

The effect of light source direction and its applications in interior design

Dr. Dalal Anwar Al Sharhan

Assistant Professor, Department of Interior Design, College of Basic Education, Public Authority for Applied Education and Training, Kuwait, d.alsharhan@gmail.com

Abstract:

To successfully achieve the various lighting functions within a space, the interior designer must manipulate the light and control its properties such as direction, intensity, shape, distribution, color, smoothness, and movement across the space to create and configure the lighting environment. In order to control these characteristics, it is vital to keep pace with modern lighting technologies and their impact on the physical environment, and thus the interior designer is fully responsible to ensure that every modification made to these characteristics is a visual and conceptual choice and not just a random reaction to the need for lighting.

The research aims to emphasize the relationship between lighting and its direction scientifically and clarify this relationship to employ it in a functional and aesthetic manner, appropriate to the nature and use of the space, and explore the latest lighting technology in determining the direction of lighting.

This research employed an analytical descriptive approach using visual ethnography supported by an experimental approach through the researcher's practice of lighting design and documenting it using visual images. This research resulted in the five basic directions of lighting within the interior environment; top lighting, front lighting, side lighting, up-lighting lighting, and multi-directional lighting. The recommendations made in this research should be considered to improve lighting design practices to support the functional and aesthetic performance in the designed space.

Keywords:

Interior Design, Lighting, Lighting Direction, Visual Ethnography

References:

1. Aronson, J. (1995). A pragmatic view of thematic analysis. *The Qualitative Report*, 2(1), 1–3.
2. Creswell, J. W. (2012). *Qualitative inquiry and research design: Choosing among five approaches*. Sage.
3. Essig, L., & Setlow, J. (2013). *Lighting and the design idea*. Wadsworth Cengage Learning.
4. Flynn, J. E., Hendrick, C., Spencer, T., & Martyniuk, O. (1979). A guide to methodology procedures for measuring subjective impressions in lighting. *Journal of the Illuminating Engineering Society*, 8(2), 95-110.
5. Flynn, J. E., Segil, A. W., & Steffy, G. (1988). *Architectural interior systems. Lighting, air conditioning, acoustics*.
6. Gordon, G. (2015). *Interior lighting for designers*. John Wiley & Sons.
7. IES. (2010). *IES Lighting Handbook, Tenth Edition*. New York, NY: Illuminating Engineering Society of North America.
8. Pink, S. (2013). *Doing visual ethnography*. Sage.
9. Tesch, R. (2013). *Qualitative research: Analysis types and software*. Routledge.
10. Thau, A. P. (1991). Vision and literacy. *Journal of Reading*, 35(3), 196-199.

Paper History:

Paper received September 21, 2022, Accepted January 11, 2023, Published March 1, 2023