

Proposing a Model to Understand the Visual Structure of Prehistory Artifacts of the Iranian Plateau; Case Studies: Artifacts from the Ancient Cities of Choghamish and Tal Bakun

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ABSTRACT

Research on the basics of visual arts has taken many forms in the history of Iranian art. In this connection, the present historical-analytical research was established with a formalistic approach and in order to recognize the visual characteristics of prehistoric images. Patterned pottery was selected from among the early illustrated documents for their historical frequency and sequence. The ancient cities of Choghamish and Tal Bakun, as research examples, were among the first settlements of the Neolithic era in Iran. An expansion of pure and applied branches of visual art in the present-time society and the importance of this art in Iran from a long time ago, elucidates the need to identify the visual roots of Iranian art. The present study established how the visual formalistic principles looked in the Iranian prehistoric era. Scant research background in this field has referred to numerous cultural areas within the Iranian plateau, necessitating the design of an established method to consider the characteristics of the visual images as seen on patterned pottery. The research method was analytical-comparative and concerned a case study of Choghamish region located in the southwestern part of the Iranian plateau, where the patterns of patterned pottery of that era are discussed. Visual arts were analyzed from a design perspective and via a formalistic approach by studying library resources and observing museum objects. This research aimed to understand the specific morphological characteristics of each era. The first and most important step in pattern design is to determine the fixed criteria for examining images, identified as the category of visual variables in three main groups; i.e., general structure, visual elements and qualities, and patterns. In the next steps, the visual images and the application of the resulting findings will be analyzed. In this way, similarities and differences determine the morphological characteristics of regions or time periods. The findings revealed that pattern density, compositional structure, circumstantiality, motifs, elements and visual qualities are the criteria for image differentiation.

Keywords: Ancient Cities, Choghamish, Tal Bakun, Visual Analysis, Patterned Pottery, Prehistory, Iran.

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1. INTRODUCTION

The history of Iranian visual art, its insistence on permanence throughout historical eras and resistance against changing criteria and more, the diversity of the present trends and the necessity for identification in works of art all make it appealing for us to examine the early origins of this type of art and to delve into the roots of images. Formalism can explain this: this is because of the visual values of these works (Connell, 1997, p. 180). An analysis of visual images to achieve formalistic methods, without considering the context of the work and examining the patterns or patterns, not in terms of the meaning conveyed by the work, is a formalist or formative view. Formalism is an approach to art that, instead of emphasizing on content, concerns the importance of form as a source of mental fascination for a work of art. In its broadest sense, form denotes how a work of art is formed, i.e., how visual elements are used, how composition principles and techniques are applied, or any other visual aspect seen in a work of art (Jensen, 2005, p. 17). Formalism reveals itself acceptable not only because it recognizes important features of the modern art, but also because it provides a way to assess tribal art, otherwise hard to understand. In other words, tribal works of art, though violated the rules of strict realism, were considered art like modern works of art, as they involved a signifying form (Carol, 2008, p. 174). A formalistic examination of work of art primarily concerns with the aesthetic effects of design components. These components, known as form elements, found the basis of the artist's visual language. From among these elements, one can refer to line, shape, space, color, light and darkness the artist arranges them in various ways to achieve wider categories of design. Visual qualities, composition, volume, texture, and perspective are also included in these elements (Adams, 2011, p. 93).

The origins of patterns go back to historical eras deep into prehistoric times (Askarpour, 2016, p. 13). A collection of pottery found from ancient remnants, especially in the prehistoric era, is the most frequent and thought of the most important archaeological data in the Iranian history (Talaie, 2011, p. 40), whose patterned samples are viewed as the early formative documents. Patterned pottery has been semantically analyzed in many of the researches done so far in order to gain a better understanding of the social, economic and cultural backgrounds of that era. Basically, pottery, by itself, can be visually analyzed as a formal medium. Analyzing the apparent structure of a work is an approach towards artistic technologies, style and form, being independent of meaning while emphasizing the relationship between visual and compositional elements and color levels and the essence of works of art (Qarabaghi, 2004, p. 43). Thus, the formative structure, composition, prevailing elements and qualities and their other visual features will be made clear with this attitude.

2. RESEARCH BACKGROUND

Studies by Hole (1984), Rezaei and Ahmadpanah (2012), Babakhan and Afshar Mohajer (2015) are research examples that concerned the visual structure of patterned pottery on the Iranian plateau; however, each has investigated some pottery in a region, based on a limited number of variables, on a case-by-case basis. Although these researches have highlighted the need to study a formalistic approach-based pottery patterns, no attempt was made by any of the researches to gain a coherent and generalizable method for the visual analysis of prehistoric patterned pottery.

In the field of historiography as well as critique and analysis of formal art, Iranian scholars cited the presence of various and scattered samples as reasons for not examining the formal works of art of the old times. Although of historical importance, they were not sufficient for an accurate stylistic study (Pakbaz, 1999, p. 13). An important issue is to examine these formal documents in order to understand the visual characteristics of different regions. For this end, based on the principles governing the visual analysis of visual arts, a model was designed to study the images of prehistory patterned pottery on the Iranian plateau. The first step was to determine the visual variables classified into three groups based on the case study findings.

Southwest, the center of which being Khuzestan and Dehloran and South Zagros with their center being Fars, are parts of the Iranian plateaus (Talaie, 2011; Malek Shahmirzadi, 2012) where patterned pottery was obtained after excavations (Bahmani, 2017, p. 29). These two zones were selected due to their proximity, common cultural archeology, more or less the same material culture, similar forms and patterns of pottery (Alizadeh, 2003, p. 27) and the richness of the images from the pottery. The reason why the two zones were selected was the ability to apply the research method in the two regions to generalize its use to other prehistory zones on the Iranian plateau. Susa or Shush, Choghamish, Jafarabad, Joy, Bandbal, Tappeh Sabz, Choghasfid and Farrokhabad in the southwest and Tal Jari, Moooshaki, Gap and Bakun in the southern Zagros are some prehistoric sites located these two zones (Talaie, 2011; Malek Shahmirzadi, 2012; Bahmani, 2017). The main data of this basic research were reconstructed patterned pottery or fully found containers in the mentioned areas of the two zones of South and Southwest Zagros¹.

3. RESEARCH METHOD

In the present historical-analytical research, first, full studies in relation to selected areas were performed. After data collection, many required texts were translated. Images of each area were extracted and categorized according to the relevant time eras. At this stage, the images of pottery as works of art were analyzed to better understand their visual structure and

features. Visual analyzes were diverse and could not be compatible with each other. Because "visual analyses leading to the recognition and classification of stylistic images" (Hart, 2003, p. 30), defining fixed qualitative variables and designing a certain pattern required to be classified for a visual analysis. For this end, in the sample images of patterned pottery in the southwest zone, different types of main variables were identified by priority and their subcategories based on visual analysis findings. The main variables are constant; however, some sections may be added to or removed from their subcategories, based on the initial analysis of images of new areas.

4. VISUAL STRUCTURE OF PATTERNED POTTERY

Studies in the studied geographical area reveal that some fixed integrated laws govern the way they have formed. Structure is the general organization of components and parts based on their dynamic relationship, and the visual structure is the general pattern of relationships and functions of the elements constituting the design (Pakbaz, 1999, p. 293). To obtain the formal structure, one must simplify the design and reduce its complexity in order to delve into its structure. In this way it is possible to analyze the structural elements and components and compare the pottery with each other (Hole, 1984, p. 328). Images on the pottery having been examined, the pattern density on the surface of the container, framing and the overall composition serve as the most important factors for the general structure in distinguishing the pottery images from each other. That which part of the container's surface is covered with a pattern is one of the most important characteristics of patterned pottery, determined by the variable of pattern density (Fig. 1).

The container's form determines the perimeter lines of it and separates it from the surrounding space; hence, it is seen as a kind of outer frame. Hence, the general forms of containers are first categorized and stated if there is a certain relationship between the same forms with a specific pattern or structure. In other words, if a pattern or structure is used on a form in several instances, the relationship between that form and that pattern need to be considered. The outer or inner surface of the container, or both, may be patterned at the same time. In case where there is a relationship between the formed surface and other visual features, this relationship is also expressed after the formal analysis. The margins constitute the inner frame of the images, separating the form area from the container's surface (Fig. 1). For this, the presence of the margins at the top and bottom of the container, the type of margin and the size of the margin are examined. Considering the formal frame provides the basis for examining the composition and type of arrangement of elements based on visual qualities, the types of which are provided in Figure 3. The visual elements and qualities, as well as the motifs used in the images (if any), are the building blocks of this general composition (Figs. 9, 13 & 14) show the more detailed similarities and differences of the patterned pottery images.

4.1. General Structure Variables

The first group includes variables related to the overall formal structure. Structural features are the most important factors distinguishing forms while making the general idea of the artist in creating a designing a form. Circumstantiality, patterns density and composition are the characteristics of the general structure in the prehistoric pottery of the Iranian plateau (Figs. 1 & 3).

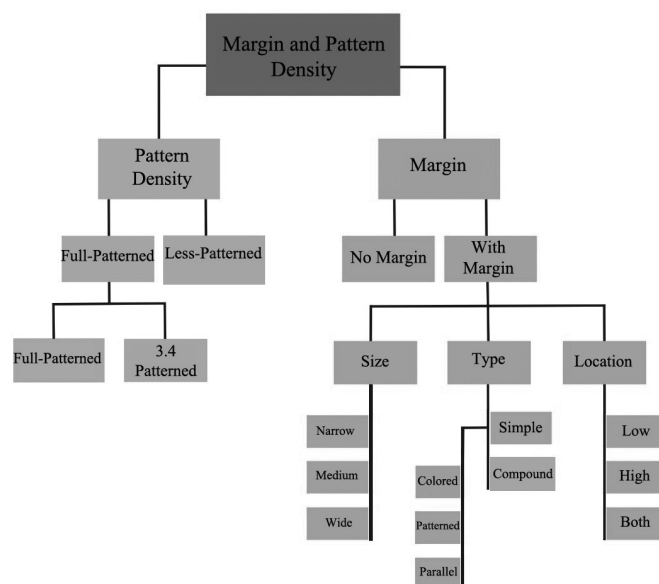


Fig. 1. Variables of General Structure, Margin and Pattern Density

Images can be divided into margin and margin-less groups. Location variables, their type and size in the image are important. Containers may have only a top or bottom margin, or both top and bottom margins may have framed the image (Fig. 2). Pattern-less colored strip, parallel lines, and patterned strips are simple margin types. In some cases, the margins are integrated, i.e., they are made of two samples of these margins. For example, look at the parallel lines and the patterned patterns in Figure 2. It should also be mentioned in the analysis if there is a clear relationship between the type of the margin and the pattern or the composition method. It must be stated in the analysis (Fig. 4 -b)².

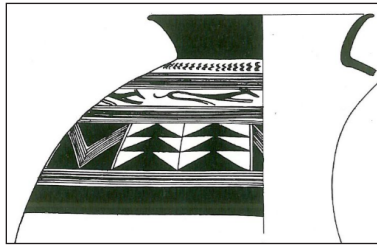


Fig. 2. Less-Patterned Earthenware Pottery with Rows: Susa, New Suziana 2 Era (D.A.F.I 1, 1971)

It is in the Middle and New eras when a patterned margin appeared; patterned margin shows that a patterned horizontal row can be seen at the top or bottom or both sides of the main row. These sub-rows, having less thickness and a simpler pattern, are thought of the patterned margins of the images (Fig. 1). In some images of the late era³, there are some exceptions in

framing. In addition to the margins, there are specific inner frames for separating the patterns in a row repeated as fixed patterns in different samples (Fig. 1). In terms of pattern density, containers are divided into two main groups: full-pattern (patterned) and low-pattern. Full-patterned containers are the ones that 1.2 of whose surfaces are patterned (Figs. 4 - 5). In some cases, these containers can be divided into two 3.4 patterned and full-patterned subgroups. The 3.4 patterned containers are the ones that 3.4 of whose surfaces are patterned and patterned containers are the ones whose entire surface is patterned. Less-patterned are also the containers with less than 1.2 of their surfaces patterned (Fig. 7-a).

Composition structure is another variable that determines the way the image and the framework are created and is divided into general rows, circular and single-patterned types, respectively, in terms of the most available containers (Fig. 3). Circular and single-patterned samples are in general 1.4 of the overall number of row compositions. Each of the general groups also has a subgroup according to the structure related components. In a row-based structure, a number of horizontal or vertical rows constitute an entire image (Fig. 2). Number of rows, direction of rows repetitions (vertical or horizontal directions), type of row repetition (alternating, one in between), spaces of rows (middle-spaced, no spaced and stuck together), size of rows relative to each other and their homogeneity in terms of patterns all determine the difference between row images relative to each other. In different time periods and regions, these components essentially become the characteristics of a period or region.

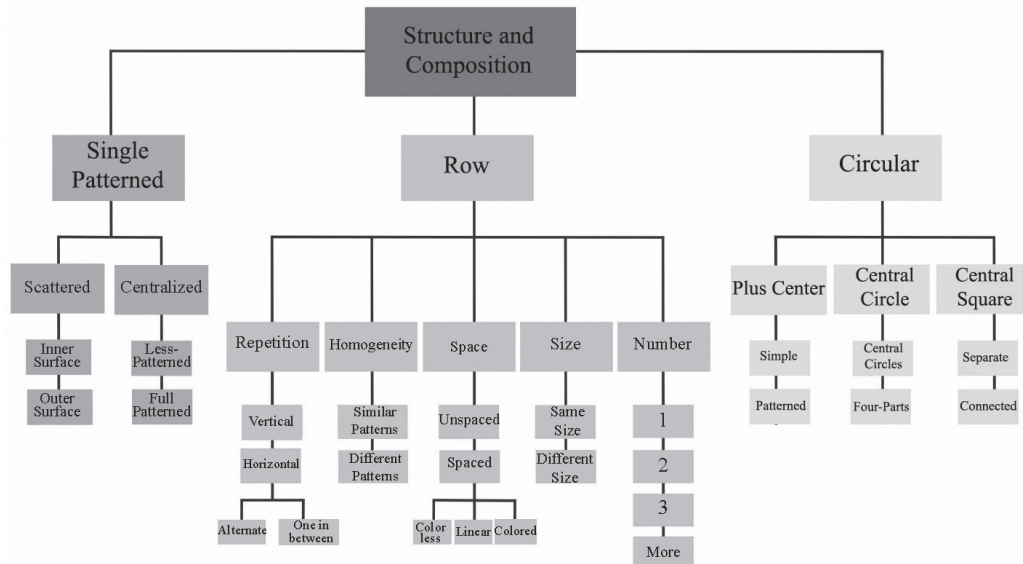


Fig. 3. General Structure Variables, Composition

The circular structure is seen on the inner surface of shallow bowls or on their outer surface and bottom. Circular structure can be divided into subgroups according to structural components. The central square,

the central circle, and plus-center are the types of circular compositions and divided according to the center frame. The circular and central square samples have a circular or square frame in the central part. The central

square structure is seen on the inner surfaces of the shallow bowls with their shape divided into four equal parts (Fig. 4). These samples have been divided into two groups, connected and separate groups. Connected types of central squares refer to the samples where the shape has been formed with lines, textures, and primary

surfaces around the middle square with the peripheral surfaces connected to the middle square⁴ (Fig. 4-a). Its separate types also include images where the central square occupies a small part of the shape with different motifs, highly dense and diverse images illustrated around it not connected to the middle square⁵ (Fig. 4-b).



(A)

(Alizadeh, 2008, Fig. 59D)



(B)

(Harper, Aruz, & Tallon, 1992, p. 33, Fig. 2)

Fig. 4. A) Shallow Open-mouthed Earthenware Bowl with Internally Shaped Structure of a Connected Central Square, Choghamish, Old Susian Period, B) Shallow Earthenware Bowl with Internally Shaped Structure of Separate Central Square, Susa, New Suziana Era (2)

Samples of central circles are two groups used both on the inner (Fig. 5-a), and outer surface and the bottom (Fig. 5-b). Samples of central circles with concentric parts are the ones where a circle is seen in its center around which other concentric circles have been drawn

(Fig. 5-a). Four-part samples are images where the space between the central circle and the frame of the circle (the edge of the container) have been divided into four parts via perpendicular lines, and in that range, different images have been created (Fig. 5-b).



(A)

(Harper, Aruz, & Tallon, 1992, p. 36, Fig. 4)



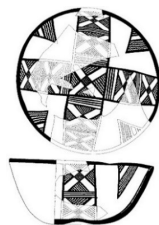
(B)

(Alizadeh, 2008, Fig. 62G)

Fig. 5. A) Shallow Open-mouthed Earthenware Bowl with Outer Surface Formed with Four-part Circular Structure, Susa, New Suziana 2 Era, B) Shallow Open-Mouthed Earthenware Bowl with Inner A Concentric Circular Structure, Chaghamish, Old Suziana Period

Sample plus-center structures are divided into two simple plus-center and patterned groups. Simple plus-center samples are common and have been seen on

the inside and outside⁶ in many areas where circular structures are not very common (Fig. 6-a).



(A)

(Delougaz & Kantor, 1996, Fig. 26 X-1)



(B)

(Alizadeh, 2008, Fig. 59C)

Fig. 6. A) Cap with an Outer Surface Formed in a Plus-Center Structure, Choghamish, Middle Suziana Era, B) Shallow Open-Mouth Earthenware Bowl with an Inner Part Formed

In patterned samples, symmetrical images or two thick patterned perpendicular lines are seen in the four quadrants of a plus-center circle (Fig. 6-a). In some cases, the central square has been formed becoming the focus of the shape. In some samples of circular structure, both methods are seen alongside each other; for example, the plus-center method integrates with the concentric circle method (Alizadeh, 2008, Fig. 42 J-K). Other images have a single-patterned structure divided into two centralized and scattered single-patterned groups. In the single-patterned structure, a fixed motif sample is repeated inside or outside the container (Figs. 7-8). Centralized single-patterns are images where a few numbers of motifs (1, 2 or 3), shape the container

in predictable areas and in a regular pattern. In some cases, the motifs appear to be smaller relative to the dimensions of the container; they occupy a small part of the container's surface and create less-patterned images (Fig. 7- a). In other cases, the motifs are large enough that can occupy the entire surface of the container, albeit in small numbers (1 or 2), creating full-patterned images (Fig. 7-b). In scattered single-patterns, more than three motifs are repeated adjacent to each other, on part or all of the surface of the container or at the level of a specific row. These images (Fig. 8) are observed on the inner and outer surfaces of the containers (D.A.F.I. 13, 1983; Figs. 33, 12).



(A)

(D.A.F.I. 13, 1983, Fig.78,3)



(B)

(Harper, Aruz, & Tallon, 1992, p. 35, Fig.3)

Fig. 7. A) Narrow-mouthed Jug with a Concentric Single-Patterned Structure, Called Bandbal 2, New Suziana Period 1, B) Patterned Cup with a Concentrated Single-Patterned Structure, Susa, New Suziana 2 Era

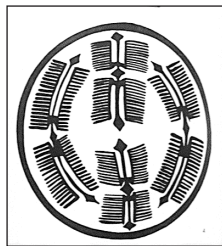


Fig. 8. Inner Surface of Low-Rise Bowls with Scattered Single-Patterned Structure, Tal Gap, Middle Persian Period

(Egami & Sono, 1962, Fig. 31, 4)

4.2. Variables of Elements and Visual Qualities

Visual elements and qualities are the second group of variables in a visual analysis. The basic visual elements include: point, line, surface, volume, texture, light and color seen in any visual effect, whether natural or artificial (Halimi, 1997, p. 34) forming the basis of all visual phenomena, including works of art (Pakbaz, 1999, p. 359). The best way to analyze and understand a visual work is to break it down into its underlying building blocks (Dandis, 2010, p. 69), considered to be the fundamental components of works of art (Okric & Whig, 2011, p. 49). Basic visual elements cannot represent visual reality and visual effects, unless

introduced in form of a composition according to one of the cases of visual qualities. Elements composition are created based on the visual qualities and different properties. Here are some of the visual qualities; exaggeration, emphasis, scattering, complexity and high-mobility. Each of the visual qualities is responsible for forming abstract composition or representing the natural world created by the underlying visual elements (Halimi, 1997, pp. 34-35).

Among the visual elements, point, line, surface and texture can be examined in the patterned pottery images (Fig. 9) and among the visual qualities, balance, symmetry, repetition, rhythm, mobility, rotation and contrast are seen in these images (Fig. 13). Some visual elements are not applicable in these images, e.g., the element of light is not examined. Since images are flat and there is no shading or depth in them, the element of volume will not be examined either, because the data, i.e., the images of the pottery serve as works of visual art on a two-dimensional level. The color element will not also be examined in the works. The building blocks create a specific color for each group; a specific color for the background and a specific color for the pattern on it. Thus, color, as a visual element, is not used in the image, but determines the technical conditions and limitations involved in making the containers, the background color and the pattern color.

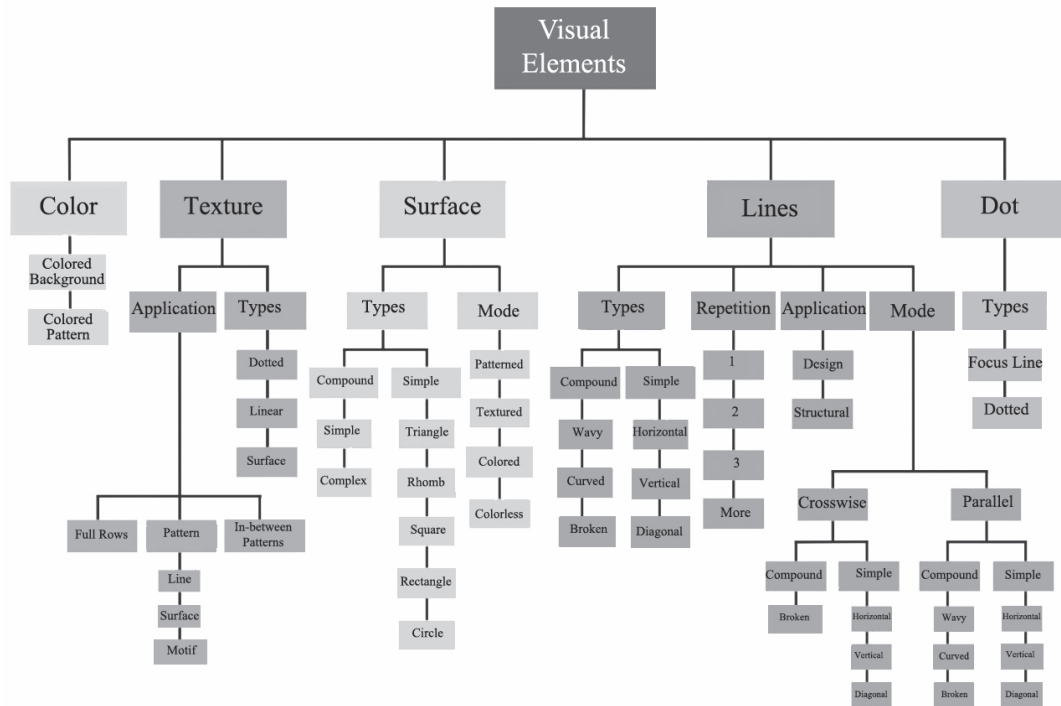


Fig. 9. Visual Element Variables

Considering the method of construction and of creating patterns, the images can be divided into two groups; the first group include images with a dark background with the pattern created on the colored surface with scratches or other methods, looking brighter than the background. In this study, these images are called "colored background" (Fig. 10). In these samples, coloring seems to have been done on the pottery surface followed by patterning.

The second group are images with a brighter background the same color as the pottery with its patterns created by coloring. These images are called "colored patterns" (Figs. 8-4). Containers of colored background have been observed more in the early periods⁷ with the patterned containers in the later periods. The reasons for creating both types of shapes have been merely technical based on pottery-making conditions. The images created in the sample of colored containers are considered to have been much more complex in terms of the shaping structure and mage patterns. The colored background method bars the artist to create many combinations and components of the shape. Since in many cases, it is not possible to achieve the original color, and color or black-and-white images are used instead, the color element cannot be studied in the visual elements, but if the number of colored background containers or the colored patterns is greater in a period or region, or if there is a clear relationship between the formal structure and the pattern creation method, it can be analyzed.

The dots are seen as dotted lines in various applications, such as those around the motif (Figs. 7-b) and those shaped linearly (Fig. 11). In some periods⁸, the way dots

are applied and their location, were one of the visual features of that period. Geometric or non-geometric motifs, in cases where they could be regarded as the simplest element could be seen as visual focal points in the figure (Fig. 7-a).

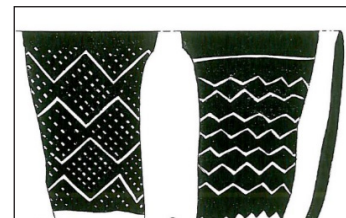


Fig. 10. Deep Open-Mouthed Bowl with Inner and Outer Design via Colored Background Method and with a Row Structure. Jafarabad, Old Suziana Era (D.A.F.I. 5, 1975)

Lines are mostly used in the patterned pottery images in the southwest and south Zagros. Types of lines, number of lines repeated, modes of repetition and their application in images are the distinguishing features of lines. Lines are divided into simple and compound types. Simple lines include horizontal, vertical, and diagonal lines, while compound lines created of the interconnected and deformed simple lines are made up of broken (zigzag), curved, and wavy lines; these lines can be seen in the images in parallel and crosswise forms. All simple and compound lines are seen in parallel in a horizontal or vertical form while horizontal, vertical, diagonal and broken lines are seen in crosswise forms. Repeated parallel and crosswise lines have in some cases also created texture (Fig.10-left). Thickening the lines and using it as the main

pattern is also seen in many images (Fig. 2). Lines are widely used. In general, lines can be divided into two main groups in terms of application: structural lines and design lines. Structural lines as part of the overall structure, such as separating rows (Fig. 2) or as margins (Fig. 5-a) help the composition. Design lines form part of the shape. For example, they can be seen in the creation of texture (Fig. 10), of the main patterns (Fig. 6-a) or as the complement of the main patterns (Fig. 11).

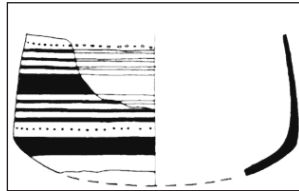


Fig. 11. Narrow-Mouthed Bowl with Row Structure without Motif. Sheikhein Grave, Thee New Suziana 1 Era

(Alizadeh, 2008, p. 137)

The surfaces used in the images can be divided according to their types and shapes. Two simple and compound groups define the types of surfaces. The simple or primary surfaces seen in the patterned pottery images are frequent, respectively; such as rhombs, triangles, circles, squares, and rectangles categorized as colorless (Egami & Masuda, 1962, Fig. 6,2), colored (Fig. 2), textured (Fig. 5-a), and patterned (Fig. 5-b). Compound surfaces consist of combined primary levels. Simple types come from a combination of two or more basic levels, such as two stuck triangles in which the primary surface has not deformed (Fig. 2). Its compound and complex types are also created by combining the primary surfaces through changing the shape, reducing or increasing a part of the surfaces (Figs. 7- a & 12)⁹.

What is perceived to be as texture in this study is the visual texture made of a repeated visual element. Dotted or pointed texture is mad of repeated points (Fig. 10- left), linear texture of repeated lines (Fig. 10- right) and surface texture of repeated surfaces (Fig. 12). Textures also have different usages, such as filling a pattern (Fig. 4-a), filling in the space between the motifs (Fig. 10), or filling a row (Fig. 2)¹⁰.

Various visual qualities are created in images by visual elements and motifs (Fig. 13). Rhythmic

repetition and symmetry are the prevailing qualities in patterned pottery. Although most of the compositions are balanced, few unbalanced images are also seen. Included in the balanced samples are symmetric ones, with some asymmetric balanced shapes also seen (Fig. 4-b). Types of rhythmic repetitions shown in Figure 13 are made of visual elements, patterns, and rows. In most samples, repetition is the main quality and plays a role in creating the texture, composition and original shapes. The maximum number of repetitions is often observed in alternating rhythmic techniques in the elements; however, in some cases, irregular motifs repetitions are also seen in the images.

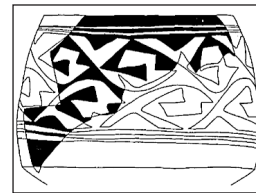


Fig. 12. Deep Narrow-Mouthed Bowl With Row Structure and Complex Positive and Negative Surfaces, Tal Bakun a, New Persian Era

(Langsdorff & McCown, 1942, pp. 57, 12)

The way motifs and rows are repeated in the row structure are the distinguishing features of images. Rows are repeated alternately, i.e., a row with a fixed shape (Egami & Sono, 1962, Fig. 18,3) and one in the other with different images¹¹ (Langsdorff & McCown, 1942, pp. 76 & 16). Types of motifs repetitions will be discussed in the relevant section. Simple (Figs. 2 & 5-a) and rotational movement (Figs. 8 & 7-a) are created by repeating and changing the direction of geometric or animal motifs. Animal motifs are also effective in creating the quality of the rotation because of exaggeration in forms and modes, as well as the composition of the inner surfaces. The way some geometric patterns are arranged on a circular surface helps create a directional movement.

There is a contrast between the positive and negative levels (Fig. 12) and between the different elements (Fig. 4- b) in the images. Contrast is also seen between textured surfaces, along the surfaces patterned or colored without a pattern¹² (Fig. 6- a). The quality of coordination and homogeneity of the elements in the shape is observed more than the contrast, and there is a contrast between the elements in certain cases.

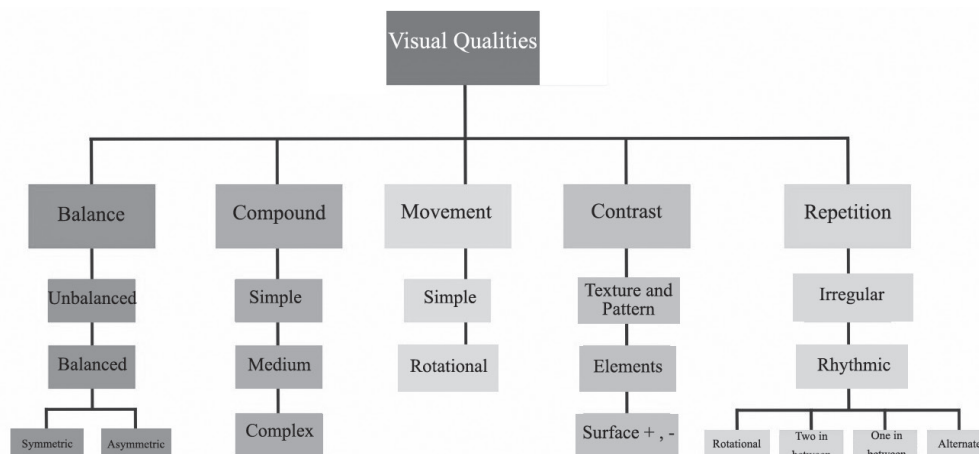


Fig. 13. Visual Quality Variable

Another quality of the shape is the type of composition. Compositions are divided into three categories: simple, medium and compound/complex. Simple compositions are the samples created by basic elements (usually lines and textures) in which no motif is used (Figs. 10, 11). Medium compositions refer to the composition of images with simple geometric patterns consisting of surfaces (Fig. 4- a) and complex compositions are the ones made of geometric surfaces and non-geometric motifs with specific texture (Figs. 4- b & 5)¹³.

4.3. Motif Variable

The third group of variables are the motifs (Fig. 14). Motif is the main and obvious theme in a work of art. An element or combination of visual elements repeated in a composition or in an artist's expression has prominence and feature (Pakbaz, 1999, p. 598). Although motifs are part of the overall structure of the form, they are investigated in detail in a separate variable group, due to their importance as stylistic features and the role they play in the creation of images. Motifs are one of the main distinguishing characteristics of images in some periods, especially in modern periods. However, motifs are not applied to create shapes in many samples of earlier periods (Fig. 10) as such elements as lines and dots create images. In the new period, images can be seen without having used motifs such that a small and regular repetition of the rule of elements, has formed simple, original, accurate and different images compared to previous periods (Fig. 11). Geometric, plant, animal and human motifs are the types of patterns used in images. Animal patterns include a variety of animals, birds, reptiles and aquatic animals. Geometric motifs are created from simple or combined geometric surfaces (Fig. 12). Some images are composed of only one type of motif, e.g., geometric (Fig. 6- b) or animal patterns (Figs. 7 & 8), without having used other visual elements. Other images include geometric, plant, animal, and human motifs at the same time (Figs. 2, 4- b, & 5). Plant, animal and human motifs are used in the images in both real and abstract types. In a broad

sense, abstraction denotes distinguishing some traits or commonality between several things or laying emphasis on this common aspect. Abstraction in art has various methods. Many methods of abstraction are to varying degrees characterized by the fact it abandons or sets aside the tradition of representing tangible and tangible reality, considering the invention of a new reality for visual perception to be a critical function of art (Pakbaz, 1999, p. 49). Motifs have been observed in various stages of abstraction. Some non-geometric motifs have been simplified and reduced to geometric shapes (Fig. 5-a) but are not recognizable. Some motifs have been simplified in a way whose resemblance to the real principle has been so reduced to an extent that it is hard to distinguish whether the pattern belongs to a human or an animal (Fig. 5-b). In some cases, similarities between the natural shape and form have completely disappeared with the patterns becoming so complex geometric surfaces (middle square in Fig. 4- b). These motifs can be pure abstract motifs (Pakbaz, 1999, p. 653). Real motifs refer to images in which the artist has sought to simulate and imitate reality (nature) when creating a motif. Even in cases where the artist has not been successful or has failed to represent the form of all the natural details, it is still regarded a real motif. Real images are all simplified and created by removing details; however, natural states are visible in them (Fig. 5- a).

The number and repetition of patterns are considered at the general level at first. In multi-row images, these two variables can be examined in the same row. Repetitions are usually regular and rhythmic. However, there are a few shapes with a concentrated or scattered single-patterned structure involving irregular repetitions. The rhythms are more uniform and alternating (Fig. 5- a) but the rhythms are one in between (Fig. 5- b), two in between (Fig. 2), rotational (Fig. 12) and checkered (DAFI 13, 1983, p. 7). Rotational rhythms are repetitions occurring with a change in specific angles. Repetition with special rules applies to images formalistically uncoordinated. This set of patterns is repeated once or twice in the shape (Fig. 4- b).

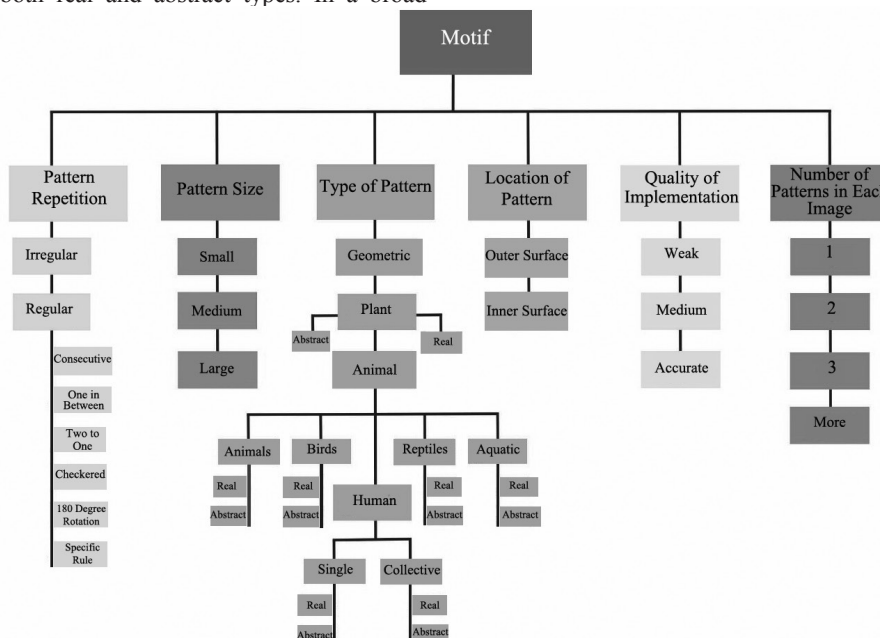


Fig. 14. Motif Variables

Concerning the number of motifs, one would suggest that several different motifs may be used in each form. Images can accordingly be divided; one-motif images (Fig. 7), two-motif images (Fig. 5-b), three-motif motif and more (Fig. 5-a). The size of the pattern is considered to be proportional to the container's dimensions. Some motifs are medium to the size of the container (human themes in Fig. 4-b). A small number of motifs also appear large relative to the container's dimensions¹⁴ (Fig. 7-b).

The closer we get to the later periods, the more accurate the quality of the motifs being implemented. The dimensions of the motifs in relation to the whole shape are divided into three categories; Small (Fig. 2), Medium (Fig. 5-a) and Large (Fig. 7-b). Some motifs are seen only on the inner (Fig. 8) or outer surface (Fig. 7-b).

5. ANALYTICAL- COMPARATIVE MODEL

Visual variables serve as the criteria for analyzing and comparing pottery patterns (Fig. 15). They will be evaluated in more detail in the analytical and comparative section as some specifications and details are missing. The main variables and their subsets were specified based on analyzing the general patterned pottery. An analytical-comparative study of the findings from the southwestern and Persian zones is not included in this article¹⁵. However, in order to elucidate the steps of Figure 15, the results from some areas in the Southwest are given. The visual analysis of the findings is at first aimed to achieve the evolution and changes of the visual properties of the images in each region over time. According to Figure 15, first the shape of each pottery is analyzed separately, based on the variables, and then the results from the analyses are provided.

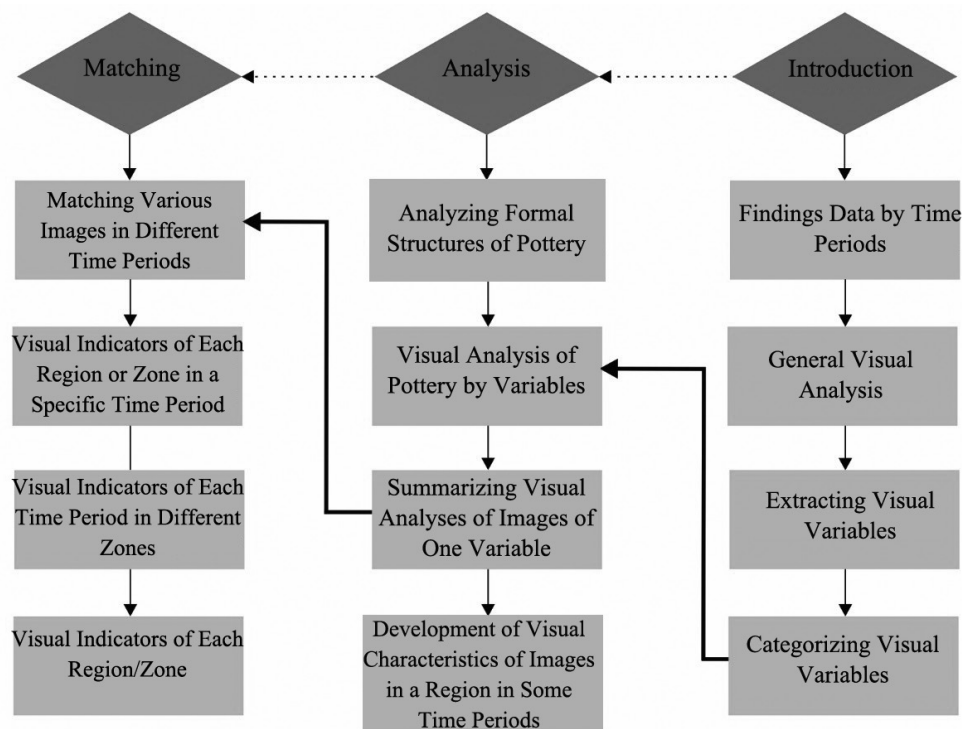


Fig. 15. Analytical-Comparative Model Based on Visual Variables

A summary of visual analysis also makes it possible to compare images of different regions over a period of time, and until the images from different regions are matched together, the main features of a region cannot be obtained. Therefore, in the comparison section (Fig. 15), image specifications in a specific geographical or historical geography can be achieved, by comparing the images of a region in different periods and different regions and summarizing their results. Comparison is aimed to obtain the common visual features of a time period in various regions and zones as well as to understand indigenous and different features of images in various regions and zones. For example, during

the Middle Suziana era in the southwest, the findings from Choghabanut, Choghamish, Joi and Jafarabad regions, being quantitatively capable of being visually analyzed, were evaluated and are described below.

Images of the inner surfaces of containers are usually full-patterned. In this period, circumstantialities has expanded. Parallel lines or patterned rows are seen as margins, however, most margins, as in the old days, consisted of a narrow, unstructured colored strip. The compositional structure in most regions is often based on rows. However, changes have been observed in the row structure compared to previous periods, including using vertical rows, using colored un-patterned

strips from other colored patterned rows, and an increase in the number of rows. Formalism is seen in vertical rows by weaving, in Jafarabad by geometric patterns, in Chghabnut by abstract animal motifs and in Choghamish by animal and geometric motifs as an intermediate row. Other motifs, such as a triangle stuck atop together in Jafarabad, an animal motif in Choghamish, and visual texture between vertical rows are examples of cup shapes. Circular structure is also seen in some areas, in two types of plus-center and concentric circles, not similar to previous periods. Colored background pottery are linear images without motifs from the visual experiences of previous periods that can be seen in Joi.

6. CONCLUSION

Analysis of visual effects should be seen as the first step in recognizing a work of art, which paves the way for further efforts to obtain other dimensions of the work. Samples of the Iranian plateau visual arts date back to prehistoric times, and despite the significance of these documents in the history of Iranian art, less formal analysis has been performed so far. Most studies have regarded these images as vehicles to understand the culture, mentalities and beliefs of the people of that time, while examining the form of images to achieve the content; however, it was considered necessary in this study to analyze the formal features of the works with a formalistic approach to achieve them.

Pottery is a selection of prehistoric formal documents

obtained from archeological sites. To have a fixed method for examining the images of patterned pottery makes it possible to understand visual features in various regions and periods. For this, this article, including a case study, examines the findings from the two zones in the southwest and the southern Zagros, investigating the visual variables of the pottery patterns and describing their definitions. It should be noted that the general variables and the study method in the Iranian plateau pottery of are fixed and the sub-variables can be changed according to the images of each region. In order to access the sub-variables or classify the variables, the images in each region must first be examined in general, taking into account the main variables, and the types of variables must be identified based on the available samples. In some areas where the findings are quantitatively feasible, it is possible to classify the images based on prioritizing the variables. Thus, lays the ground for understanding stylistic features. Determining the variables is in fact an introduction to analyzing and applying pottery patterns in accordance with the analytical-comparative model presented in Figure 15.

The results from such infrastructural and fundamental analyses, even summarizing the analyzes in relation to a variable, can be the subject of much applied research in the field of art. In addition, the way principles and foundations of the visual arts are applied in the initial images will lay a ground for knowledge and awareness for researchers and artists.

END NOTE

1. The data are held in repositories for reconstruction, study or presentation, or for display in museums. The sites in the southwestern and southern Zagros regions have been excavated by non-Iranian archeological groups. A small number of samples are in the Iranian National Museums and the Institute of Archeology of the University of Tehran, but others are kept in the Louvre, Yale University, the University of Tokyo, and the Institute of Oriental Studies at the University of Chicago. The excavation results and images of the findings were reported in journals such as: (D.A.F.I 1, 1971), books such as: (Alizadeh, 2003) or in some cases in the form of articles such as: (Garfinkel, 2000).
2. In some time periods (New Suziana 2 in Shushan) or regions (Jari 1), the type of circumstantiality distinguishes its image in a period or region.
3. New Suziana 2 in Shushan, especially in the Susa region.
4. Many of these samples were obtained from the Choghamish area of ancient Suziana.
5. Many of these images were seen on the inner sides of the containers obtained from Susa in the new Susanna 2.
6. Samples of plus-center on the outer surface are often seen in containers in the form of caps.
7. The ancient period and in some cases the old period.
8. New Susanna period 1, Sheikhein's grave.
9. Bacun A in New Susanna 2 is an area where a variety of complex composite surfaces make up the majority of its images.
10. In Fars Tal Mooshaki, the visual texture of the lines and points that fill the surface of the horizontal row is a characteristic of the style of images.
11. In images not having a motif, in some cases, rows without a pattern are illustrated with various repetitions (Fig. 11), but because structural components such as colorless strips, horizontal parallel lines, and dotted lines make up these images, in some images, no image row is repeated except for the types of repetitions in the row section (Figs. 2 & 4) and each row is different from the other row in terms of patterns and composition.
12. The highest contrast is observed between positive and negative levels in the samples of Tel Bakun A, which is characterized by the lightness of this region.
13. Such as the examples with a circular structure in the old Choghamish or the those of Susa, Jafarabad and Bakun A in the new Suziana 2.
14. In areas such as Bandbal, in the southwest, the patterned images are single-row, and the width of the row is usually equal to the height of the container. The themes are also large and elongated to the height of the row. This is a characteristic of the stylistic imagery.
15. Findings of the Southwest and Fars Zones are provided in the dissertation of Ms. Mahan Naji (Corresponding Author) under the supervision of Dr. Ahmad Salehi Kakhki and Dr. Hassan Talaei at Isfahan University of the Arts, according to the model presented in the article.

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