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Colour Psychology and Functionality of Inlay Designs in Mughal Monuments of Agra (India)

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Abstract:

This paper aims to discover the psychological effects of colors and its functionality of Inlay Designs in Mughal Monuments (i.e., Taj Mahal, Agra Red Fort, tomb of Itmad-ud-Daulah and Akbar Tomb). These monuments were chosen for survey by author due to its richness in color variances and to have better understanding the responses of visitors, artisans, and scholars were also ascertained. Colour stones applied in the Mughal monuments create style and appeal and that too according to their functions, symbolism, and psychology of colour schemes. It helps to make better decisions and increase the use of designs when choosing colors for different spaces to suit the purpose for which they are designed. Further, it would help to understand the role of Mughal culture, emperor's taste and colour schemes of artisans in a better way. The results suggest that use of appropriate and/or correct colors would increase the functionality of the space.

1. Introduction

The marble inlay--*Pachchikari* or *Parchinkari*-- is one of the most attractive and popular forms of the Indian Mughal art. The inlay art in these Mughal monuments can be seen in the evolutionary process. With regard to architectural decorations, the wide variety of decorative inlay art was unique in the Mughal monuments. It was not only because of the change in the style of ornamentation but also the emphasis being laid on inlay rather than on carving during the Mughal period (Nath, 1976, 15). The monument of Akbar's period was mainly in red sandstone. His architecture, the Red Fort at Agra and Fatehpur Sikiri, were wholly Indian in style. The inlay art can be seen in the Buland Darwaza, Jami Masjid (Fatehpur Sikiri) and in the Jahangiri Mahal, Delhi Gate (Agra Red Fort). In these buildings of Akbar, mainly geometrical inlay designs were applied, and it should be noted that it was the beginning phase of the development of inlay work during the Mughals. After the death of Akbar in 1605 A.D., his son, Prince Salim, ascended the throne and assumed the title of Jahangir (r.1605-1627 A.D.), "Seizer of the World." His proficient wife, Nur Jahan, assisted him in his artistic aspiration the mausoleum of Akbar at Sikandra, outside of Agra, represents a major turning point in the Mughal history as the successors of Akbar have adopted the sandstone compositions into magnificent marble masterpieces. This monument was decorated with a variety of inlay designs. Arabesque inlay design was also introduced in Jahangir's building. During his regime, the tomb of Itmad-ud-Daulah was constructed, which may be regarded as the connecting link between the style of Akbar and Shah Jahan (Sharma and Gupta, 2012). This tomb is a "jewelled casket" rising on the banks of the Yamuna, an example of the transition from red sandstone to marble. Buildings of Jahangir were changed not only in their architectural style but also in the method of decoration. The tomb of Itmad-ud-Daulah is made of traditional red sandstone as well as of white marble. The white marble is inlaid with coloured marble garnished with semi-precious and precious stones. This tomb was the first structure in India in which white marble replaced red sandstone as the ground for polychrome *pietra dura* inlay (Blair and Bloom, 1994). In Jahangir's buildings, new themes were added, such as wine vessels, flower vases, dishes, fruits and cypress trees. Shah Jahan, the successor of Jahangir, was much impressed by his father's tremendous architectural taste and took an active part in the many remarkable architectural projects of his reign. In the Taj Mahal, Shah Jahan modified the designs as suggested by the designers (Sharma and Gupta, 2012). The inlay art was at its peak in this monument. In addition to this monument, Shah Jahan constructed Muthamman Burj (Shah Burj, 1631-40 A.D.), Diwan-I-Am, Diwan-I-Khas of Agra Red Fort, the Taj Mahal (1631-1652 A.D.) at Agra; Red Fort and Palaces at Delhi (1639-1648 A.D.), all known for their marvelous inlay works. Shah Jahan also commissioned his famous peacock throne at Diwan-I-Am at Delhi Red Fort after transferring the capital to Delhi in 1648 A.D. (Gascoigne, 1971, 186-187).

2. Application of Colour in Mughal Inlay Designs and its Psychology and Functionality

Colour psychology is the study of the effect that colours have on human behavior, particularly the natural instinctive feelings that each colour evokes. Colour preference is subjective; however, colour psychology reveals how each colour creates an emotional, mental and physical response collectively in the people as a whole. For example, red colour will create feelings of warmth, movement, ambition, determination, and sometimes anger. Colours often have different meanings in different cultures. For example, in South Asian culture, it is common that a bride wears red dress. In Islam religion, it is preferred to wear black dress on this occasion (Christa, [http://www.ehow.com/facts_5202784_symbolic-meanng-black-wedding-dress, html](http://www.ehow.com/facts_5202784_symbolic-meanng-black-wedding-dress.html)). In Western culture- a bride traditionally wears

white dress on the occasion of marriage (Ralph, 1967, 175). In Indian culture, red, yellow, green and white are considered as auspicious colours. In auspicious designs, the designers prefer these colours.

Colour has always been an important element as it is associated with mood and feeling. In the Mughal architecture, the designs were taken from life and nature. They were lifted with an element of idealism and have direct imitation. Red is considered to be the best colour, if the purpose is to draw attention. It may be the reason that the Mughals used red sandstone in almost every monument at the entrance gateways, which catches full attention of the viewers. It is interesting to note that the main building of the Taj Mahal and the tomb of Itmad-ud-Daulah are of white marble, but their entrances are in red sandstone (Figure 1). It indicates the functionality and the symbolism of red colour. No doubt, at that time, the availability of red sandstone in this particular area was in abundance. Red and its shades are also used as a symbol of love, and is visible in the flowers inlaid in the Taj Mahal (Figures 4) and Diwan-I-Am, Agra Red Fort. Colour from hot reds to pale pinks were found in many flowers, applied at the Taj Mahal, and suggested the feeling of Shah Jahan's love for his wife, Mumtaz. This colour is also used as the sign of determination and attention to the viewers because the colour red stands out against the background of white. The Bulland Darwaza (Fatehpur Sikri) in red sandstone indicates the power and victory of Akbar (Fig. 2). Presently, red colour is being used in traffic signs because it attracts the attention, and is the most visible colour in daylight.

Black and white colour stones inlaid in red sandstone (as shown in the figures 3) indicate the importance of white and black colours on red. The design applied on the red base, gains more attention and thinking process of the viewers. For example, *swastika*, sun and *satkona*s inlaid in white colour represent the purity of the design elements and gain the concentration (Figures 3-b, 3-c and 3-d). These designs are the symbols of purification, spirituality, hope, protection, purity, simplicity, peace, and blessings. It is also the colour of wealth, beauty, and of the goddess Lakshmi in the Indian context (Feisner, 2006, 127). The cenotaphs in Akbar's tomb, tomb of Itmad-ud-Daulah and Taj Mahal are in white marble, and indicate spirituality and peace.



Figure 1: Inlay Designs, tomb of Itmad-ud-Daulah Figure 2: Inlay Designs, Buland Darwaza

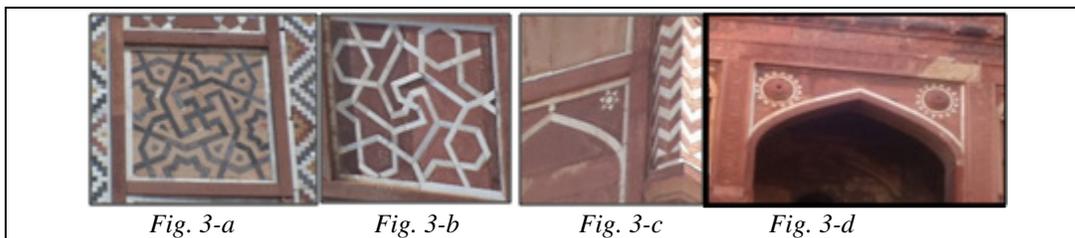


Figure 3 (a), (b) Swastika and (c) Satkona at the Akbar's tomb (d) Sun at Jahangiri Mahal

The first influence of the design on the beholder is to give direct sensuous pleasure, through the beauty of the motif or design elements. The figure 4 expresses its functionality of colour with colourful floral design elements on a white surface. Even the delicate stems are clearly visible. Here, red, green and yellow colours are used in the modified version of *burnakalasa* motif. (Sharma and Gupta, 2012) The aesthetic satisfaction in the harmony of colour, idea and auspicious expression can be seen in the whole composition of the work. Generally, in Indian context the auspicious designs are presented in auspicious colours. Conversely, at the main gateway of Akbar's tomb (Figures 3-a and 3-c), the bold *swastikas* in black and white coloured stones on red base are used. It is an exception in the Mughal monuments where *swastika* is available in black colour. It may be because the black colour is auspicious in Islam religion and black stands for royalty and power. In the Mughal monuments, *swastika*, star, lotus and *satkona* exist in white colour on red base. White colour stands for purity, honour, and integrity.

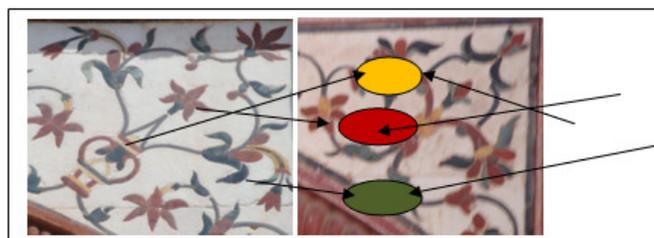


Figure 4: Red, green and yellow colours used at the Taj Mahal

Besides the sensuous and aesthetic pleasure in the beauty of colour and light, the analogous colour scheme was used at the tomb of Itmad-ud- Daulah (Figures 5) and Maussarm Burj, Agra Red Fort (Fig. 9). It imparts a soothing effect through colour scheme. The Mughals had used a variety of designs in full composition with unity in colour scheme that enhances the comforting and relaxing atmosphere. Otherwise, so many designs can create exasperating results. In the tomb of Itmad-ud-Daulah, the depiction of wine vessels, vases, dishes and fruits are found in a cheerful mood as they depict atmosphere of joy and celebration (Fig. 5). On the other hand, wine vessels, vases and dishes on red base, marble with white outline at the sidewalls of the main gateway- do not seem to provide a welcoming and joyful feeling, as the designs on the main building (Fig. 1). However, it attracts attention of a viewer, while black colour inlaid on red base does not catch attention as compared to white on red.

The other scheme used is combination of black and white. Such designs represent on and off in the geometrical patterns at the Akbar's tomb gateway and at the tomb of Itmad-ud-Daulah (Figures 1 and 3). The black and the white colours give monotonous effect. Calligraphy was mostly inlaid with black on white marble base in the Taj Mahal and at the Agra Red Fort (Figures).

Calligraphy is a part of the holy Qur'an's phrases, for devotees it is a matter of concentration and meditation. The calligraphy that adorns important arches within the monument makes extensive references to paradise (Fig. 8). In the Taj Mahal and Agra Fort, the designs create atmosphere of purity with the help of sober background instead of colourful base. Besides, the Mughals left some margin between calligraphy and floral designs to give a breakup that provides a moment of separation in transposing the mind from spiritual to colourful world, where life starts through colourful symbolic designs (Fig. 8). The present study finds that yellow, green, and red coloured stones were applied in floral designs, providing harmony of expression through colour.

The objects placed at specific distances from us are certain to overlap in their projection on our retinas. The artisan preferred colours in a design as an overlapped can be seen clearly in the Mughal monuments. For example, a brown tree was overlapping the yellow stem and grey stem was overlapping the brown cypress tree (Fig.6). In the Taj Mahal, the overlapping effect was beautifully seen in border designs (as shown in the figures 7). This expression is possible only because of colour scheme used.



Figure 5: vase, wine vessels at the tomb of Itmad-ud-Daulah

Figure 6: Overlapping effect through colours at the tomb of Itmad-ud-Daulah



Figure 7: Overlapping effect through colours at the Taj Mahal

Figure 8: Calligraphy at Taj Mahal

The polychromatic colour scheme was applied in a geometrical design (Fig. 9). Red, yellow, blue, orange purple, brown, white, gray and black coloured stones were inlaid perfectly. However, the use of white colour base works for its balance and unity in diversity, and follows a basic principle of "Isolation with contrast or white" (Scott, 1951, 98). The area of contrast is reduced by separating the design with neutral light tone and is increased by placing the design with a dark tone line. It may be white or black. It gets the contrast down to manageable limits. It is suggested that neutral light colours in a design should be chosen so that the attention can be relaxed without strain, and is one reason why these colours are restful.



Figure 9: Polychromatic colour scheme at Agra Red Fort

Colours in floral inlay designs, mainly in natural flowers, were beautifully depicted in the Agra Red Fort and Taj Mahal with all possibilities. Artisans used stones to give them a natural look. They give an expression of shading through the texture of the stone as seen in the Taj Mahal (Figure 10), tomb of Itmad-ud- Daulah (Fig. 11) and Agra Red Fort. The same is also seen in flower vases, dishes, leaves, and fruits in the tomb of Itmad-ud- Daulah (Figure 5). Hence, it can be said that the choice of the colours makes the difference with respect to the texture, shading effect, and natural expression in the Mughal monuments.



Figure 10: Natural flowers depicted on the screen at Taj Mahal



Figure 11: Nargis flower at the tomb of Itmad-ud-Daulah

4. Conclusion

When we speak of something that creates an aesthetic experience, we are usually talking about some form of art and Mughal inlay art is the best example. The coloured stones applied according to their functions, symbolism, and psychology of colour scheme, not only reflecting feelings, pleasures and sensations of the emperor but add style and appeal. The buildings of Akbar and Jahangir, gave monochromatic effect with an emphasis on white marble and red sandstone. The selection of colours in inlay designs of Jahangir's buildings is soberer as compared to buildings of Shah Jahan. The inlay designs appear more translucent, as it is made of the mother pearl and has a rich polychromatic colour scheme in Shah Jahan's buildings. The artisans used colour schemes that were complementary, monochromatic, analogous and neutral in nature with great perfection and efficiency. The shading effects and folds of petals in natural flowers with the texture of stones were successfully employed. The flower colours and shades were very intelligently chosen and gave a natural look.

The colour application in inlay designs in the Mughal monuments is soberer. It was also observed that the artisans preferred and aimed at the overall effect, this is authenticated by viewer's appreciation. The artisans were found to be very conscious of colour symbolism as evidenced in floral, arabesques, geometrical, calligraphy and the Hindu auspicious designs. In auspicious designs, the Indian auspicious colours were found to be applied in the Mughal monuments except at the Akbar's tomb where black coloured *swastika* was present. Through a colour scheme, the depiction of wine vessels, dishes and vases in the exterior of the main building gave the impact of joy and sorrow on the sidewalls of the entrance gateway of Itmad- ud- Daulah. The overlapping effect through colours is skillfully applied in the Taj Mahal and the tomb of Itmad-ud-Daulah. It provides insight that there is a need to know the effects of colors on moods of individuals and hence architects should rationally capture. Based on the results, it can be further concluded that the use of appropriate and/or correct colors would increase the functionality of the space.

5. References

- i. Christa T., "What is the Symbolic Meaning of A Black Wedding Dress?", http://www.ehow.com/facts_5202784_symbolic-meanng-black-wedding-dress_.html.
- ii. Feisner E., Colour. City: King Laurence Publisher, p. 127, 2006.
- iii. Gascoigne B., The Great Moghuls, B. I. Publication: New Delhi in association with Jonathan Cape London, pp.75-215, 1971.
- iv. Nath R., History of Decorative art in Mughal Architecture, 1st edition. Motilal Banarsidas: Delhi, pp. XX, 1-144, 1976.
- v. Ralph F., Color: A Complete Guide for Artists, Watson- Guptill Publication: The University of Michigan, pp. 1-175, 1967.
- vi. Scott R. G., Design Fundamentals, McGraw-Hiel: New York, pp. 1-199, 1951.
- vii. Sharma P. and Gupta I., "Inlay Designs in the Mughal Monuments" Lap Lambert Academic Publishing (Germany) ISBN 98-3-8473-7907-7, 2012.
- viii. Sharma P. and Gupta I., "Possible Sources-Inspiration & Influence for Design Elements Used in Inlay Work in Monuments of Agra", Shodhak- India's Journal of Historical Research, Vol. 36, Sr. 108, pp. 212-221, September- December 2007.
- ix. Sharma P. and Gupta I., "Wine Vessels in the Mughal Monuments of Agra during Jahangir Period- Symbolic & Emotional Perspective", Kala Dirga, Vol. 8, no 16, pp. 76-78, April 2008.
- x. Sharma P., Gupta I. and Jha P., "Aesthetic Pleasure of Indian Rasas in Inlay Designs of Mughal Architecture of Agra", The IUP. Journal of Architecture, Vol. 1, No.1, pp. 36-47, 2009.
- xi. Sharma P., Gupta I. and Jha P., "Arrangement of Inlay designs: A study of Mughal Monuments of Agra", Proceeding HWWE08 International Conference, VIT Pune, pp. 532- 537, Dec 2008b.
- xii. Sharma P., Gupta I. and Jha P., "New Aspects Related to Origin and Development of Mughal Inlay Art in India", Anistoriton Journal, vol. 11, pp.1-11, 2008a. http://www.anistor.gr/english/enback/2008_2a_Anistoriton.pdf.