



The Impact Of Lighting Design In Art Galleries



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ABSTRACT

Lighting design is an essential part of the art gallery experience and affects changing how the artwork is seen and even the beauty and emotive capability of the artwork. Configuration of developing lighting helps guide the concentration; enhance vital details; create and modify the mood thus paying a significant role in the setting and feel of the exhibit space. Effective lighting design in galleries serves various functions:

it allows correct visualization of artworks, reduces glare and minimizes the dangers of getting a damage due to high levels of UV radiation. As with lighting techniques, the use of light and shadows can design depth, drama or subtleties to guide visitors through an exhibition's story telling. Above all, the relationship of light and architecture in a gallery can provoke a certain emotion. For instance, warm light will evoke comfort while dim light will create discomfort and vice versa, bright light will produce sterility and much thinking.

KEYWORDS

Aesthetic Enhancement

Artwork Preservation

Visual Hierarchy

Emotional Impact

Flexibility and adaptability

INTRODUCTION

Lighting design practice affects perception and experience of artworks in art galleries. Lighting enhances the transparency, gives better concentration, and accentuates areas that are imperative for enhanced illumination. Through control of intensity of light, color temperature and direction. It not only stresses aesthetic and form of arts such as paint and sculpture but also has effect on people's feelings as well. In addition, the state of lighting is done well with balanced equally between appearance and protection of delicate artworks offered a great atmosphere for the gallery as it does complement the gallery's purpose.

TYPES OF LIGHT

1)Natural Light

2)Ambient Light

3)Task Light

4)Accent Light

5)Direct Light

6)Indirect Light

7)Spot Light

An art gallery is space with large walls set aside for the presentation of two and three-dimensional artwork. One of its main uses is to present so called art pieces such as paintings, sculptures or photographs.

OBJECTIVES

1. To look at how lighting design affects the viewer's experience: Find out the effects that different levels of lighting have on perception, analysis and emotional feelings towards art works.

2. Determine the appropriate lighting design principles for art galleries: Develop lighting recommendations for art galleries based on research evidence specific to artwork type, arrangement and galleries, and impacts visitors.

3. Assessing the impact of lighting design on artwork preservation and conservation: Understand how different lighting impacts the degradation of artworks and establish the standard form of lighting for artworks maintenance and conservation.

4. Examine the current condition of lighting design in art galleries: Solicit information from a cross-section of existing art galleries as to their current practices, challenges and potential for change regarding the lighting design of their galleries.

5. Examine how light design enhances the aesthetic of art and also the climax and prefrontal cortices connections: Examine with regard to lighting design factors in factors of viewers' emotions, attention, and engagement to artworks.

6. Develop criteria that would allow determining the efficiency of the lighting design in art galleries: Design an effective approach to assess the effectiveness of lighting design to create an excellent impression to audiences, protect artworks, and enhance the functionality of a gallery.

RESEARCH PAPER

1)Research on the influence of lighting mode and CCT on the lighting design of art museum based on subjective experiment

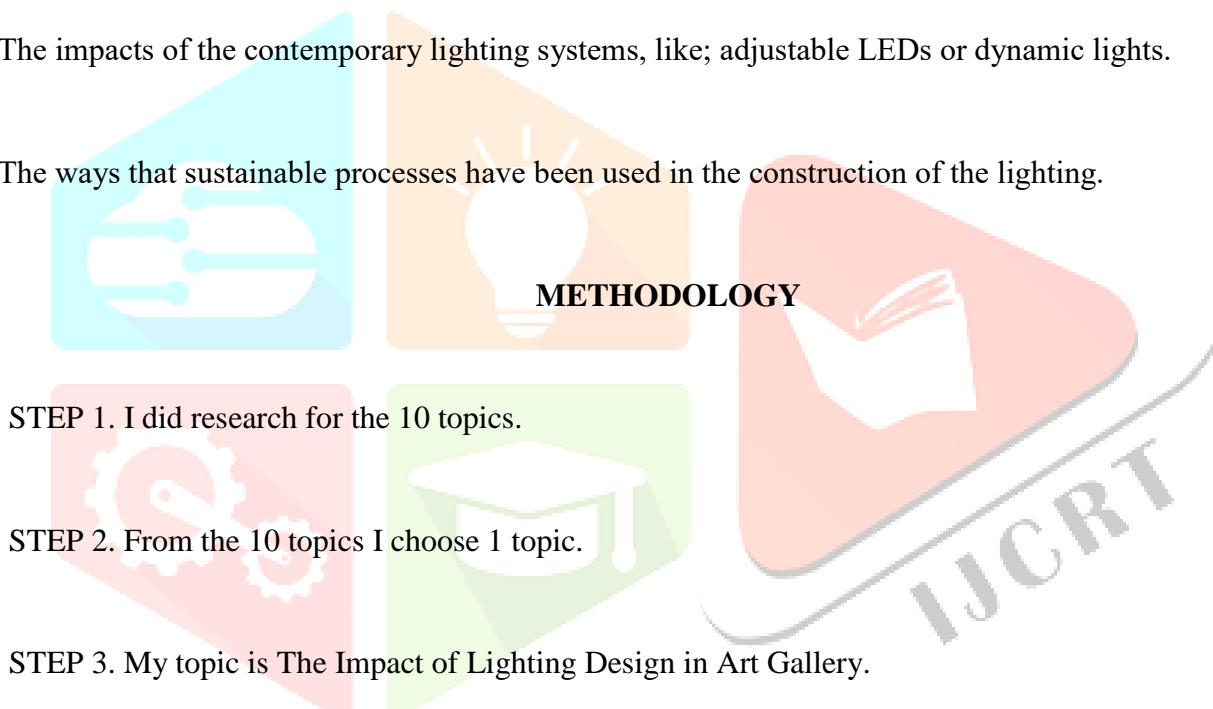
Haiwen Gao; Zhisheng Wang; Dan Zhu; Cong Zhang; Nianyu Zou DECEMBER.21.2020

In general, this study focuses on the relationship between observer's psychology and modifications to different lighting modes: general lighting, accent lighting, and mixed lighting as well as the CCT's of 4000 K and 2700 K to find the optimum lighting environment.

The first topic centres and amplifies how certain technical features influence perceptions in art museums through subjective tests such as lighting modes and correlated colour temperature (CCT).

But my subject is more general and looks at how lighting design affects art galleries as a whole, which may include things like:

- How different lighting options impact people's feelings and psychological conditions.
- Different techniques of installation in relation to the said variants (e.g., sculptures with lighting versus paintings with lighting).
- The impacts of the contemporary lighting systems, like; adjustable LEDs or dynamic lights.
- The ways that sustainable processes have been used in the construction of the lighting.



STEP 4. I did research on Albert Hall which is in Jaipur.

STEP 5. Then I read the literature reviews.

STEP 6. Then I found research gap.

STEP 7: Design the planning and it's concept.

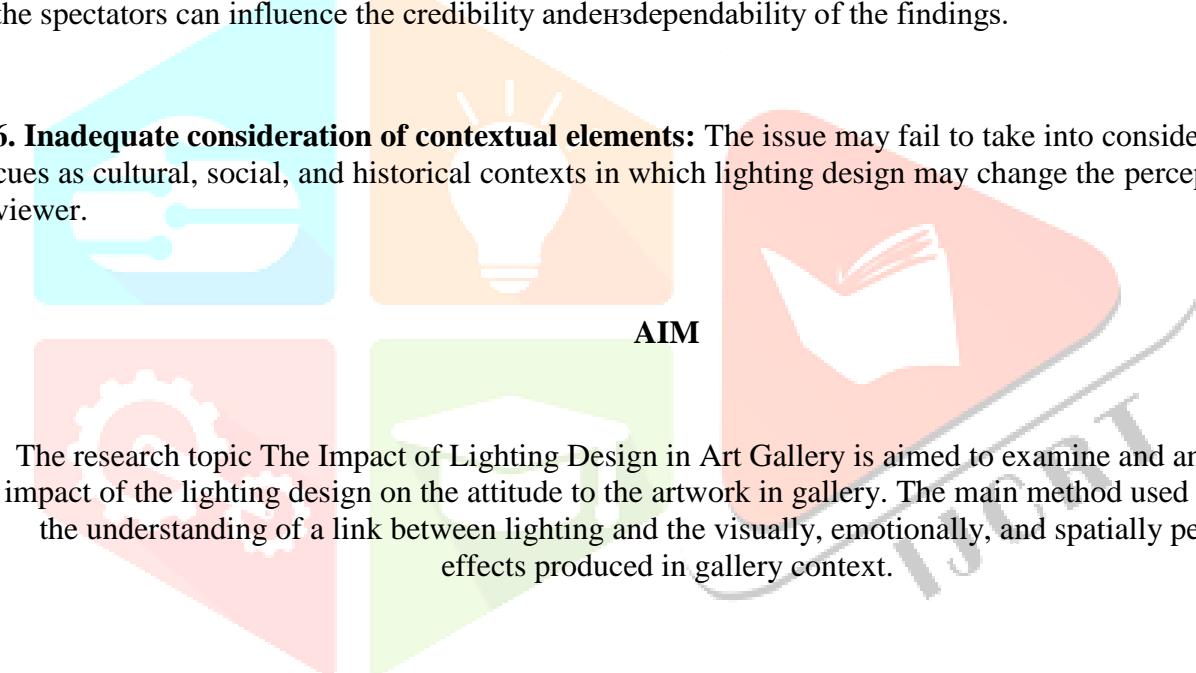
STEP 8: 2D and 3D elevations

STEP 9: Model making

LIMITATIONS

- 1. Subjective nature of lighting design:** Lighting design is an ornery pick and what one person considers proper lighting may not be the same as another.
- 2. Limited generalizability:** Findings arising from a research conducted on lighting design of art galleries may not be transferable to museums, galleries or cultural institutions.
- 3. Technical complications:** Lighting design is not devoid of technical issues like light sources materials, and human vision, which are challenging to probe and examine.
- 4. Limited data availability:** The research on the prospective of lighting design on the viewers and the artworks as well as the general running of a gallery may at time be scarce.
- 5. Difficulty in controlling variables:** J. Variables such as light condition, kind of artwork, and type of the spectators can influence the credibility and dependability of the findings.

- 6. Inadequate consideration of contextual elements:** The issue may fail to take into consideration such cues as cultural, social, and historical contexts in which lighting design may change the perception of the viewer.



PROBLEM STATEMENT

- 1. Inaccurate Colour Representation:** Insufficient illumination interferes with color, material, form, and such other considerations which go into the artwork and thus poses potential threat to the artist and viewer satisfaction.
- 2. Visual Discomfort and Eye Strain:** Low light levels create eye strain and headaches as well as fatigue, lowering the degree to which one can appreciate viewing, as well as posing a danger in the long run to the viewers' vision.
- 3. Damage to Sensitive Artworks:** High or unproper lighting affects the negative conservation and generally shortens the life expectancy of delicate artifacts such as paintings, prints and pictures.

4. Negative Impact on Visitor Engagement: Lack of proper lighting affects viewers' claims, attitudes and experience of course; the audience will not feel any connection with the artwork.

5. Inconsistent Lighting Conditions: This sometimes results in poor contrast between areas well lit and those poorly lit areas, a factor that reduces the gallery experience of the visitors.

6. Lack of Attention to Artwork-Specific Lighting Requirements: Some kinds of creation needs to have specific light environments for proper illumination. These are some of the conditions which if not considered put at risk both the viewers and the state of the artwork.

7. Inadequate Training for Gallery workers: Gallery workers themselves may not be familiar with the right approach to lighting design and its interaction with the audience, thus the majority of them will remain in substandard lighting and give visitors the worst time of their lives.

RESEARCH QUESTION

1) What is the role of a lighting design in terms of shifting the importance of the subject of a painting or statue?

2) How does light get oriented in a way which influences the two dimensions of art on the wall and the depth of the picture?

3) In what ways does the organization of the episodes of distinct types of lighting affect the clarity of elements in different kinds of art?

4) It is as follows lighting that never fails to influence the contrast and textural impression of any artwork?

5) Which particular positioning of Schott lights have the most impact on realistic depiction of colours in artworks?

6) How does ambient, task or accent lighting influence presentation of art piece in the gallery or exhibition?

7) In what ways and for what purposes can light be applied to exhibit large sculptures or paintings so it would not overwhelm the vicinity of murals or other significantly spatial creations?

8) More potentially, how does lighting design impact artworks having reflecting or translucent surfaces for example, glass or metal surfaces with a shiny polish?

9) In what manner does—not necessarily dynamic or adjustable—lighting (as is the case with adaptive or interactive lighting, including changes in response to motion) affect the viewer's perception of modern art?

10) How might one employ lighting design as a way of mimicking or even improving the intended environmental setting for site responsive art works?

SCOPE

1. Looking into the impact of lighting design on the viewer's experience: Explored how the design of the latitude that is afforded to viewers influences their psychological responses, feelings and meanings of artwork.

2. Examining how lighting design affects artwork preservation and conservation: Setting up the best practices for light and not to degrade the art and keep the paintings looking their best at all times.

3. Creating principles and recommendations for effective lighting design: Establishing the best practices that could help art galleries in achieving the best layout that enhances the visitor experience as well as created friendly lighting conditions for the artworks.

4. Investigating the current state of lighting design in art galleries: A survey and case-studies approach to studying current and potential lighting design practice issues and potentiality for correct in art gallery environments.

5. Investigating the role of lighting design in improving the emotional and cognitive experience of art: Further examining what role lighting design plays in the viewer's experience of emotions, attention, and interest towards the artworks.

6. Creating a framework to assess the success of lighting design in art galleries: Defining precise strategy for the assessment of the lighting design's influence on the visitors' perception of works, their sustainability, and galleries' functions.

SIGNIFICANT OF RESEARCH

Improve the Visitor Experience: It may be helpful for the galleries to know how lighting affects vision and depth of emotions so as to give its guests better experiences to cherish.

Optimize Artistic Presentation: The outcomes of this study may help the best practices in lighting to focus the description of the works' complete variety of colours, textures, and details to their original purposes defined by the author.

Ensure Artwork Preservation: Studious exploration shows that mitigating measures against the effects of UV radiation or heat, mean that delicate art pieces are protected in the long run; thus, is a lighting solution.

Promote Sustainable Practices: Research on products like LED lighting contributes to one's efforts to select sustainable measures for use within corridors while enhancing the visual appeal of the area without

compromising on the quality of the illumination.

Contribute to Design Innovation: These discoveries may well lead to developments in lighting design, benefitting the architects, curators, and designers involved in gallery spaces.

RESULT/OUTCOME

1) Enhances luminosity as well as the features of colours, texture and details.

2) Calls up emotions and focuses people on certain artworks.

3) Protects artwork from harmful UV and infrared radiation types.

4) Fosters the senses and enables the visitors to get directions.

5) Employs energy efficient atleast energy responsive lighting.

6) Makes it universally available by applying the best contrast and brightness.

CONCLUSION

Another factor that forms the visitor's experience and has a big effect on the art work and ones that are presented in art galleries is the lighting design. Timely lighting ensures the appropriate protection of the pieces and also enhances the appearances of the cased works and also offers an engaging experience. Also for accessibility and sustainability to make the gallery area more friendly for the people and the environment of the community. When lighting design is given the utmost priority, art galleries successfully avoid object damage, enhance display, and make a lasting impression on the guests.