

# Architecture and Engineering: Some Notes on Collaborative Design Pedagogy

MAICHAEL E. GAMBLE  
Harvard University

Increasingly complex architectural projects demand approaches which rely self consciously on collaborative team efforts. As educators, we are similarly challenged to develop new models for studios and seminars which encourage exploration into design as a multidisciplinary endeavor — one that defines architecture as a synthesis of art and engineering. Too often, architecture and engineering are presented within the academy as separate entities, and comprehensive explorations into the relation between these two disciplines are lacking. Beginning with Gottfried Semper's theory of making as the poetic essence of architecture envisaged through a logical method of invention, this presentation will compare and analyze through cultural/historical inquiry and construction detailing the evo-

lution of the curtain wall as a collaboration between disciplines. A quick survey of specific examples by Oud, Gropius, Mies van der Rohe and Le Corbusier will introduce the suspended entrance wall at the Channel 4 headquarters in London by Richard Rogers and Ove Arup as a current model for discussing new methods of collaboration. By closely examining the working method between Ove Arup and Partners and Richard Rogers, we may begin to define and discuss new pedagogical models which comprehensively explore the role of engineering in architectural design.

*Editor's note:* The full text of this paper was not available at time of publication.