

## **The Laboratorisation of Architectural Form: translating and adapting the residential highrise**

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Sigfried Giedion is amongst the first architectural critics considering the scientific dimension and the laboratorisation character of modern avant-gardiste architecture. Looking back at the 19th century he reflects on the 'internalisation' of the connection between science and life when he writes in 1928: "Our inner attitude today demands of the house: Greatest possible overcoming of gravity. Light proportions. Openness, free flow of air: things that were first indicated in an abstract way by the constructional designs of the past century" (Giedion, 1995 [1928], 93). For Giedion, it is not simply the architect who gives way to the engineer, nor does the "encroachment of the engineer-constructor signif[y] the encroachment of more rapid, industrial means of design" (94), but architecture "had to create the elements of collective design" (99). For Giedion modern design is not created by the individual architect, but is made in a laboratory where new materials and construction methods are – in his words - 'pressed on' the architect.

Taking Giedion as our starting point, we intend to respecify the implementation of collective design in modern architecture and especially in post-war highrise housing construction. We will turn to two distinct implementation problems of the state-sponsored residential highrise.

Firstly, conceived within avant-garde continental modernism (e.g. Le Corbusier's *Unité d'habitation*), then mainstreamed into state building programmes across the globe, the residential high-rise was repeated with a unique rigor in the history of human habitation. Bruno Latour (1983) has shown that successful distribution of centrally created technologies depend on how we are able to reproduce 'laboratory conditions' in the field. In Britain, we find such laboratory conditions inscribed in the Parker Morris Report of 1961 (British Ministry of Housing and Local Government Report *Homes for Today and Tomorrow*). We discuss this document as one of the main design tools that was advising on and *translating* standards for state-sponsored housing into architectural projects.

Secondly, we will revisit the scientification of the residential highrise by looking at sociological studies that were researching the pathology of the new estates from the 1960s onwards (almost as soon as highrise housing was completed and occupied). Following Marianne de Laet and Annemarie Mol (2000) in their study on the Zimbabwe Bush pump we document that successful distribution and implementation of technological artefacts is possible when technologies and human agents are adaptable to local contexts. In the paper we consider how highrise sociologists have been able and creative in translating the highrise into their own work. It is through such studies that 'social facts' such as, for example, vandalism, social exclusion, crowding found their way into the existing network of architectural and housing provision expertise.

We find that the laboratorisation of architecture and in our case the scientification of the residential highrise is a collective process in which material and social

components of a building assemble in particular ways. This conclusion leads us to a more flexible understanding of terms such as Modernism and modern attitude. It also raises questions about the plasticity of the category 'expert' in architecture.