of supernatural and human-centered powers and the development of science, the general orientation of the arts underwent a fundamental change, so that with the spread of Western education, the tastes and aesthetics of society are largely rooted in beliefs and the way of thinking of people is changing. For example, if we consider architecture as an art and look at the attitude of society and professionals to the category of architecture, this change in the constructed buildings is quite visible [11].

Palaces and palaces built for kings and temples built for the gods, which had a religious and supernatural aspect, are slowly being replaced by tall towers built not for the gods but for man. These changes have been so radical and major that even if art manifests itself in a religious direction, this play has emerged with a new interpretation and content that may perhaps be seen more in human-centered arts. For example, building a church where you can drive and worship, which reminds most people of open-air cinemas where you can watch movies by car. Now, regardless of whether this change is good or bad, whether we should follow it and praise the new art or reject it, we are the mother of a world where these successive changes and developments are happening and progressing.

If we accept that man is a thinking being who is constantly changing, both individually and consequently socially (and perhaps vice versa), it is better to direct these changes in such a way that we can go through a process. Let's do the vision to the other vision, which itself requires creating tension, in such a way that we do not lose our past values and do not lag behind the current of changes and developments. Being a spectator in these conditions only causes one to lag behind and even accept the art and beauty that is rooted in a foreign culture. Art and civilization that is not dynamic and creative (creator) is slowly disappearing and being destroyed. Descartes' thought revolutionized the way Western thinking, and consequently ontology, followed modernity and the resulting technological world.

The supremacy of rationalism over all traditional beliefs (mythical, religious, moral) led to Nietzsche's shocking proclamation of the "death of God" and led to the "death of art" in Hegel's thought. With the disappearance of the tangible reference, which was known as the source of the initial concepts, the forms (signs) remained but the concepts (meanings) were lost. Not relying on the warmth of thousands of years, which is as old as mankind, led to the collapse of the world that sustained human life, and that means He gave. Utopia collapsed, and the dreams of science and technology that led to it led to two world-burning home wars that left nothing but distress, displacement, futility, worry, and anxiety.

Modernity made possible any negation; Values were devalued and concepts faded; Vanity and meaninglessness joined emptiness. In the field of architecture, the consequences of World War II (destruction and the need for reconstruction), and the huge industrial technology that with the discovery and recognition of metal and concrete structures with the use of glass had led to a dramatic change in construction.

The emergence of a new style called modern style brought and soon it showed itself in the form of international style, as set and inviolable principles and rules as a universal model and abstract from any cultural or semantic differences. Gradually, the simple faces of the great pioneers of modern architecture, both in appearance and functional relationships, differed enormously from what was previously known as

architectural examples, as claimed by its creators. To dictate the pure form empty of any meaning as a homogeneous form to the whole world, was reduced to simple and boring cans that contained no novelty, surprise, or motivation in the discovery and perception of new spaces and the consequent semantic burden. In Iran, in addition to political and social affairs, the field of art and architecture was not unaffected by the effects of modernism. Since Iran was not the birthplace of modern thought, and because of its unequivocal dominance of its achievements, its exploitation was inevitable, Modern thought in confrontation with the specific intellectual, religious and religious system of Iran, created an inevitable fusion between modernism and tradition that began at the end of the reign of Nasser al-Din Shah Qajar and during the next century led to the creation of new forms in architecture that In the forms of Qajar architecture, Reza Shahi, pre-modern, modern international, Indigenous regional and even traditional with modern technology, was presented and in recent years, various types of postmodern methods from historical to deconstruction and other than these have been exposed. Iran is on the border between strong religious tendencies and historical, cultural and religious beliefs on the one hand, and the coordinates of orderliness and cutting from ontology in the old way and turning to epistemology through its rational axis is the instrumental basis of the modern world on the other is located in which even a return to myths and rituals from a rational and practical

point of view takes place. And is devoid of the dimensions of faith and belief. Now the non-Western world, because of the extreme distance from the intellectual and material productions of the Western world, and at the same time its inescapable dependence on them, has no choice but to find a solution that can comprehensively present all aspects involved in what it wants or does not want. It is dominated, encompassed, in order to be able to communicate with the world outside of itself. On the other hand, in the present semantic vacuum, the Western world finds no escape but to know the cultures of other countries of the world and to communicate with them in order to survive.

That is why in research foundations, large budgets are considered for the perception of the diverse and colorful cultures of the existing and living world, and their display in cultural, research, artistic centers and world exhibitions is highly welcomed. Now, the longitudinal system in the history of human culture has become a kind of transversal form, and in an instant, various aspects of human civilization from the earliest ages to the latest technological methods can be seen together. The in-depth and extensive studies of the Western world in the knowledge of ancient cultures have caused the doctrinal values of ancient civilizations to be valued as much as the new achievements of the post-industrial world, in fact it is now an accepted principle that none should be a factor for failure. Put another that should confirm it. To be an intellectual in today's world means to be aware

of all the factors involved in creating the present moment. To turn a blind eye to any of the building blocks of world civilization is to deprive oneself of conscious sight of them.

Coordinated steps in the direction of the global collective song, which is composed of innumerable components that seek easy and instantaneous communication of the present time, as well as being in the true logical position, must be done with wisdom, tact and foresight. Contemplation on the surrounding world, which is influenced by the thought and essence of Western modernity, as well as the wonderful and imaginative world of the mythical world and religious beliefs and Eastern faith, will avoid ignoring the living and present parts of human life.

On the other hand, despite the fact that external life is approaching each other despite structural differences in human societies, traditions originating from within are also regaining their former values. Differences in economic, social and cultural contexts have also created a deep gap between different countries that cannot be ignored. Based on this, it seems that the logical solution is to pay special attention to the pain of mystical and religious culture and convey its message in a way that is in harmony with today's views and new techniques and achievements, a special form of combining components. It should be presented in such a way that the beautiful face resulting from the elements of time has the capacity to accept the deep and wide meaning of timelessness. It should be noted that no single device alone can meet today's needs.

### *General ideas and Goals*

Various factors can be involved in the general idea for the design of the Shiraz Museum of Contemporary Art. In general, when we start designing a building, according to the general physical plan, site condition, building use, climate, socio-historical-political status and many other factors, the mention of which causes a long discussion. There are countless factors involved in designing that addressing all of them actually leads to not paying attention to all of them. In fact, it can be said that the factors involved in the design are numerous and the relationship between them is a relative and sometimes even contradictory one. For example, addressing one factor in the design may cause a defect or deficiency in another factor or vice versa. In this case, we can cite many examples of even great and prominent architects, for example, "Miss Vander Ruhr" often sacrificed the applicability of many spaces in her designs to the beauty and perfection she wanted in design.

Now the easiest way to identify the ideas that shape the main lines is to summarize and classify the major factors and their relationship to the more detailed factors, but beyond all this, what shapes a building can be the way of thinking that creates and the design of that building was considered, which in aesthetic discussions is interpreted as the creative personality. Another very important factor that is considered in the overall shape and layout of the building is its use, and the other that is closely related to the use and quality of the building (in terms of execution) is the

economy. In this case, we assume that the economic aspects of the project are provided in every way (of course, from a reasonable point of view). With all these interpretations and explanations, the following factors can be considered as the main characteristics and influential factors in the design process and the creation of initial lines, which we will talk about. The building to be designed. It is a building that is considered and will be used as a museum of new (contemporary) arts. This factor can be seen and interpreted from various aspects.

#### *Art and the category of aesthetics in general*

In general, a museum that is used to display and even create contemporary and new art will have its own atmosphere. If we want to enter the category of art, we will enter a very vague and complex valley-what is art? What is the purpose of art?

#### *Tradition and the past*

It can be said that traditional art is an art that cannot be ignored in general. We are rooted in our past and tradition. This point is undeniable if we look at it from an architectural point of view. Traditional forms in Iranian architecture are forms that deal with the human soul and creatures. If we look at Islamic art as one of the main roots and culture and art of Iran, we see that everywhere the sacred and divine art is calling the human soul to the path and strive to reach a higher and higher self above this earthly world (post in this discussion, we do not mean to criticize and arrive at the right or

wrong of old (traditional) art and modern (so-called modern) art. Rather, it should be said that each of these arts has its own philosophy and words. Which in its place is very valuable and significant?

For example, the use of the central courtyard can be considered one of the initiatives of the Iranians in the central regions to escape the oppressive heat. The fact that the introverted culture of these people has been largely dependent on their environmental and architectural conditions that gradually make them popular. Made introverted. And then, after a calm and wonderful harmony, their culture and architecture are inextricably linked. It can be considered as one of the architectural honors and shows its effects both in the long run and in the short run on the minds and culture of the people who live in it, inhale it and observe and listen to it. But the creation of introverted conditions at the beginning of the creation of architecture in these areas, which is recognized by researchers and great Iranian architects as the general traditional architecture of this borderland. It has largely been subject to their environmental conditions and then gradually became a culture. Now that technology and science have largely overcome these environmental conditions, should we follow and imitate these forms and architecture (in other words: this way of thinking) or not?

Indeed, where does the conflict between tradition and modernity, which can be seen in all aspects of human beings today (at least in us who are Oriental people and more rooted in

religion and tradition), end, and which legitimacy must be accepted? For example, the central courtyard, which has been one of the main features in traditional Iranian architecture, and the people who are accustomed to it and even though they live in small apartments (in modern terms: matchbox), imagine or observe it. It can be discarded in old movies or homes, can the forms that our ancestors worked for years and inherited for us be discarded? If we do not set aside, then what do we do with new technology? Should we reject technology, and if that does not make sense?

But one can always come to a conclusion in this or that conflict that is wise and perfect. It is clear that mere imitation of traditional architecture is not compatible with today's economy or the culture of 20th century people, even if we do not consider this contradiction for our human dignity. As a creature with the personality and ability to create something new, simply imitating our fathers (even assuming the ideas and thoughts are correct) is not a good thing.

It seems that we have to look around and see how many people (architects) who have been able to defend both the past and traditional architecture and their creative and innovative personality today, for example, the central courtyard (as a major factor in Our traditional architecture (and many other countries) is used by many architects around the world and in completely modern buildings, and in some cases even more, and the central courtyard is

considered as a general design idea. There are many examples.

#### *Idea like a filter (idea)*

But what is the origin of this idea and the thought that other ideas seem like hanging branches from it? To answer this question, we can point out what is the ruling spirit of our time? Is the spirit of our time (which is the year 2000 and the 21st century) modernism to the governorship of Lollipop (architecturally, of course) and a return to the past that theorists such as Moore and Neturi gave?

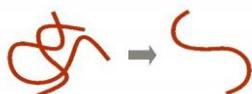
Do I value religious art and look for an octagonal dome in Islamic architecture, for example? Now, the answer to the above questions can lead us to build a museum that we are reading, which is also a museum of art, which is also of a new type. What does it want to display in it? To better express the ruling spirit for these objects, works and.... What is the art they want to display in the museum? The answers to these questions can only lead us to the idea that rules every line and every idea. Perhaps this idea can be compared to a filter. When a person wants to accomplish something, depending on his study and mental strength, a large number of solutions (which in architecture can be considered as an idea) come to his mind. It is a process that makes a solution. Consider the special and work for it. It is the function of the same thought that passes certain ideas through itself like a filter.

The answers to the above questions may be answered differently, or even contradictory, but I think our time is a time of doubt and

duality, or rather the multiplicity of thoughts and ideas. In the 50's and 60's, modern thinking entered all aspects of human life and was absolute power. The past was set aside and new ideas emerged like metal pillars based on the heart of the past.

Better was the cry of joy that has found its way, and that collective happiness (not the happiness of the aristocracy and the elders) is on the way. But after a while, this thought became doubtful and duplicitous, and even some of its elders turned away from it. Yes, the idea of returning to past traditions was raised, some emphasized modernism, some put only imitation of past traditions (so-called classical) on their tablet, and others turned to interpretations. The new style (or rather, fashion) emerged from a point where the process, which had lasted for years, was reduced to a few years. So, the ruling spirit of our time is the spirit of multiplicity and diversity of thoughts (Figure 1.).

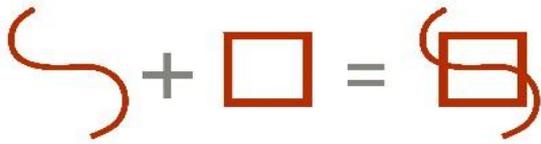
But as I have already explained, it seems that in order to flex the dryness and mechanization of modernism, the imitative use of traditional forms and spaces causes dishonesty and a kind of deception of the viewer, and it is best in the present time that He used the major elements of space and tradition in a way in the form of new interpretations.



**Figure 1.** Formation of the initial line of the curve

But what are the manifestations of modernism? Certainly, the number of manifestations of modernism in terms of space, materials. The general thinking and attitude towards volumes is large and varies over time, so one must make a choice or summarize these elements. If we look at the modern movement in its most powerful time ever. It can be seen that straight lines, curves, etc. have been used in various forms in many works. In terms of form, different types of forms have been used. From the works of Miss Wonder Ruhr to Jelly's works such as Eric Mendelssohn (if we consider his work to be the result of modernism!), But the most obvious and abundant form used in modernism has been the cube form. Just take a look at modern skyscrapers around the world (and indeed in every city and country). If we choose this indicator form of the modern golden age, in terms of form, it is a volume obtained by moving a curved plate (which can be obtained from a curved line on the plate) and a cube that extends along a square plate in Space is coming. The cube is clear in form, but the generating line of the volume-forming curve can be innumerable.

If we have almost limited choices in choosing the size of the cube, but we have more freedom in choosing a curved form that can suit us and choose it. While trying out different forms of the curve, you can also visualize how it combines with a cube or a background of materials. This may help optimize a choice (Figure 2).



**Figure 2.** Adding a square to the initial curve

*Category*

**Absolute space:** With a brief look at the history of several thousand years of architecture and its growth and development, we see that the concept of architectural space has not grown significantly, but the changes have been mainly structural in the form and appearance of the architect and more architectural space as An appearance has been created within it, but the concept of architecture still remains in a shell state, which has also made the spaces more complex due to the changes and complexities that have arisen in the appearance of architecture, which itself owes much to the change and growth of tools and technology. This kind of skepticism of space, which is more of a Western manifestation of the concept of space, can be called a kind of Cartesian and Cartesian space, which with Descartes' famous phrase "I think then we are."

Descartes' dualistic view has the reality in philosophy and science. It means that man can understand that he exists without having a material sense. The architecture that is formed from the suspended space has no dependence on the form, but it is the space that is of primary importance and a special type of space is designed that creates special internal connections in the architecture that is not

function and this space is Which creates the external form of architecture and nothing else. Suspended space does not fit into any spatial framework such as "modern" and "postmodern" and cannot be expressed by Euclidean and Fold geometries and mathematics, because it has its own concept and space that is different from the above spaces. These spaces are scientific spaces and have rational justification, but the suspended space is not a scientific space and has no material preference in the scientific sense. To approach this type of space, one must remove the Iranian architectural art from a series of words and replace it with words related to it. In Islamic architecture, space has a negative feel. Space is defined not by a positive object, but by the absence of physicality or materiality. Space is defined in the same way in relation to the inner surfaces of the forms of the environment and not in relation to the tangible positive object, the space itself is negative and is directly related to the spiritual symbol of empty space.

All the forms we create are in fact suitable for achieving a form combination that creates useful positive and negative spaces for activity and life. Apart from performance, if these spaces also have a sensory and mental effect, what better way to discuss the form about the collection? We have reached a curved form and a cube to design, but to achieve a suitable combination between the curve and the cube and even at a more basic stage, to achieve the curved volume form used, we must create the space we want to define and create. It is quite

clear (of course, this certainty is related to the whole and not to the spaces that will be discussed later), but what can be borrowed from the spaces of traditional architecture? Of course, in our traditional architecture, there have been many spaces with special functions, each of which can be instructive in its place, but we must choose a space that can be used to get a better definition of the whole work and at least the lines to draw the shape. The curve we use becomes a little more organized. (During a design process, the more fixed and determined information that is the result of our choices, the more these factors are like constraints or nails that fixed our lines and lines. And slowly form the outline).

By creating enclosed courtyards, more intimate and safer spaces can be created. Also, due to the variety of functions we have, it created spatial diversity and spatial division. And it opens our hands to distribute these functions, each of which in turn requires space. If we take a look at the spaces that need to be created, we come across more public or private spaces (for the use of specific people), so it is better that this space is not a single space. So, our lines and lines tend to be oppressive.

Optimally draws 2 spaces and if not more positive space (external) into closed forms (negative spaces) and from them we can literally create a yard. This creation of forms should also be formed according to the creation of the main and main openings of the design (museum), which can be two or more. Yes, slowly we come to a series of lines and basic outlines.

We are now slowly drawing and comparing the forms and designs of our original idea (thought), which the multiplicity of ideas is at the present time, as well as the method of modernism from the heart. To make a choice again. Using the yard apart from creating fluidity and spatial diversity that makes the arrangement of spaces easier can also create diversity in terms of creating volumetric layers on the horizontal surface.

If the plot line is not a continuous line, we go back to the past and immerse the courtyard space into the ground in order to emphasize it and introduce it as an indicator volume by creating a difference in level.



**Figure 3.** Adding a new line to the existing line set

Now we have a combination that can serve as a chassis and a whole for us. But our interpretations of tradition and modernity in this case are not enough for our purpose, and whatever we think we see cannot represent the whole of our idea and opinion, either in terms of philosophy or in terms of space and form. There must be a way to create a multiplicity of opinions and multiplicity of thoughts and ideas. Thoughts and ideas that go in a direction that denies everything from tradition to modernism and even themselves and reach an infinite transparency and achieve nothingness. Yes, new lines break through the work and cross it, and each one changes direction.

### *Spatial openings*

One of the fundamental contrasts that makes it possible to distinguish between different types of architectural spaces is that these spaces can be both enclosed, introverted, and self-centered, as well as open, extroverted, and centrifugal. Where the building complex is more or less concentrated, the space is equally enclosed. The extent of this confinement does not depend only on the number or size of openings. When we want to create an atmosphere that tends to open up to the outside, we are actually trying to make it less explicit.

Thus, there is a direct relationship between perceptions and perceptions about explicit and implicit space and the degree of openness or confinement of space. The principles of one of these can be used to achieve the other. The opening of spaces is achieved by reducing the amount of its definition (for example, by removing a corner). Also, through the presence of elements that belong both inside and outside (for example, extending a wall outwards).

Window and door are two classic ways of restraining openings in the structure of load-bearing walls: a place to pass through it (the image) that frames the outside view, as well as a source of light and air. The relative position and size of these openings, and their form structures the space and helps to explain its nature (for example, its thickness). The larger these openings, the more they indicate the absence of a wall, especially if there is a corner opening. In this way, the image of the wall has a weak penetration and hole and the space is

opened. Reinforced concrete, steel and glass, by eliminating the dependence between structure and opening, have made it possible to expand the range of architectural expression tools.

### *Climate and geography*

All the lines and lines that eventually show the shape of a building are made somewhere. Place as a sublime can change the design and change the design lines and lines, even in some cases in general. A design can ideally meet our needs that can meet the maximum demands. Certainly, the needs of the climate and the environment, such as light, temperature and wind, and so on. They can serve as environmental factors in the design, if we do not care for them, cause disturbance later and be considered as one of the design weaknesses.

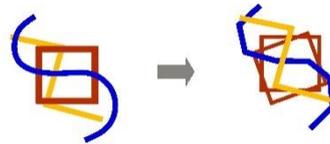
**Light:** Light is the factor that makes objects visible. A museum is a place to see, so light is one of the factors that should be considered as an important factor. Indeed, natural light is considered as the best and most appropriate light in general and we should try as much as possible to use natural light, especially in environments that do not conflict with the performance of those environments. This mode of using natural light, as we have seen, has been considered in buildings such as the Museum of Contemporary Art in Tehran and the Kimble Museum of Art, and has even taken on the general shape of the museum. In order to bring light to the museum environments, natural light has been tried to use indirect sunlight as much as possible. For this purpose,

and in the macro dimension (total volume), special ways have been considered in various cases. For example, using "void" or splitting volumes and using skylights or ceilings. (For example, we can refer to the skylights of the Museum of Contemporary Art in Tehran, which is explained in the section on the analysis of museum works.) Regarding our design, which is the Museum of Art, pulls into the used space and on a smaller scale, it paves the way for the use of appropriate ways to deliver light indirectly into the spaces we want.

**Interaction (interaction of influencing factors):** The general conclusion obtained from the various factors that are shown in the main lines are the result of many factors, the main factors of which were explained. They are inexplicable and do not come in words. However, apart from the placement and use of different forms, a factor that is very important and should be considered is the effect and interaction of the form elements of the composition with each other. The main forms we used (curved form and cube form) can strongly influence each other. How this effect can be considered from different perspectives. But in general, two main factors play a role in this.

**Direction and shape of the curve 2- Cube shape:** Just as a curve can be assumed to have a myriad of points in a row, it can also be assumed to have a myriad of small lines in a row. A square is a shape that is the result of only 4 distinct lines. Therefore, the effect of the square on the curve can be considered as a reduction in the softness and flexibility of the

curve line. And the effect of a curve that interacts with the square It can be considered as 2 or more (multiplication) of squares and the formal effects of each of them can be studied according to the functions and other factors.



**Figure 4.** Interaction of lines and forms

**Geometry (regulatory factor):** Geometry as a general that can create order and cause the regularity of shapes and combinations is a factor that determines the end points of collisions and endings or beginnings with its rules. Now that we have reached a combination of different shapes (plan view) and the resulting forms (perspective view), it is better to introduce geometry to the field in order to regulate it and regulate the created spaces as much as possible.



**Figure 5.** Affects geometry as a line regulating factor

Geometry has fascinated humans since ancient times. Philosophers such as Plato, Pythagoras, and Archimedes were great mathematicians and geometers. Geometry as a mysterious science, property, and weapon has helped priests and pharaohs maintain their superiority over others. They could use geometry to survey the earth, measure the

distance between stars, and track it. Initially, the geometry of a tool was like a gun, and only a few people knew how to use it. In addition to its real usefulness, geometry gave a special mental state to those who knew the secret. Later, the geometry became the preoccupation of the Jesuit sect, whose hypotheses were questioned and refined, and they immortalized themselves by offering new interpretations of it. They devised new methods for solving problems and then raised doubts about the universality of previous views.

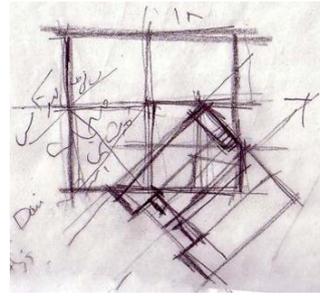
(1) Geometry makes it easy for architects to use shapes that can be reproduced or repeated if necessary, without any fear of practical error.

(2) Geometry gives architects great freedom (rectangles, as well as other shapes, can be picked up with infinite proportions) even in restrictive conditions of choice of shape.

(3) Geometry, while disciplining architecture and architects in the material world, has also given them the metaphorical possibility of approaching God and its universal or divine order - through the use of explicit universal forms (square, circle and sphere).

(4) 4. Geometry reassures the architect, while making possible a range of intrinsic motivations through the different emotions created by different proportions of form.

(5) The geometry of the unifying force creates an internal connection between the mysteries who were aware of the secrets and was therefore seen as a means of distinguishing between professional and social identities.



**Figure 6.** Study of the effect of geometry on the main lines

There are three different ways to change form:

**1- Traditional method:** Development of form evolution through step-by-step adaptation to (constraints) such as external factors (site, vision, orientation, prevailing winds and environmental issues), internal factors (functional criteria, physical and structural planning) As well as artistic factors (ability, will and approach of the architect to manipulate the form, at the same time according to his cost, other pragmatic criteria).

**2- Adaptation:** the possibility of adapting formal movements from painting, sculpture, objects and other artificial products; And learning from their two- or three-dimensional features, while continuing to explore interpretations of their feasibility and validity. Variable adaptation is a form of "image transfer" that can also be described as "image metaphor". When a garden becomes the basis for the process of changing form in building a house, that garden can be considered a metaphor for that house.

**3- Decomposition or decomposition:** It is a process in which, in order to find new ways of combining different components, and to evolve the possibility of forming new volumes and

creating new solutions, the assumed volume can be broken and a new volume can be created. The process of continuous exploratory questioning and focusing on the imaginary mental affairs is the key to the ultimate understanding of the imagination. This process, which many people have experienced, is now one of the most popular architectural styles. However, the important thing for the student is to learn this exploration in himself. Regarding the general composition of the lines that we have created, the effect of geometry moves to the extent of the effect of specific lines and angles and moves towards the formation of two halves of octagons and two squares that intersect at specific geometric points.

**Performance:** Today's building is characterized by the complexity of its functions; The combination of high performance in a building for economic reasons (land cost, construction cost) for operation has become mandatory and inevitable. The buildings of a college on campus or a central city office or leisure and business complexes are examples of multi-functional buildings. It is very unlikely that a modern building would not face the multiplicity of functions, diversity, structural needs (covering the openings of spaces), and circular paths and complex installation needs. Also, there is no modern building in which parts of it do not require specialized performance needs (such as acoustics). Specialization adds new dimensions to the discussion of the advantages and disadvantages of "geometric compositions"

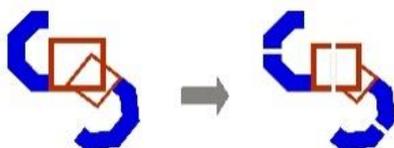
and "geometric contexts" architecture. Such projects can be approached through many strategies, including:

(1) By harmonizing different functional needs under the coverage of a total volume (in the dimensions of an urban block). The main points that should be paid special attention to the designer are coordination and structural / functional scale.

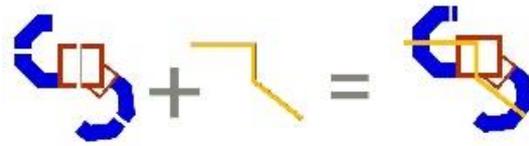
(2) Through the clear separation of the various functional parts, the geometric alignment - as it meets the functional needs of each part separately - and the proper expression of each geometric element as part of the overall composition. In this case, more attention should be paid to the relative degree of unity.

Structural modules may not be a suitable tool for the overall unity of the work, as they may change due to different structural needs, building materials and texture can be a good unifying factor in this case. In this particular case, two main strategies emerge for the designer: The first strategy is to blend and express the forms according to the optimal function of each particular user (for example, the acoustic volume expression of a particular amphitheater. This method is very similar to playing with building blocks, except that here the architect must accept that there is a perfect match between each block and its functional function. The second strategy is more in the search for fusion and integration of the optimal functional space in a large volume of trust, in which special needs are included in the main volume through interior design tricks, such as false ceilings. In this case, most practitioners

prefer to use right-angled spaces (consisting of straight lines) in larger volumes and then turn their attention to special needs. This method seems to be more effective, especially in the future when the use of buildings cannot be predicted. The modern movement advocated the expression of complex buildings through individual volumes expressing its function. Today's architects have found that "assigning" to performance is a dangerous and difficult subject to make; Because the focus on the aspects of unity, scale, rhythm, as well as the dialogue between the visible parts of the building complex, are very important due to the purely compositional considerations that are consistent with the context. Today's large-scale and complex building, just as the facades of single-function buildings played in the past, is a good model for "new" combinations on an urban scale. The concept and idea of a geometric background has been very helpful in achieving such a goal, given the overall composition created at the various stages of design, as well as creating a more appropriate environment for placing functions when adding different lines that are influenced by a particular thought. Note that the results are shown in the following diagrams.



**Figure 7.** To add the third line as a symbol of the era of vote intensification



**Figure 8.** After adding the final line, which has tried to include all the desired components

**Design standards:** Apart from all the various discussions such as aesthetics and philosophy, etc., every building that is built has standards. Humans travel in it and must show their functional abilities well. The standard factor, as a factor that occupies a part of the designer's mind from the beginning to the end, has an important place in the design process. Although many standards do not have a determining factor in the overall formation of the building, but should be considered.

We have two general sections in the discussion of standards:

- (1) Standards set by urban bodies and decision-making bodies such as municipalities, etc., which are usually standards related to the category of urban planning.
- (2) General standards of various spaces that are considered in general on the human scale.

### **Part One: Urban Standards**

This section summarizes some of the general city rules that should be considered in the design:

#### *Public buildings*

Public places in this regulation mean those buildings that provide one of the types of public services to the community.

### *Inputs*

- (1) The main entrance should be considered for the use of the disabled and should have adequate access to the car park with parking.
- (2) The entrance of the building is as level as possible with the sidewalk.
- (3) The sidewalk leading to the entrance of the disabled should be marked with sensory signs.
- (4) The minimum depth of the front entrance space is 140 cm.
- (5) The presence of an awning at least 140 cm wide on the front entrance space is mandatory.
- (6) The minimum width of the openings at the entrance of the building should be 160 cm.

### *Corridor*

- (1) The minimum width of the corridor should be 140 cm.
- (2) The floor of corridors should be non-slip and the installation of floors with long piles should be avoided.
- (3) In case of surface difference in the floor of the corridor, the connection with the sloping surface should be provided properly.

### *Openings (door window)*

- (1) The minimum useful width of each door for the passage of a wheelchair is 80 cm.
- (2) Adequate visibility is required for doors that open to the outside.
- (3) The maximum height of view from the finished floor is 100 cm.

### *Stop*

- (1) In order to stop the vehicle in order to get off the wheel and ride the disabled people from

the vehicle in the main streets of the city, it is necessary to create a bay with a depth of 3.60 meters and a length of 12 meters with proper connection with the sidewalk.

(2) It is necessary to allocate two special parking lots for the disabled by installing a special sign next to the main street at a distance of 500 meters.

(3) In public parking lots, it is necessary to allocate 3% of the parking space to the physically disabled.

### *Cultural-religious use*

Authorized use, including the city mosque, mosques, cinema, museum, cultural center, large hall for performances, lectures, gatherings, library, etc. it is possible.

Criteria related to land separation at different levels:

Minimum separation in the neighborhood of 500 square meters

Minimum separation in the area of 1000 square meters

The minimum separation in the region and the city is 2500 square meters

The minimum rider access width on the neighborhood scale is 12 meters

The minimum width of the rider is 14 meters in area scale

Culturally and religiously, it is located on an urban scale next to second-class service arteries with a width of 35 meters.

### *General rules related to the construction of the building*

Maximum occupancy level 50% on the ground floor (at the neighborhood, district, city and region)

Maximum 100% infrastructure in two floors

Note 1: Observance of the rules and regulations of the relevant organizations is mandatory.

Note 2: Cultural and religious use at different levels is located in the detailed plan of the areas.

### *Parking*

For every 100 square meters on the floors of two parking units. In cultural areas and public open spaces, substations should be built underground.

## **Part 2: General standards of spaces**

In this section, we examine the standards of the various spaces used in the museum in general:

In the design of Shiraz Art Museum, the spaces have been selected based on the activities and goals intended for this collection.

Based on the physical program intended for this collection, various spaces have been created that have general standards and, in some cases, micro standards that are significant. In this section, we review and consider these standards.

In order to achieve the dimensions and spatial standards of the various sections of the Shiraz Museum of Contemporary Art, statistics have been selected based on the conferences held at the Museum of Contemporary Art in Tehran and also from the museum's standard books (Latin). Also, to record fixed statistics such as the number of books in the library and staff and

visitors to the museum, etc., the statistics of the Museum of Contemporary Art in Tehran has been considered. The reference diagrams and visual representations of the standards are the standard museum books (Latin).

**Library:** In this library, about 2000 to 2500 non-Persian (Latin) books and about 1500 Persian books in the fields of architecture, painting, cinema, graphics and other artistic fields will be kept, of which 1,500 volumes are archived in a closed package and the rest are used on bookshelves.

The average length and thickness of art books in Latin is 25 and 4.5 cm and the average height of each shelf is 30 cm. The point is that 10 to 15 percent of the volume of a shelf should be open for new books.

### *Educational environment*

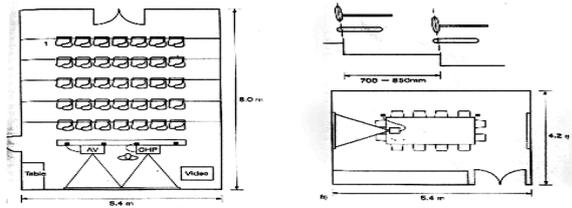
Training class size standards are generally as follows

Small classes (private) 3 \* 2 square meters

Classes for 15 to 20 people 5/7 \* 5 square meters

Classes for 40 to 50 people 5/7 \* 10 square meters

The average height in this case is 3.5 meters and the proportion of classes varies from length to width of 1.3: 1 to 1.7: 1, but the optimal state is 1.4: 1. The per capita level of classes in Germany is 0.9 to 0.8, in the United Kingdom 0.93 to 1.6 and in the Netherlands 1.3 meters for classes up to 50 people. 2 meters distance from the teacher to the first row of classroom chairs is considered.

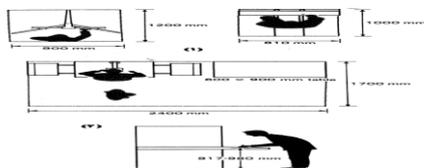


**Figure 9.** General standards of conference hall space (conference classes) and slide show room for 12 people

**Galleries:** The standards related to the galleries intended for Shiraz Art Museum have been considered according to the existing standard for galleries. Required area for each image: 3-5 square meters of wall area

In the exhibition space of contemporary periodicals, including contemporary and volumetric works, are placed and in space. The pattern of displaying works in a gallery can be in various forms, some of which are considered as a general standard. Shown in the following diagrams.

Another thing that should be considered in this case is that in the space used as a gallery, sometimes a series of spaces such as commonly used design spaces as well as used for the camera and writing content, etc. are also considered.

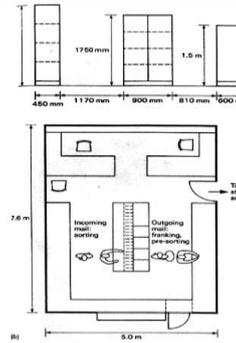


**Figure 10.** Write the title of the figure

Amphitheater is intended for a maximum of 250 people, including users of educational classes and the general public. Two hundred and forty-two people attended the conference. Music is also planned in this space. One of the things that must be observed in the amphitheater hall is that the minimum age and back space should be 30% of the total space intended for the amphitheater and the angle of view of people in the hall should be 30 to 35 degrees. The minimum width of the seats in the hall is 40 cm and the width of the passage is 40 to 45 cm. Side aisles and interior aisles between seats are considered to be between 120 and 200 cm depending on the distance between them. The distance for age to the first row is at least equal to 2 rows of living room (with front space), which is approximately 160 to 200 cm.

*Standards of service office spaces*

Office spaces in the complex are considered according to the general needs of the complex and the number of people who should work in them. The general standard for office space for each permanent employee is about 5 to 6 square meters of useful space. Some service office spaces, such as the document archiving room or the letter room (internal secretary), have certain standards, which in this case are intended for a medium-sized museum.



**Figure 11.** Standards of service office spaces

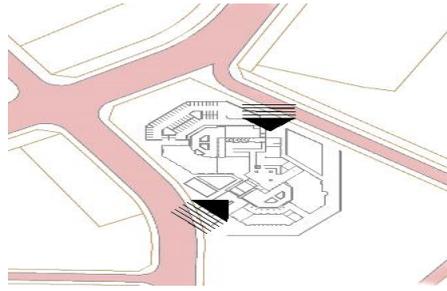
*The overall formation of the collection*

Overall formation of the collection: After shaping the whole form and creating various spaces according to the needs and creating the desired order in general and considering the necessary spaces for this collection, now it is time to enter more detailed spaces and design and their characteristics are created. In general, these more detailed relationships can be studied in several categories.

**Location and site:** As we have specified in the status of the site, the site in question for this collection is a smooth site with no slope. The northwest and southeast orientation of the site is the same as the general orientation of our collection, but in the more detailed case, this orientation becomes more diverse.

**Inputs:** To ensure the entry and exit of people in general and more specifically, two entrances are considered on the two main fronts of the complex. The entrance location for the complex (main entrance) in the middle of one of the

important sides of the site is considered so that it can provide the necessary services for general visitors. This entrance is further divided into two main parts, one upwards and the main central hall and the other downwards and the inner courtyard. This entrance is also in a place in terms of form, which creates the necessary attraction and invitation for the person from outside, and also the road from which this entrance branches off is one of the first-class roads around the site and in terms of traffic. In other ways, it is in a better position. The second entrance is located in the back front of the site and facing a side street. This entrance connects to the private communication section with galleries as well as the administrative and research section. One of the sub-branches of this entrance leads to another inner courtyard, which is dedicated to the educational section, and this entrance also provides an external connection to the complex's private parking lot.



**Figure 11** The main input directions are shown in Figure

**Form:** In terms of final shape and form, the set consists of a curved form that has been converted into two semi-octagons and a cubic form in its heart with a transparent elongated form that gives the whole set more unity and coherence. Inside the two halves of the octagon with respect to the floor of origin (zero) has a negative height difference and the yards in the heart of these two created sections sink into the heart of the earth. The elongated and transparent form, which has become a network, has been extended throughout the complex and, in terms of functionality, has included a vertical interface (stairs) in one part as a structure and in another part.

The main form of the collection, which houses the main galleries, is up to 3 floors high and a gap of 3.5 meters has been created in the middle of it. The transparent elongated form and the lattice pass through this section and connect the two created parts. In the same part, corridors have been installed to connect the two parts of the main cube volume. The function of the gap in the main volume as well as other parts is to create a state of unpredictability and ambiguity in the collection as well as visual mobility and dynamism in its entirety. As the main corridor

of the office section on the ground floor above it, due to this gap, it can act as a skylight by using glass mosaics and contribute to the freshness and beauty of the interior space.

**Functional connections:** In order to improve the performance of external-to-internal communication as well as internal communication, various parts of the collection have been defined at several levels.

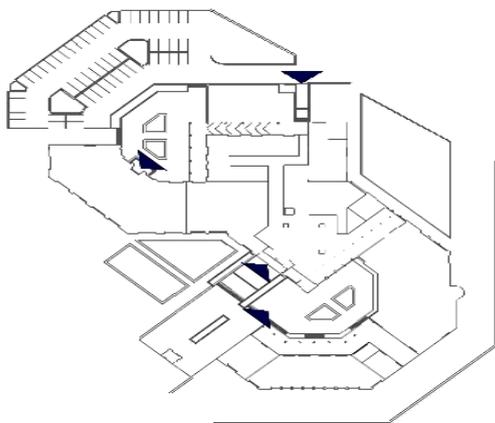
(1) The parts that have access and communication both from inside and outside the complex, such as the amphitheater, in this case, the external communication is direct and is possible through an entrance in one of the inner courtyards.

(2) Sections that are accessible only from outside the main collection, such as the educational section and stores. In this case, the need for external communication was considered as a main need to avoid interfering with the main function of the museum.

(3) Places that can use both the main entrance and the private entrance. This situation can be seen in most of the museum. The reason for this is more flexibility in the operation of the collection, so that parts of the collection they can be predicted to be used both through the public entrance for the general public and

through the private entrance for the entry and exit of the staff of the complex or special situations.

It should be noted that all these entrances are guarded by guard units. After entering the main part of the complex, we enter a large central hall, which provides communication to the major parts of the complex through this central hall. Along it is a landmark that provides vertical connection to galleries and exhibitions. To the right is the path defined by the set of columns, which includes a number of works of art that led to the inner entrance of the amphitheater and central toilets, and to the left is the main door and the entrance to the library. Also, the corridor leading to the roof of this part, as mentioned above, is a feature. It is illuminated by glass bricks. The exhibition halls and galleries of the collection are generally located on the upper floors, with which the public communicates through the same central staircase inside the lobby. In general, these galleries are defined in 3 floors, each of which is divided into 2 parts.



**Figure 11.** General internal circulation routes and major input directions

On the first floor, one of these sections is dedicated to the warehouse and the main archive and the management of the halls. This is due to the higher security in this section. The connection created in the management department is such that the department is located at the end of this department and dominates the main entrance front as well as the central lobby. The sections to which foreign references are more are located in the front parts of this corridor. The end of this corridor, which provides management services, reaches a staircase that goes to the basement section. Deployed from the facilities department. The link to the training section is designed to be completely external to minimize performance interference.

**Parking:** The private parking lot of the complex is located on the opposite side to the side street and is covered and has been created in such a way that it completes the general form of the complex. Divided and provides communication with parking lots. It is worth mentioning that efforts have been made to create various connections between different parts of the collection in classifying these connections and maximum ability in managing the collection and not creating interference and disturbance for its main function, which is to display the work of art.

**View of the complex:** For the view of the complex, it has been tried to observe the principles and generalities on the basis of which the complex has been formed, so that for the ground floors and the administrative and educational part, a brick facade or brick color

is considered, which can reflect the present and the weather is over. In the case of the main volume of the cube, which is divided into two parts, one part is made of glass and the other is made of concrete, which can represent the materials that were used in modernism. The grid that splits the volume of the cube is a symbol of the new era and the architecture that symbolizes technology.

**Structure:** Structure as a factor in maintaining the building and providing its strength can also serve to show ideas and theories. As mentioned, the main idea in designing a museum building is to show the era of change as well as the diversity of opinions and ideas now. To show this identity in the building, the structure can also be used in a way. The volumes that make up the design of the museum form a volume of approximately 100 meters in the longest state.

The diameter of the semi-octagonal volumes is 60 meters (center to the outermost part). And the length of the base side of the main cube is 36 meters. Due to the length of the volumes that are combined and this amount is more than at least 30 meters, the expansion joint is considered at the junction of the main volumes. The structure intended for this building includes the main structure that includes concrete and the building as a whole, and the structure intended for the existing network, which is of great visual importance, is made of metal. This network-like part connects two cubic volumes in a part of the building and has a structural function in them. The floor in the lowest part of the gap created in the volume of

the cube is made of glass mosaics that allow light to reach the main corridor of the ground floor.

**Museum Garden:** At the southeastern end of the site, a large section is dedicated to integrated green space, which is surrounded by a short wall and can have the function of a museum garden for sculptures that can be placed outdoors.

### Conclusion

Art is the most familiar word that lives on in our time in the strangest way. We say familiar, because everyone has more or less information about it and a special opinion; and usually everyone uses it in some way and in their private and social life. Today, the simplest, best, and most effective means of instilling socio-political theories, ideologies, and messages, and with the most influential factor in changing or creating values, individual and social tendencies and even the most hidden layers of individual personality such as love or hate. Entertainment, not just leisure, is an art. The art that controls so much and from the most superficial to the deepest layers of human social and personal life, it is so strange and anonymous that it seems as if no one has the air of revision to condemn it. Art, which can have a prophetic role, has forgotten its real role, function and duty in the twentieth century and has become a hobby in the hands of a few free from the thought of society and human life. This nostalgia for art is the result of its remaining unknown, or rather superficial knowledge of it in society. Sociology of art,

although in terms of being sociological, is committed to not judging values and prejudices in the subject and mission or purpose of art, at the same time it can realistically identify and introduce the dimensions of the impact of art and society and art to cleanse it of the contamination of this apparent purpose, that is, the means of being entertained, and to enable society to reconsider it. The art of communicating and transferring content from the inside out; as it seems to the public. The quality of art depends on two factors, one is the content within and the other is the form of communication that attracts. The content within and within the human conscience has been obtained from various channels. Divine talent, knowledge and piety are the main source of physical knowledge; Ethics that are a community of goodness; Religion, which is the source of wisdom and connects man to the sciences of the prophets and saints; Worship gives worship to man and all human roles appear in worship; Purity and purity mirror man as if to see all things enlightened and undisturbed; Faith is the hallmark of humanity and causes us to see the enlightened things of God ("The believer sees the light of God"); Dhikr reassures the heart and is the cause of instant and continuous communication with the

owner of the universe. If man's relationship with God is established, God will establish man's relationship with people.

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