Abstract

The main aim of this dissertation is to look into the architectural aesthetics of long span structures. Long span structure acts as a constraint both structurally and architecturally. It would be interesting to look into how architects deal with this constraint in making of architecture. The author identifies a few characteristics from modern architecture with the emergence of new technology as the basis for discussion of a variety of structural systems, that are different in nature. The scope ranges from free-standing buildings, depicted by tent, shell and frame, to the integration of large spaces within a building.

The discussion would begin with an introduction of long span structures, its definition, reason and architect's role. A brief description of the historical background is given before the understanding of the structural principles of individual systems. The architectural aspects are then studied into and supported by case studies. Lastly the summary and conclusion will put an end to study. This discussion may not be exhaustive as the related scope of work is enormous.

Further recommendations for this field of would be a detail study of individual studies, for example tensile structure has a variety of forms. But as an architect, the author believes, should learn more than one system, unlike Frei Otto or P.L. Nervi who specialise on this subject.