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تحليل بسامدى رنگ ايران در پوسترهاى گرافيك با موضوع ايران

## Frequency Analysis of Iranian Colors in Graphic Posters with the Theme of Iran


#### Abstract

Problem Definition: Relatively speaking, there are elements or phenomena in the universe whose origin, use, repetition, and representation have caused the formation of collective memories, and in their light, a sense of belonging or identity has been formed. One of these elements is color, which may be attributed to a group or a nation within a certain or wide range in a non-written form, regardless of whether the subject is right or wrong. Graphics, as a visual medium from form and color, conveys various subjects; thus, cultural issues and national culture can also be a part of it. To address this issue, the present research aims to find the answer to the following questions: 1 . what are the most frequent colors related to Iran in graphic posters with the theme of Iran or culture? and 2. What are the possible reasons


 for these colors?.Objective: Knowing Iranian intangible symbolic elements and better understanding different variants of Iranian visual culture are the main goals of this research.
Research Method: In this research, data were collected using library resources, databases, and visual graphic evidence. Then, using the method of visual content analysis, by collecting color samples from posters related to Iran in a pseudo-statistical manner, the most frequent colors were identified and then described and analyzed.
Results: This study showed that to represent the Iranian color, except for the corporate color and the official flag, Iranian graphic designers referred to the colors related to their culture, which are often derived from cultural and artistic products, handicrafts, the color of the climate and ecosystem, traditional arts, Iranian-Islamic architecture, calligraphy, and the like. They also reproduced a spectrum of these colors in their work for Iran-related topics. Among these, the most frequent colors associated with Iran are the color spectrum of lacquered red, bright yellow, and brick red, as well as turquoise blue.

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## Introduction

Except for certain registered elements, some of which are called "corporate visual identity" in the image field, applying a visual component to someone or something is not very justified or confident. By putting this issue forward, the problem of this research is to identify high-frequency colors in posters, one aspect of which is Iran or related to Iran's visual culture. Apart from the color argument, in the other visual field (design elements), various examples are attributed to the country; later, the same elements have been represented in the new arts of that country. An obvious example is the influence of Japanese graphics from the country's printing stamps. Some particular paintings, including natural, climatic, plant, animal, and artificial elements, are also among the items used as a symbol or sign of a nation or a person. These symbols are often represented or recreated by artists or at the request of others, and according to the cognition, knowledge, and technique of the artist of each discipline, different qualities have entered the field of visual culture. Among the cases where color is used as a symbol of a nation or country is the color of the country's flag, which is considered the corporate color of the country, and its argument is beyond the scope of this research. Apart from the official color of the country's flag, the discussion of this research is about the color or its spectrum that may be attributed to something or someone. It is essential to mention that due to the limited range of colors, it is impossible to confirm their application or association easily. However, the surrounding environment works, and actual objects, etc., along with high-frequency colors, create intersubjective memories, the reflection of which is the formation of symbolic colors in limited, medium, or specialized societies. Among Iranian graphic designers, there are also those who, by studying and expanding their visual knowledge or intuitively, have used colors in their work, which probably had a high frequency in their living or professional environment. With those mentioned above, since some graphic orders are about different issues of Iran, the problem of this research is what the most frequent colors related to Iran in Iranian graphic posters with the theme of Iran or Iranian culture issues are and why they are used.

## Research Method

In this research, 65 posters of Iranian graphic designers have been examined, one aspect of which was Iran. These works are among the works of various graphic designers, often selected from biannual books of Iranian graphic works. The selection of samples was random and often related to cultural, artistic, and sometimes commercial issues. In this research, three indicator colors from each work whose color range is more were sampled by the author using the color selection tool of Illustrator software and recorded at the bottom of each work. To prevent the error of the color selection tool when removing the color from the artwork, the author has monitored the validity of the color sample removal. After collecting three dominant colors from each work, a total of 195 color samples from different spectrums were obtained from 65 works, and these colors were analyzed accordingly. The priority of this research was colors other than white and black. The duration of the creation of these works is approximately 50 years. The type of analysis is qualitative and pseudostatistical, and the basis is analyzing the color content of graphic works. This research information was obtained from library sources and visual evidence from web-based databases. It should be noted that some of the graphic works whose color was analyzed in this research may be different from the original designed or published version. So, this difference was also taken into consideration, and the selected colors were the average of the colors of digital and paper media.

## Research Background

"Lakens" (2011), in an article entitled "Orange as a color of interest to the Dutch people and its identity evaluation as a national color," investigated the relationship between a nation and its national color and the acceptance of this color among the Dutch people as a national and identity color. " Yang, M \& Zeng " (2009), in an article entitled "The use and innovation of Chinese red in modern design", emphasized the consensus of the Chinese on Chinese red and having an emotional relationship with this color. He also focused on the need to further research and promote the Chinese red color and its innovative use in modern Chinese design. In an article entitled "Light and color in Islamic painting and architecture", "Khoshnazar and Rajabi" (2008) mentioned that the colors used in Iranian architecture and painting were influenced by the theories of light and color of Islamic sages. "Nasiri, Afrasiabpour, and Ahmadi" (2016), in an article entitled "Mystic Symbol of Color in Islamic Art and Architecture," believed that azure blue and turquoise are the main background colors of the walls, mosaics, altars, domes, courtyards, and naves of mosques. These colors, along with gold, have a special shine and effect in Iranian-Islamic paintings. "Sourasrafil" (2000), in an article called "Iranian colors," addressed colors in carpets such as madder, reseda, walnut shell, indigo, and animal pigments such as cochineal and some local colors such as "Jaft", "Ghandal", and "Jashir" and associated them to the Iranian colors. Sourasrafil also wrote a book called "Iranian Colors" (1999), focusing on carpets in seven sections, the fifth chapter of which is about Iranian colors. "Kolahkaj" (2019), in research called "Investigation in the Representation of Iranian Visual Identity," pointed out some prominent colors of Iran and mentioned three colors of pale goldenrod, lacquered red, and turquoise as salient colors associated with Iran. The abovementioned research highlighted aspects of color in works or Iranian culture and art. In the meantime, this research aims to measure the most frequent colors in the graphic works on the theme of Iran.

## Color in Iranian culture

According to the online encyclopedia "Iranica", color has always played a symbolic role in religion, poetry, and everyday life. Like other perceptual areas of human life, this issue also has implications in Islamic and Persian cultures. An example is "Haft peykar Nizami," one of the most attractive sources of Persian literature about the spirit of color (https://iranicaonline.org). According to "Vahdat-Talab and Nik-Maram," color is one of the elements that separates Iranian art from the others. This norm has existed since ancient times, the dawn of civilization in the plateau of Iran, and its example has been seen in Achaemenid relief mosaics, Sassanid period dishes, and colorful objects, paintings, decorations, and various crafts of the Islamic period (Wahdat Talab \& Nik Maram, 2017, p. 88). Moreover, in the wall paintings obtained from the excavations of Susa, images of archers with clothes of several bright colors have been seen. According to "Iranica," in the distant past in Iran, some colors, including yellow, were used for furniture and clothing related to rulers, and its use was exclusive to the court (https://iranicaonline.org). In the clothes of Iranian people, the color demonstrates a unique glory, which has been seen in the clothes of Iranian people. Bakhtiari, Bahmai, Qashqai, Lor, Kurdish, and similar women's clothing are prominent examples. Regarding the use of colors in Iranian clothing, "QaviPanjeh" believed that the use of these colors was different according to the gender, periods of life, and status of the wearers. For example, she mentioned that in contrast to the green color, there is red lacquer, which the Turkmens use abundantly in their carpets and clothes (Qavi Panjeh, 2014, p. 14). Color has a specific place in famous and well-known Iranian products, and the color palette of each region of Iran is often dependent on the raw materials
of that region or ecosystem. A product like an Iranian carpet is a part of its identity arising from its color. "Sourasrafil" points out that "without any doubt, the color in the carpet is not less important than the pattern." As the role of the carpet cannot be separated from the cultural factor, i.e., Iranian people and its coordinates, such as production centers, the color also has a local identity, which depends on the particular colors and the skill of its master dyers. He further said that preserving the originality of Iranian carpets is achieved by using economic colors such as " madder, "cochineal," "reseda," "Walnut shell," "Pomegranate skin," "grape leaf," and some local pigments such as "Jaft", "Ghandal", and "Jashir". According to him, it is right to mention the colors of madder, cochineal, reseda, Walnut shell, Pomegranate skin, and grape leaf, as national colors (Sourasrafil, 2000, pp. 74-71). According to "Saedi and Seyed Ahmadi Zawieh" in Iranian carpets, a range of lacquer, madder, red, navy, walnut shell, and pomegranate skin colors have been used in the entire geographical area of Iranian carpets, including Kerman, Isfahan, Khorasan, Tabriz, Kashan, and Yazd (Saedi \& Seyed Ahmadi Zawieh, 2012, p. 33). Also, Iranian artists used turquoise blue in Iranian pottery and ceramics, and in products such as carpets and rugs, complementary and bright colors were used. In Iranian painting and book design, the bright colors of gold, azure, and bright yellow (pale goldenrod) have been the dominant colors. Although the general belief is that the color of Islamic architecture is mainly cold colors, such as blue, turquoise, and the like, according to "Ismaili and Soleimani," the color of some places of Islamic architecture, in some mosques such as Khatam mosque in Zanjan and Moshir mosque in Shiraz, is yellow. In Nasir al-Molk mosque in Shiraz, the dominant color is pink, and this mosque is known as the "Pink Mosque." Also, the color of Sheikh Lotfollah Mosque in Isfahan is blue and cream (Esmaili \& Soleimani, 2017, p. 11). Bright yellow (pale goldenrod) or light brick color and its related spectrum are the dominant color of traditional Iranian housing and related to its ecosystem. According to "Vahdat-Talab and Nik-Maram," red color is mostly used in decorations and decorative elements in IranianIslamic architecture. For example, various colors of white, red, yellow, green, and azure blue are used in the Stucco ornament of "Soltaniye Dome." In the "Pirbakran" stucco of Isfahan, the color of the altar is red. In terms of new themes, red, orange, and pink colors can be seen in the Qajar period mosaic work (Wahdt Talab \& Nik Maram, 2017, p. 88). According to Nasiri et al., the surfaces of most mosaics are cold colors such as rust, turquoise, and azure (Nasiri, Afrasiabpour, \& Ahmadi, 2016, p. 12). Although introducing colors other than turquoise and dusty as a special or symbolic color of Iranian architecture makes the audience cautious, the high frequency of turquoise color and brick or dusty in Iranian architecture leaves no doubt in this regard for the audience. However, it must be accepted that every profession or job has its color palette. Regarding the color of the Iranian flag and its concepts, "Hasannia" believed that "The three main colors of the Iranian flag, based on the mythological system of George Dumézil, are a symbol of the three classes of Iran, and among them, white is a symbol of royalty, red is a symbol of fighting and bravery, and green is a symbol of agriculture and farmers (Hasannia, 2016, p. 1).

## Analysis and Discussion

The four functions of color in graphic design, quoted by "Berry and Martin," are: attracting attention, focusing on the work, transmitting information, and maintaining information in mind (Berry \& Martin, 1991, p. 6). Looking at the color in the posters with the theme of Iran from the same point of view shows that in the investigated posters, the colors are of interest from the perspective of representing information about Iran, and the other functions of the color are in the next priority. On the other hand, the poster's function in graphics has
always been fast messaging, which is achieved by combining and communicating the two elements of shape and color. Therefore, the representation of the message for which the work was designed has always been crucial; however, during this communication, other intervening variables such as the designer's style and technique, national style, the influence of contemporary art styles and movements, and the client's wishes also affect the outcome of the work. Also, proper perception of the message by the audience is another facet of the graphic effect, which becomes possible with the alignment of the sender's and receiver's viewpoints. Also, "Hall" argues in his reception theory that it is possible to infer more than one impression or read from media texts during decoding and encoding. That is, between the message encoded by the sender and what is decoded by the recipient, there is not necessarily a match or similarity (Mehdizadeh, 2012, p. 266, as cited in Hall, 1973). The study of Iranian color in graphic works with the theme of Iran is exclusively the study of the color translation of the word Iran in posters with one aspect of the subject of Iran.
Figure 1: The theme of the biennial of Contemporary Iranian Pottery, the dominant colors are black, brick red, and dark lacquered on a white background. The color sampling of the mentioned three colors is shown at the bottom of the image. As the subject of this work is divided into two parts or elements, pottery, and Iran, the light brick red color at the bottom of the image is mutually related to pottery and Iran. Brick red is a familiar and frequent color for the Iranian audience, and dark lacquered red also has such a function. The first can often be seen in traditional buildings and the second in Iran's handicrafts and industries. According to the triad of the semiotic system, the image of pottery and the color of brick is an iconographic symbol for pottery with explicit meaning, while the color of brick red, to represent Iran, is a profile image with an ambiguous meaning. In other words, the type of reference of the two thematic elements of the poster is different in terms of meaning, which will be analyzed from the same point of view.
Figure 2: The subject of this image is the 8th Tehran poster biennial, which, due to the occurrence of this event in the capital, the name of Tehran in this work refers to Iran. This work's background is white; its three main colors are lacquer red, light yellow, and blue. At the bottom of the work, a sample of its colors has been selected and highlighted. In this work, while conveying the subject, the two elements of motifs and color also play an identity role and have shown an indirect or literal meaning of Iran. This literal meaning is an index of the role and color associated with Iran; however, this does not mean that the two shapes and colors mentioned in this work are originally Iranian.
Figures 3-11: There are works designed by different and often leading designers for the annual or biennial exhibitions of graphics, illustration, and painting in Iran. In most of the mentioned works, there are spectrums of yellow and, on a more limited level, lacquer red. Except in Figures 3, 4, 8, the yellow color of this group of works has not been interpreted as Iranian. Regarding Figure 8, in particular, it should be mentioned that the designer of this work, while having specific knowledge of Iranian culture, has always used the Iranian color palette in his works, while Encyclopaedia Britannica wrote about one of this designer's works ( $800^{\text {th }}$-year commemoration poster of Saadi Shirazi). At the end of the 20 th century, "Qobad Shiva," an Iranian graphic designer, was inspired by the color palette, traditional Arabic calligraphy, and book layout of ancient Persian manuscripts and used them in his collection of graphic works, including packaging, advertising, and magazine title design.

PAYKAREH
Journal of Art Faculty, Shahid Chamran University of Ahvaz
Frequency Analysis of Iranian Colors in Graphic Posters with the Theme of Iran
Volume 11 Issue 27. Page 42-59
47


Figure 1. Designer: Mostafa Asadollahi. Source: Meshki, 2003, p. 59.

Figure 4. Designer: Ghobad Shiva.
Source: Nazar Research and Cultural Institute, 2007, p. 72.
Figure 7. Designer: Morteza Momayez. Source: Nazar Research and Cultural Institute, 2007, p. 10.
Figure 10. Designer: Ali Khorshidpour Source: Iranian Society of Visual Art, 1994, p. 1.

Figure 2. Designer: Mohsen Mohammad Valihi. Source: Iranian Graphic Designers Society, 2004, p. 90.

Figure 5. Designer: Mostafa Asadollahi. Source: Meshki, 2004, p. 61.

Figure 8. Designer: Ghobad Shiva. source: https://iranhonar2008.mihanblog.com.

Figure 11. Designer: Ghobad Shiva.
Source: Iranian Graphic Designers Society, 2007, p. 310.

Figure 3. Designer: Farshid Mesghali. Source: Visual Art Development Institute of Culture and Islamic Guidance, 2007, p. 31. Figure 6. Designer: Morteza Momayez. Source: Nazar Research and Cultural Institute, 2007, p. 10. Figure 9. Designer, Mostafa Asadollahi.
Source: Meshki, 2004, p. 21.
Figure 12. Designer: Narges Safaei. Source: Iranian Graphic Designers Society, 2007, p. 269.

For example, his poster in 1984, designed on the occasion of the $800^{\text {th }}$ birth anniversary of the famous Iranian poet "Saadi," shows his unique ability and control in creating a vibrant image with color. His collection of works shows that it is possible to continue the tradition of ancient Persian manuscript books, with modifications, within the framework of contemporary design (https://iranicaonline.org).
Figure 12: Another work is related to Iran, the Iranian Nastaliq calligraphy shows that it is Iranian, and the color in this work has no special function.
Figures 13 \& 14: Two works by the same designer, the first one was designed for the Tehran Poster Biennial, and the second one was designed for the Iranian Graphic Designers Biennial. Due to its centrality, it is already mentioned that the name Tehran refers to Iran in some of these posters. In Figure 13, a geometric form taken from architectural motifs, and in the next step, a blue-green color close to Iranian turquoise, show a form of intersubjective communication with the Iranian audience. However, in Figure 14, there is a form of Persian writing and the negative form of the Persian number 5 in the background of the poster showing this function, while the color of the work lacks such a function.
Figures 15-21: A similar space shows the designer's personal style in most of these works. This similar space includes somewhat solid forms with bright, high-contrast flat colors. Figure 13 of this designer is inspired by the well-known form of Iranian carpets and rugs, which is arranged with the " "ايران" " shape of the word which is derived from cursive Nastaliq calligraphy. Also, Figure 16, the subject of Iran's trade exhibition in another country, has represented the colors of the Iranian flag in a form attributed to Iranian visual culture in combination with the theme of the poster. Among the colors of this work, blue color has the highest relationship with the visual culture of Iran. Moreover, among the works of this designer, Figure 18 has the highest color ratio with the colors known from Iran. Here, known colors from Iran mean the most frequently seen colors in Iran. In other works of this designer, the function of color serves the subject and also shows his personal style.
Figures 22-24: In Figure 22, the subject of which is the Iranian garden, the pale goldenrod color, then the writing and its centrality, as well as the fourfold symmetry around the writing, convey the Iranian space, and this conveyance in Figure 23, the subject of which is "Iran, the cradle of civilization" shows more familiar and tangible elements for the audience familiar with Iran. Also, in Figure 24, the subject of which is the fourth biennial of Iranian painting, this representation is arranged with other elements that are related to the subject. The important point is that Iranian designers have used less abstract elements in subjects whose visual background is rooted in Iran and for which there is a visual source and reference. Examples are Figures $8,24 \& 30$.
Figure 25: This work is the representation of the theme and personal style of the designer in the first step, but an element of Iranian form and color is represented in the image of the flower (derived from Iranian flower and bird motifs) on the left has connected it to the visual background of Iran.
Figures 26-28: In Figure 26, the subject of which is dramatic literature, two ranges of colors emerging from the Iranian visual tradition, i.e., lacquered red and pale goldenrod, are displayed, and this is represented in Figure 27 with the use of a spectrum of brick red color. Also, in Figure 28, whose subject is Iranian handicrafts, a range of colors and shapes related to the subject, which is rooted in Iran's visual tradition, are represented. This work is another document that Iranian designers are more faithful to their visual tradition in subjects with a visual background.

## PAYKAREH

Journal of Art Faculty, Shahid Chamran University of Ahvaz
Frequency Analysis of Iranian Colors in Graphic Posters with the Theme of Iran
Volume 11 Issue 27. Page 42-59
49


Figure 13. Designer: Mostafa Asadollahi. Source: Meshki, 2004, p. 61.

Figure 16. Designer: Mostafa Asadollahi Source: Meshki, 2004, p. 65.

Figure 19. Designer: Mostafa Asadollahi. Source: Meshki, 2004, p. 49.

Figure 22. Designer: Mona Rahimzadeh. Source: Visual Art Development Institute of Culture and Islamic Guidance, 2007, p. 123.

Figure 14. Designer: Mostafa Asadollahi.
Source: Meshki, 2004, p. 53. Figure 17. Designer: Mostafa Asadollahi
: Meshki, 2004, p. 53.
Figure 20. Designer: Mostafa Asadollahi.
Source: Meshki, 2004, p. 49. Figure 23. Designer: Reza Mir Moqtadaei and Forouzan Yazadani. Source: Iranian Society of Visual Art, 2007, p. 100.

Figure 15. Designer: Mostafa Asadollahi.
Source: Meshki, 2004, p. 83. Figure 18. Designer: Mostafa Asadollahi.
Source: Meshki, 2004, p. 51.
Figure 21. Designer: Mostafa Asadollahi.
Source: Meshki, 2004, p. 45.
Figure 24. Designer: Ali Vazirian.
Source: Vazirian, 2011, p. 48.

## PAYKAREH

Journal of Art Faculty, Shahid Chamran University of Ahvaz
Frequency Analysis of Iranian Colors in Graphic Posters with the Theme of Iran
Volume 11 Issue 27. Page 42-59
50


Figure 25. Designer: Ghobad Shiva Source: Shiva, 2003, p. 10.

Figure 28. Designer: Bijan Janab.
Source: Iranian Society of Visual Art, 1996, p. 26.
Figure 31. Designer: Ghobad Shiva. Source: Nazar Research and Cultural Institute, 2003, p. 89.
Figure 34. Designer: Masoud Nejabati.
Source: Meshki, 2006, p. 63

Figure 26. Designer: Mohammad Saber. Source: Visual Art Development Institute of Culture and Islamic Guidance, 2007, p. 83. Figure 29. Designer: Peyman Pourhassan.
Source: Iranian Graphic Designers Society,
2010, p. 67.
Figure 32. Designer: Hamid Ajami.
Source: Iranian Society of Visual Art, 1996, p. 30.

Figure 27. Designer: Mostafa Asadollahi.
Source: Meshki, 2004, p. 79. Figure 30. Designer: Ali
Vazirian.
Source: Sureh Mehr, 1390, p. 77.
Figure 33. Designer: Arya
Kasaei. Source: Iranian Graphic
Designers Society, 2010, p. 221.
Figure 35. Designer: Siamak Filizadeh. Source:Figure 36. Designer: Iraj Mirza Visual Art Development Institute of Culture Alikhani. Source: Iranian Graphic and Islamic Guidance, 2006, p. 224.

Designers Society, 2010, p. 217.

## PAYKAREH

Journal of Art Faculty, Shahid Chamran University of Ahvaz
Frequency Analysis of Iranian Colors in Graphic Posters with the Theme of Iran
Volume 11 Issue 27. Page 42-59
51


Figure 37. Designer: by Reza Abedini
Subject: Exhibition of posters of Iranian culture, 2007.
Source: https://geotypografika.com.
Figure 40. Designer: Morteza Momayez, Figure 41. Designer: Morteza
Mostafa Asadollahi, Massoud Sepehr. Momayez. Source: Iranian Graphic
Source: Iranian Society of Visual Art, 1999, p. 140.
Figure 43. Designer: Farzad Adibi.
Source: Meshki, 2005, p. 84.
Figure 46. Designer: Mohsen Seyed Mahmoudi. Source: Iranian Society of
Visual Art, 1999, p. 44.

Figure 38. Designer: Majid Abbasi Source: Iranian Graphic Designers Society, 2010, p. 229. Designers Society, 2001, p. 2.

Figure 44. Designer: Farzad Adibi Source: Meshki, 2005, p. 84.

Figure 47. Morteza Akouchkian Source: Iranian Graphic Designers Society, 2010, p. 64.

Figure 39. Designer: Hossein
Derakhshani. Source: Visual Art Development Institute of Culture and Islamic Guidance, 2007, p. 258. Figure 42. Designer: Krist Hoyan. Source: Iranian Society of Visual Art, 1994, p. 96.

Figure 45. Hossein
Abdolmohammadzadeh. Source: Iranian Graphic Designers Society, 2011, p. 244. Figure 48. Cyrus Parsanjad. Source: https: //rangmagazine.ir983.

Figures 29-32: In Figure 29, the subject of 25 years of Iran's poster, the pictorial interpretation of Iran combines carpet motifs and Iranian architecture. However, in Figure 30, whose subject is Iranian painting, the Iranian aspect of the work is shown with the two visual elements of color and shape in addition to Nastaliq calligraphy. In Figure 31, which is a celebration of Shiraz art and a manifestation of Iran's seniority and vitality, a range of bright lacquered red colors is depicted with a combination of cursive calligraphy, while in Figure 32, the representation of Iran is shown with a range of colors related to Iranian architecture and also the subject.
Figures 33-34: In Figure 33, the subject of which is Iran's first sculpture exposition, color does not play a significant role in representing the word Iran, while in the text of Figure 34, a range of colors related to Iran's cultural background can be read.
Figure 35: The expression of the Iranian concept of the work first emerges from the form and then relies on a combination of the warm spectrum and familiar Iranian colors such as lacquer red and pale goldenrod.
Figure 36: The subject of this picture, which is an Iranian view, is decorated with text from the Iranian writing tradition and different color ranges mainly to convey the subject of the work.
Figure 37: It is a section of a three-part work, the title of which is the poster exhibition of Iranian culture. The designer of this work has represented Iran with its dusty color and calligraphy.
Figure 38: With the theme of Iranian variations, it seems to be represented with a pale goldenrod color close to golden;
Figure 39: With the topic of Iranian anthropology, the Nastaliq calligraphy has been used to represent the name of Iran.
Figure 40: It is the joint work of three prominent Iranian designers. This work is a fusion of traditional Iranian colors and also a prominent and proud image of the greatness of this civilization.
Figures 41 \& 42: In Figure 41, the color and shape of the poster are in line with the theme of the work, while in Figure 42, which is about the festival of Iranian films in Armenia, the lotus flower, which is an image attributed to Iran, had this function.
Figures 43 \& 45: In these two works, the Iranian aspect of the work is often shown with elements that have their roots in the visual tradition of Iran. Besides, the visual style and technique of the designer are also represented.
Figures 45 \& 46: In Figure 45, which, like Figure 36, has an Iranian view, Nastaliq writing is a translation of the Iranian concept of the work, and in Figure 46, colors and shapes simultaneously, while communicating related to the theme, represent the Iranian concept of the work.
Figure 47: The subject of this is the second national festival of chamomile flowers. In this poster, the element of nationality is another concept of being Iranian, which is depicted with a brick red background.
Figure 48: The elements of this work are this discursive calligraphy and an image of a mythical cypress tree, which represents the Iranian nature of the work.
Figure 49-54: In Figure 49, the theme of which is the festival of national rituals of Iran, the Iranian symbol of the work is represented by the shape, and in Figure 50, neither in the form nor in the color of the work, a significant strain of the element of Iranian aspect is represented. The poster's theme has been reproduced in this poster and the following posters (See Figures 51 \& 52). Also, in Figure 53, two spectrums of blue-green and pale goldenrod colors are represented in a format related to Iran's art exhibition topic. In Figure 54, which
is related to Figure 18 and by the same designer, the colors related to the visual culture of Iran and the form related to the theme of the work are reproduced. Despite the fact that its subject is the third biennial exhibition of Iranian painting, the elements of Figure 55 have been mainly focused on the visual expression of the subject.
Figure 56: The subject of this work is Iranian-Islamic painting, in which shape and color are represented as Iranian elements together and related to the subject with a combination of technique and visual tone of the designer of this poster.



Figure 57. Designer: Ghobad Shiva.
Source: Nazar Research and Cultural
Institute, 2004, p. 83.
Figure 60. Designer: Mustafa Asadullahi.
Source: Meshki, 2004, p. 19.

Figure 58. Designer: Ghobad Shiva. Source: Nazar Research and Cultural Institute, 2004, p. 83.

Figure 61. Designer: Massoud Nejabati, Subject: Exhibition of Contemporary Iranian Painters in Zagreb. Source: Meshki, 2006, p. 81.

Figures 57 \& 58: It is from the same designer, and the name of Iran is written on their foreheads. The color in these two works represents the subject, and there is no clear sense of Iran in these two works.
Figure 59: It is from the previous designer, the two elements of form and color in it are aligned and complementary, representing Iran. It seems that the designer of this work used his special Iranian color palette as before.
Figure 60: In this picture, the sense of the Iranian aspect of the work is induced by the lacquered red color.
Figure 61: In this work, a range of lacquered red colors with a significant range can represent the color of Iran.



64


Figure 63. Designer: Mohammad Ehsaei
Source: Iranian Graphic Designers Society, 2004, p. 206. Figure 65. Designer: Farzad Adibi. Source: httpss://instagram.com/p/CHvuBuPgv.

Figures 62 \& 63: These two works represented Iran with a combination of Iranian and Arabic calligraphy and cursive Nastaliq scripts. Even though the sense of being Iranian is not received much in Figure 62, it seems that the blue color of the background, as well as the cursive Nastaliq calligraphy of Figure 63, convinced the audience in this regard to some extent. It should be said that the interpretation of Figure 62 is in line with Thompson's interpretation of the semi-interactive meaning of the media. The reason is the weakening of the number of elements we know as Iranian elements. Thomspon mentions in his theory of mediated pseudo-interaction that the audience's reception of indirect media messages (of which graphics are also a part) is rethinking, open, and based on the intellectual context of the audience (Mehdizadeh, 2012, p. 137, as cited in Thompson, 2019). On the other hand, in Figure 63, the blue color of the background, which is similar to the color spectrum seen abundantly in Iranian architecture, together with the Nastaliq calligraphy, deepens the Iranian sense of the work.
Figures 64 \& 65: In Figure 64, two elements of color and form represent Iran and the work's subject. In this work, the colors of pale goldenrod, lacquer red, and ocher, which are the same or sometimes substitutes for gold, have been arranged with an inscription in Nastaliq. However, in Figure 65, the lacquered red color and, to some extent, blue have shown another strain of the Iranian aspect of the work.


Graph 1. The range of high-frequency colors from posters with the theme of Iran .In preparing this figure, the colors sampled from the introduced works were placed, and each color was arranged as a color unit. It should be mentioned that there is an overlap between some dark red and yellow, and also yellow to bluegreen spectrums, the reason for which is that the color spectrums are close to each other. As mentioned before, white color is not included in these samples. Also, the color rows below some color steps are the middle steps of these colors. Source: Author.

## Discussion

It is possible to attribute one or more colors to a country relatively by repeating or using it over time and forming collective memories with them. Also, relating colors to the land and skin color or the presence of special pigments in a climate and long-term use of specific colors in manufactured products are expected. On the other hand, it is possible to relate colors to religion, ideology, ethnicity, etc. An overview of some Iranian art branches, such as architecture, clothing, handicrafts, pottery, book design, and the like, showed that the range of colors attributed to each discipline or profession in Iran is different according to the gender and materials of each art branch. In this research, the indicator color in any field is its dominant color. Iranian color in graphics has been examined from the same point of view; therefore, according to Thompson's semi-interactive media opinions, the
interpretation of one-way indirect media, which includes graphics, is a rethinking practice based on the mental context of the recipient of the message. From reading the posters on the subject of Iran at the end, the findings of this research are presented by illustrating the results of Graph 1. The most frequent colors related to Iran in the desired posters with a combination of quantitative and qualitative methods of research based on statistical society, firstly lacquer red and the spectrum close to it (Graph 1-1), and then yellow and gold and the spectrum close to it (Graph 1-2), then it is blue, and the spectrum is close to dark and turquoise (Graph. 1-3). After these three categories of color spectrum, as can be seen in Graphs 1-4 \& 1-5, the spectrum close to black and green were the most frequent colors in posters with the theme of Iran.

## Conclusion

According to the results which were obtained by examining a considerable number of posters with the theme of Iran, respectively, a range of red lacquered colors, then yellow, golden, spectrum close to it, and then blue and spectrum close to dark, and turquoise were the most frequent colors used in posters related to Iran, considering the main theme of the posters. After that, black spectrums have been very frequent. One aspect of the validity of this result is the low frequency of some of the main colors, such as red, green, and purple. In fact, the media system, of which graphics is a part, has symbolized the colors in graphics, which arose from the color palette of other elements of Iranian visual culture, and as a result, colors from Iran are represented as Iranian colors based on the relationship of the designer, customer, or audience. Based on this, it can be said that Iranian graphic designers, while being loyal to their style and color palette, have also referred to their culturally supported colors to represent the Iranian color, except for the corporate color and the official flag of the country. These colors are often derived from the environment, culture, and visual cultures, such as handmade products, artistic, cultural goods, handicrafts, ecosystem, traditional arts, Iranian-Islamic architecture, and calligraphy. The red origin of lacquered color is carpets and some handicrafts and Iranian clothing. Also, the origin of the pale goldenrod color and its spectrums is the Iranian climate, native housing, and exclusively the earth of Iran. The origin of the turquoise color and blue spectrums is Iranian mosaic work. Since graphics with its modern concept does not have a long history in Iran and like architecture with Iranian carpets was not present in all the historical periods of Iran, in the meantime, the most relevant traditional art profession with modern Iranian graphics is the tradition of Iranian calligraphy and book layout, where the dominant color spectrums are bright yellow and golden. In addition, the mentioned two colors and their spectrums are also related to Iran's climate and ecosystem.

## References

- Berry, S \& Martin, J. (1991). Designing with Colour, London, England, B.T.Batsford Ltd.Conference: 10th IEEE International Conference on Computer-Aided Industrial Design and Conceptual Design. Wenzhou, Peoplesr, China.
- Esmaili, S, \& Soleimani, S. (2017). Comparative comparison of color application in Islamic architecture of China and Iran. Annual Conference on Architectural, Urban Planning and Urban Management Research, Shiraz, Iran.
- Hall, S. (1973). Encoding and Decoding in the Television Discourse. Birmingham: Centre for Contemporary Cultural Studies.
- Hasannia, F. (2016). Analysis of the latent semantic foundations of the colors and symbols of the Iranian flag in different periods (Master's thesis). Ramsar Azad University, Iran.


## PAYKAREH

Journal of Art Faculty, Shahid Chamran University of Ahvaz
Frequency Analysis of Iranian Colors in Graphic Posters with the Theme of Iran
Volume 11 Issue 27. Page 42-59
58

- Iranian Graphic Designers Society. (2001). Graphic Design Iranl the first Selected Works of Iranian Graphic Designer. Tehran: Darog e No
- Iranian Graphic Designers Society. (2004). The 8 ${ }^{\text {th }}$ Tehran International poster biennial. Tehran: Iranian Graphic Designers Society.
- Iranian Graphic Designers Society. (2010). Silver Cypress 2010. Tehran: Nazar Art.
- Iranian Graphic Designers Society. (2011). Silver Cypress 2011. Tehran: Nazar Art.
- Iranian Society of Visual Art, Tehran Museum of Contemporary Arts Iranian Graphic Designers Society. (1994). The $4^{\text {th }}$ Contemporary Iranian Graphic Biennial .Tehran: Iranian Graphic Designers Society.
- Iranian Society of Visual Art. (1996). Contemporary Graphic of Iran A Selection of Works: The 5 ${ }^{\text {th }}$ Biennial of Iranian Graphic Design Biennial. Tehran: Iranian Society of Visual Art.
- Iranian Society of Visual Art. (1999). Contemporary Graphic of Iran A Selection of Works: The $6^{\text {th }}$ Biennial of Iranian Graphic Designers. Tehran: Iranian Society of Visual Art.
- Khoshnazar, R, \& Rajabi, M A. (2008). Light and color in Islamic painting and architecture. Ketab e Mahe e Honar, (127), pp. 70-71.
- Kolahkaj, M. (2019). A Study in Representation of National Identity: 50 Years of Contemporary Iranian Graphics (1961-2011). National Studies Journal, 20(79), pp. 139-156.
- Lakens, D. (2011). Orange as a perceptual representation of the Dutch nation: Effects on perceived national identification and color evaluation. European Journal of Social Psychology, Eur. J. Soc. Psychol. (41), pp. 924-929.
- Meshki, S. (2005). Iranian Contemporary Graphic Designers: Farzad Adibi. Tehran: Yassavoli.
- Meshki, S. (2006). Iranian Contemporary Graphic Designers: Masoud Nejabati. Tehran:

Yassavoli.

- Meshki, S. (2004). Iranian Contemporary Graphic Designers:Mostafa Assadollahi. Tehran:

Yassavoli.

- Nasiri, M, Afrasiabpour, A A, \& Ahmadi, F. (2017). The mystical symbol of color in Islamic art and architecture. Islamic mysticism (religions and mysticism), 14(56), pp. 17-53.
- Nazar Research and Cultural Institule With Cooperation by Morteza Momayez Foundation. (2004). A Selection Graphic Design by Morteza Momayez. Tehran: Nazar.
- Qavi Panjeh, Z. (2014). Role and color in Turkmen women's clothing. The Second International Conference on Research in Science and Technology, Leading Karin Conference Institute, Istanbul, Turkey.
- Shiva, Q. (2001). Ghobad Shiva: Graphic Designer. Tehran: Nazar Publishing.
- Saedi, S.,\& Seyed Ahmadi Zawieh, S. (2014). The effective factors on the application of color in Yazd carpet. Paykareh, 2(4), pp. 25-42.
- Sourasrafil, Sh. (1999). Iranian Colors. Tehran: institution Handmade carpet research.
- Sourasrafil, Sh. (2000). Iranian colors. Book of the Month of Art, (23-24), pp. 71-74.
- Vazirian, A. (2011). Lyric \& Religious Design, A Collection of Paintings \& Graphic works by Ali Vazirian. Tehran: Sooreh Mehr.
- Visual Art Development Institute of Culture and Islamic Guidance with Cooperation of Tehran Museum of Contemporary Arts Iranian Graphic Designers Society. (2007). The $9^{\text {th }}$ Tehran poster biennial. Tehran: Visual Art Development Institute.
- Visual Art Development Institute of Culture and Islamic Guidance with Cooperation of Tehran Museum of Contemporary Arts Iranian Graphic Designers Society. (2009). The $10^{\text {th }}$ Tehran International poster biennial. Tehran: Visual Art Development Institul.
- Visual Art DevelopmentInstitutel with Cooperation of Tehran Museum of Contemporary Arts Iranian Graphic Designers Society. (2007). The $9^{\text {th }}$ Contemporary Iranian Graphic Design Biennial. Tehran: Visual Art Development Institute.
- Wahdat Talab, M.,\& Nik Maram, A. (2017). An Investigation into the Importance, Abundance and Distribution of Red Color in Stained Glass Windows of Historical Houses in Iran Case Study: 22 Examples of Stained Glass Windows Circle heads (Crowns) in Houses built during Qajar Dynasty in Tabriz. Honar-Ha-Ye-Ziba: Memary Va Shahrsazi, 22(2), pp. 87-97.


## PAYKAREH

Journal of Art Faculty, Shahid Chamran University of Ahvaz
Frequency Analysis of Iranian Colors in Graphic Posters with the Theme of Iran
Volume 11 Issue 27. Page 42-59
59

- Yang, M \& Zeng. Q. (2009). Application and Innovation of Chinese Red In Modern Design. International Conference on Computer Aided Industrial Design and Conceptual Design-CAID\&CD. pp. 1520-1523.
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[^0]:    Keywords
    Iranian, National, Color, Graphic, Poster, Color Frequency

