

EVALUATION: DIPLOMA PROJECT

Student: Rafail Afandiyev
Project: "Integrated Daylight Design in Czech Floral Conservatory"
Ústav: Prostorového planovani, 15121
Advisor: Henry W. A. Hanson IV
Opponent: Doc. Peter Kumble PhD
June 9, 2018

Introduction:

The subject of daylighting is of the authors interest. In order to effectively develop both research and a design proposal within one semester the site and the general topic were from my guidance.

Portfolio:

The portfolio table of contents suggests a reasonable structure for explaining the research, case studies, analysis and proposal development. However, the text is difficult to read with numerous distracting grammatical, syntactical and word choice errors. It is understood that the author is not a native English speaker; however, it is recommended that in the future the author uses an editor to review text in documents such as this diploma portfolio. The drawings of the proposal are missing valuable information such as indication of north, location of where sections are cut, reference for elevations, location and labeling of construction sections, etc. This leaves too much for the reader to figure out in order to try to understand the design proposal.

Generally, the portfolio is difficult to follow, particularly by someone that is not familiar with the project as it is fragmented, it is more of a rough draft ready for critical review and more development.

Research & Analysis:

A brief overview of the qualitative and quantitative aspect of light is provided on page 14; describing the engineering orientation to quantity and the architects orientation to quality and stating that an intent of this work is to "...encourage overlap between qualitative and quantitative factors throughout the design process"; unfortunately, there is virtually nothing that follows other than a very brief discussion of light quantity, visible light and photosynthesis.

The site analysis recognizes some of the basics but would benefit from at least some summary findings of the analysis such as SWOT and Constraints and Potentials. The photographs of the site included in the portfolio have no reference and it is not possible to understand why they are shown.

Case studies seem to have captured more attention of the author. It would be helpful to understand why these case studies were selected and what contributions these case studies make to the development of a proposal.

The Design Proposal:

The project design uses some basic ideas to structure the development of a proposal; inside /outside, the wall, and city /park. These ideas are used as formalistic forces to give the proposal shape. However, function and systems are not a part of the design 'forces' shaping the proposal. For example, sunlight, ventilation and visitor flow through the facility.

The graphic and textual description of the design proposal leaves some important questions in addressed / unanswered.

- Why are the interior and exterior functions organized the way they are and how do people move through the building; guests, staff, students etc.?
- How is the exhibition organized in the curvilinear building such that it is synchronized with the life inside?
- How does daylighting create an appropriate environment for the selected interiors, quantitatively and qualitatively?
- From a building systems perspective, how is daylighting integrated into an efficient and effective indoor environment?

The structure of the building is based on two primary elements, a reverse curve massive wall and a curved glazed diagrid. Very sparse information is offered about these two elements, It appears that the steel ribs are on the exterior, why? What is their dimension? What are they steel? How are they coated? Are there any operable sections? What is the shading system made of and how is it controlled? Is the steel arch really pocketed into the concrete wall? Does the concrete wall extend above the roof as naked concrete? With a coping?

Finally the exterior site areas of the proposal is minimally developed in spite of their important role in the idea of the proposal.

Conclusion:

The subject of daylight is certainly important to architecture; however, it needs to be in an integral part of design proposals, as the author recognizes on page 14. The proposal offers some basic ideas that need both more investigation and development in order to propose a compelling proposal. Therefore, my evaluation of the Diploma Project of Rafail Afandiyev is D; Satisfactory.

Henry W. A. Hanson IV
Head, Landscape & Architecture Studio
hansohen@fa.cvut.cz