

Master's Dissertation at the Div. of Structural Mechanics



STRUCTURE AS ARCHITECTURE

Louise Pedersen and Jonas Täljsten

Presentation

Spring, 2007

Report

will be published as
report TVSM-5149

Supervisors

Göran Sandberg, Professor
Avd. för byggnadsmekanik, LTH

Kent Persson, PhD
Avd. för byggnadsmekanik, LTH

Morten Lund, Architect, professor
Copenhagen, Denmark

The work is performed at

Div. of structural Mechanics
and Div. of Architecture and
Built Environment, Lund Inst.
of Technology, Lund University

Background

Throughout the history it has mostly been the same person that both design and construct a building. The so called "Master Builder" handled both with the architecture and the durability of the construction.

With the industrialization and new technical development the work became so complex that it was necessary to divide the "Master Builder" into two central professions. The architect and the engineer became now two different professionals who should work in cooperation. The two professions slid more and more away from each other during the years. Nowadays this trend has turned around and both architects and engineers have understood that if development of new complex architecture shall continue it is necessary to have a near collaboration, work together and above all have an understanding for each work and profession.

Programme of Civil Engineering and the Division of Architecture and Built Environment at the Programme in Architecture. Jonas Täljsten a student in architecture and Louise Pedersen a student of civil engineering have decided to design and construct a museum of Modern art in Warsaw. The building will be constructed in such way that both the architectural form and the mechanical force play together. It will not only show general cooperation between the two professions but also how modern architecture can be developed throughout a positive collaboration between form and structure.

Contents

This Master Thesis will be about problems that can appear in cooperation between architects and engineers and how they may be solved. The thesis will also deal with a building project. It is collaboration between the Division of Structural Mechanics at the



LUND
UNIVERSITY