ARE 361: Fundamentals for Lighting Design
HW #6: Lighting Design Analysis—Psychological Impressions
Assigned: Period 5.2
Due: Period 7.1

ASSIGNMENT SUMMARY
This exercise is intended to further your ability analyze how architecture can be rendered and revealed with light. It is specifically intended to extend your sensitivity concerning subjective experiences and/or behaviors that can be reinforced by light in the designed environment. Here you are asked to critically examine the luminous environment with an eye toward identifying and analyzing why and how some luminous environments have the capacity to reinforce some specific subjective experiences through their use of light.

LEARNING OBJECTIVES
Upon completion of this exercise, you should be able to:
- Recognize the components of light (sometimes also called “layers of light”, or luminous characteristics), that reinforce psychological and/or behavioral outcomes for occupants.
- Analyze images of illuminated environments with an eye toward identifying how the design team employed techniques for psychological and/or behavioral reinforcement.
- Annotate images using words and terms common in architectural lighting.
In achieving the above, you will add to your image collection, which you can use to explain to others how light renders architectural form and influences the mood and behavior of building occupants.

LEARNING OUTCOME MAPPING

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<thead>
<tr>
<th>Course Learning Outcome</th>
<th>ABET Student Learning Outcome</th>
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<td>2. Analyze lighting design solutions by identifying the components of light (sometimes called “layers of light”, or luminous characteristics) that were employed in design.</td>
<td>7. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies. [Maps to course learning outcomes 1, 2, 3, and 4.]</td>
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READING
Review the “Psychology of Light” series by John Flynn that is posted on the Canvas website. The previously assigned “How to Communicate Light” article is also still relevant. Chapter 6 Light and Perception and Chapter 12 Lighting Techniques and Details from Livingston’s Designing with Light are also both relevant. As with the previous image-collacting assignment, this assignment focuses on just two of the five forms of communication described in the “How to Communicate Light” article: images and words.

FINDING IMAGES
The images may be photographs you have taken or images you find online or in magazines. Use of a generic search engine like Google Images is not likely your best route to finding suitable
images. Instead, consider searching lighting trade magazines, lighting award programs, or the websites of lighting design firms:

Lighting Trade Magazines
- **Lighting Design + Application (LD+A):** This is the monthly magazine of the Illuminating Engineering Society. LD+A is an excellent resource that you can access through Oregon State’s University Membership.
  
  Username: ies@oregonstate.edu
  Password: ie$2021OSU
  The above username and password will allow for 10 simultaneous logins.
- **Arc:** A magazine focused on lighting in architecture.
- **Professional Lighting Design:** Projects published in PLD usually describe process as well as the design outcomes.
- **Architect Magazine:** An online magazine that includes some lighting content. See especially the “AL Design Awards” pages.

Lighting Award Programs
- **IALD Design Awards:** The International Association of Lighting Designers (IALD) has an extensive online library of award-winning projects, from 2004 to present.
- **IES Illumination Awards:** The IES has been building their online library of award-winning projects. The archive of past award winners includes (Note: It is easier to view high resolution images of projects from 2019 and earlier):
  - 2021 IES Illumination Awards
  - 2020 IES Illumination Awards
  - 2019 IES Illumination Awards
  - 2018 IES Illumination Awards
  - 2017 IES Illumination Awards
  - 2016 IES Illumination Awards
- **LIT Lighting Design Awards:** This is relatively new awards program that includes a wide range of categories, including awards for projects, products, and people.

Lighting Design Firm Websites
- Lighting designer firms often use their websites as marketing tools to showcase their work. The IALD website includes a directory of IALD lighting designers [LINK]; use that directory to locate lighting design firms.

IMAGE COLLECTING
Collect images that exemplify reinforcement of the psychological impressions listed below. Briefly annotate the images using the same type of annotation techniques previously discussed. Unlike the previous annotations, in which you were also asked to provide a critique, you need not provide a critique. Focus only on identifying the features of the luminous environment that support the psychological or behavioral reinforcement conditions indicated below.

**Image #1**  
**Impression of Visual Clarity:** John Flynn asserts that the impression of visual clarity is reinforced with bright, uniform lighting mode, with some peripheral emphasis, such as with high reflectance walls or wall lighting. Select an image that exemplifies these features.
**Image #2**  
**Impression of Relaxation:** John Flynn asserts that the impression of relaxation is supported by a nonuniform lighting mode with peripheral (wall) emphasis, rather than overhead lighting. Select an image that exemplifies these features.

**Image #3**  
**Impression of Spaciousness:** The image need not be of a spacious interior, but must illustrate and explain how light has been used to enhance the impression of spaciousness for a given environment. John Flynn asserts that impressions of spaciousness are supported by uniform, peripheral (wall) lighting, where brightness is a reinforcing factor, but not a decisive one. Select an image that exemplifies these features.

**Image #4**  
**Reinforcement of Guided Circulation:** The image must show an example of a situation where the lighting design provides constructive orientation, providing cues about a path, thereby lessening disorientation and providing navigational guidance. See especially article #2 from the Flynn series in Electrical Consultant titled “Orientation as a Visual Task”.

Focus on lighting vocabulary when you write your annotated captions. Map the luminous conditions (e.g., planes of lighting emphasis and intensity) to the techniques advocated by John Flynn. The focus should be on how light and lighting reinforce the above impressions, rather than architectural layout or interior decoration. Choose words about light and lighting that are technically correct for the situation. Write crisply and succinctly.

Refer to Assignment 03: Lighting Image Examples, Annotations, and Critiques for some examples of one method of annotating images.

Provide a citation for each of your selected images. One preferred format for image citations is that of the American Psychological Association (APA). For guidance on the APA citation format for images, refer to THIS LINK.