Turning Function into Form

Historic shifts in Modernist Architects’ creative process.

Atli Magnus Seelow
Dr.-Ing., Architect, Project Leader History and Theory
Chalmers University of Technology, Department of Architecture
Gothenburg, Sweden
atli.seelow@chalmers.se

Abstract
Since the debate between Henry van de Velde and Hermann Muthesius at the 1914 Werkbund Exhibition in Cologne over the issue of individual versus standardized types, the discussion about turning Function into Form has for over a century held an important place in Architectural Theory.

The aim of this contribution is to trace the historic shifts in this relationship between Function and Form – from Art to Science and Politics:

First, how Functional Thinking was turned into an Art Form. This orginated in the Werkbund concept of artistic refinement of industrial mass-production. It is later picked up by Walter Gropius and developed into a design methodology – searching for a task’s nature or purpose. Gropius’ quest for nature is influenced by the circular Arts & Crafts argument to aestheticise the functional form and to declare »the useful« beautiful. A similar line of thought can be found with Le Corbusier who refers to the mathematician Henri Poincaré to find a »solution élégante« to solve the dilemma between »machine à habiter« and the poetic and lyrical play of pure geometric forms.

Second, how Functional Analysis was applied to design and production processes; focused on certain functions, such as economic construction management or floor plan design. This starts at the turn of the century with the invention of scientific management and assembly line production. In the inter-war years this finds an expression in various rationalization endeavours, e.g. of insolation, floorplan design, movement patterns or construction management, and leads after World War Two to a kind of construction industry functionalism whose goal of capitalistic maximization even contradicts the needs of the users.

Third, how Architectural Function was used as a social or political argument. This is of particular interest during the interwar years, when functional arguments are utilized in an ideological and political sense as a means in the political class struggle.

A comparison of these different aspects of the relationship between Function and Form reveals that it has undergone a number of fundamental shifts. These shifts are tied to historic developments and are in large parts dictated by the historic context.

It is also interesting to note that the major shifts in emphasis – from Art to Science and Politics – happened in a fairly short period of time in the first half of the 20th Century. Yet this can be explained by the need to react to the rapid historic changes, i.e. need for artistic refinement of industrial mass-production, the necessity to employ scientific methods to overcome the economic problems after World War One and to participate in the radical political discussions of the 1930s.

It is fair to say that the major aspects of this relationship between Function and Form – Art, Science and Politics – established in first half of the 20th Century are still in use today as Design Strategies. So the question remains, if these suffice or if they are to serve as stepping stones towards a new poetic rethinking of the relationship of Function and Form that contemporary values may require.

Keywords: Modern Architecture, Functionalism, Form, Art, Science, Politics.
Key references