

## Case Study: The Mannheim Theater Grou Serra

### Introduction

With the competition project for the Mannheim Theater in 1953, Mies van der Rohe proposed one of the clearest and strongest examples for a clear span structure he had done so far. The proposal incorporated a defined and complex program within a single unifying hall – perfectly demonstrating its strength and pertinence as a solution for complex space problems.

As pointed out by Ludwig Hilberseimer, The Mannheim Theater project was Mies' first public project<sup>1</sup>, preceding his commissions for large office buildings he later built. Franz Schulze also pointed out that the "Mannheim [theater] was by far the largest single building he had ever undertaken".<sup>2</sup>

Not only was this project of a very large scale, but also being a public building, it is dealing with a level of complexity – perhaps even bureaucratic complexity – unmatched by the architect until then.

The Cantor drive-in restaurant His first true attempt at a clear span structure could be traced back to the Cantor Drive-In restaurant, a building that was designed between 1945 and 1950 [ill. 1]. The project has been little studied, yet its significance shouldn't be diminished.

Mies himself seems to have given it

a particular importance, the project occupies 229 pages of his published archive, compared to the 83 pages dedicated to the Farnsworth house for instance.<sup>3</sup> Liane Lefaivre points this out in her article<sup>4</sup> about the restaurant and its significance not only for affirming the universal space as an approach, but also as Mies' establishment in the American architectural discipline by working on what is a quintessentially American project – a drive-in restaurant in the sprawling urban fabric.

### Two theater projects

Following that, in 1947, Mies van der Rohe worked on a theoretical proposal for a theater. This is his first attempt at applying the principles of a universal space and a clear span to a theater project [ill. 2]. Although influential on the Mannheim proposal, its speculative nature didn't require the complexity the actual competition did, and the result shows some discrepancies and lack of detailing regarding several programmatic, spatial and structural needs.

In 1949, one of his students, Reginald Malcolmson worked on a proposal for a theater for his thesis on Mies' own recommendation.<sup>5</sup> This sparked a very close collaboration between the two architects and the resulting project could – and perhaps even should, be seen as an extension of the research Mies had started in 1947. By its very nature, Mies' education method didn't seek to reinvent typologies

at frequent rates, but rather refine and continuously develop previously unsolved problems. From this point of view, and due to Mies' high level of involvement in the development of the thesis, Malcolmson's theater can be seen as a direct continuation of Mies' first attempt. But again, the project seems to have encountered a similar development as that of 1947 – where by its very nature, and lack of support by factual constraints. Both projects undoubtedly make great use of the clear span structure by placing a completely free-standing auditorium in the space – very ahead of the established theater practices of the time – but remain fundamentally undeveloped. [ill. 3]

#### The Mannheim theater

Mannheim was therefore a first confrontation with reality for a theater scheme, with proper programmatic needs and a brief to answer to. The level of complexity he achieved was beyond both previous theater projects. And while we could see the complexity of the plan as a detriment to the clear span structure, there is almost a certain nonchalance to the approach; in a conversation with Christian Norberg-Schulz<sup>6</sup>, Mies simply stated that the complicated floor plans were in keeping with the requirements of the competition program, but the program itself would be enclosed in a clear-span structure. In the descriptive text submitted for the competition, he explains:

"I came to the conclusion that the best way to enclose this complicated

spatial organism was to cover it with a huge column-free hall of steel and colored glass or, to express it differently, to place this whole theater organism inside such a hall." <sup>7</sup>

The proposal for the Mannheim theater works on a 4 meter module, the overall dimension of the building was 80 meters by 160 meters, therefore occupying the full site that was given by the city for the competition. The height of the main floor was 12 meters, and the total height of the building above grade was 18 meters, with trusses 8 meters deep.<sup>8</sup>

The attention to detail for the Mannheim was staggering and went to show the importance Mies gave to the project. Although the time spent on the project was unusually short, just a few weeks, a considerable thought was put into it.<sup>9</sup>

The French architect Pierre Vago recalls going by Mies' office on one of his "good days" and seeing "young people there working with black blocks. They explained they were trying out variations for the corner pieces connecting the supports and binders for the Mannheim project. Mind you, this was not about a structural problem, but the architectural effect of a detail which, situated over 60 ft. high on the building, couldn't even have been seen!" <sup>10</sup>

For the competition, Mies submitted a set of drawings and perspective, all in strokes of uniform thickness [ill. 4], show the building without indicating the material or structure

- a job left for the massive model [ill. 5] that was produced and sent to the jury in Mannheim, the drawings themselves are merely compositional.<sup>11</sup>

#### After Mannheim

It is worthwhile to note that although the Mannheim proposal by Mies van der Rohe remained unbuilt due to incredibly political reasons<sup>12</sup>, he was offered to participate in the second round of the competition, but believing his work done, refused to participate.

The commissioned - and built - project was done by one of his pupils, Gerhard Weber, who seeing the strength of the initial plan, tried to keep some of the elements present in their teacher's work. It is also worthwhile to note that the completed project retains in fact very little of the subtlety and elegance of Mies' project [ill. 6], failing at capturing the fundamental move to enclose the "theater organism" within such a hall - a move that in and of itself, gave such a strength to the initial proposal.

#### Conclusion

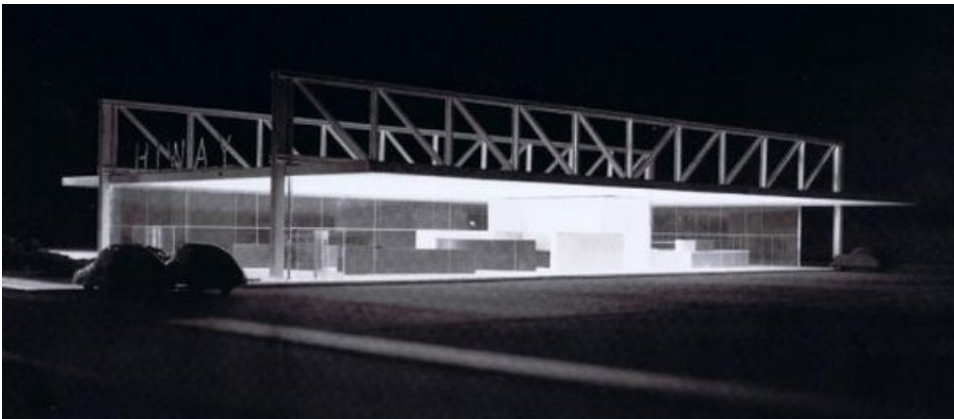
It can be argued that due to its complexity, the Mannheim theater does not pose itself as a purely universal space in the same way the Cantor restaurant, Crown Hall or even the first theater projects did in their vast openness. But it does something else, something more. It accentuates even more so

the potential of the clear span enclosing as a very viable solution to even such complex problems - and while it can seem very logical - in retrospective - to see the applicability of a universal space for a convention hall or an architecture school, it requires more depth and thought to apply it to a seemingly inadequate program such as that of a theater.

For this very reason, it could be argued that while the Mannheim isn't a true universal space in and of itself - where the space is left free in order to be used in several different ways throughout time, it integrates the program itself within a space, heightening it, giving it a strong credibility as a solution for complex problems and a very static program, and not simply where flexibility, or a certain ambiguity, is needed.

The Mannheim project is perhaps one of the best examples of what Mies attempted to do with his buildings, as explained in a conversation with Christian Norberg-Schulz:

"I try to make my buildings neutral frames in which people and art works can lead lives of their own. In order to do that, you have to respect things as they are." <sup>13</sup>

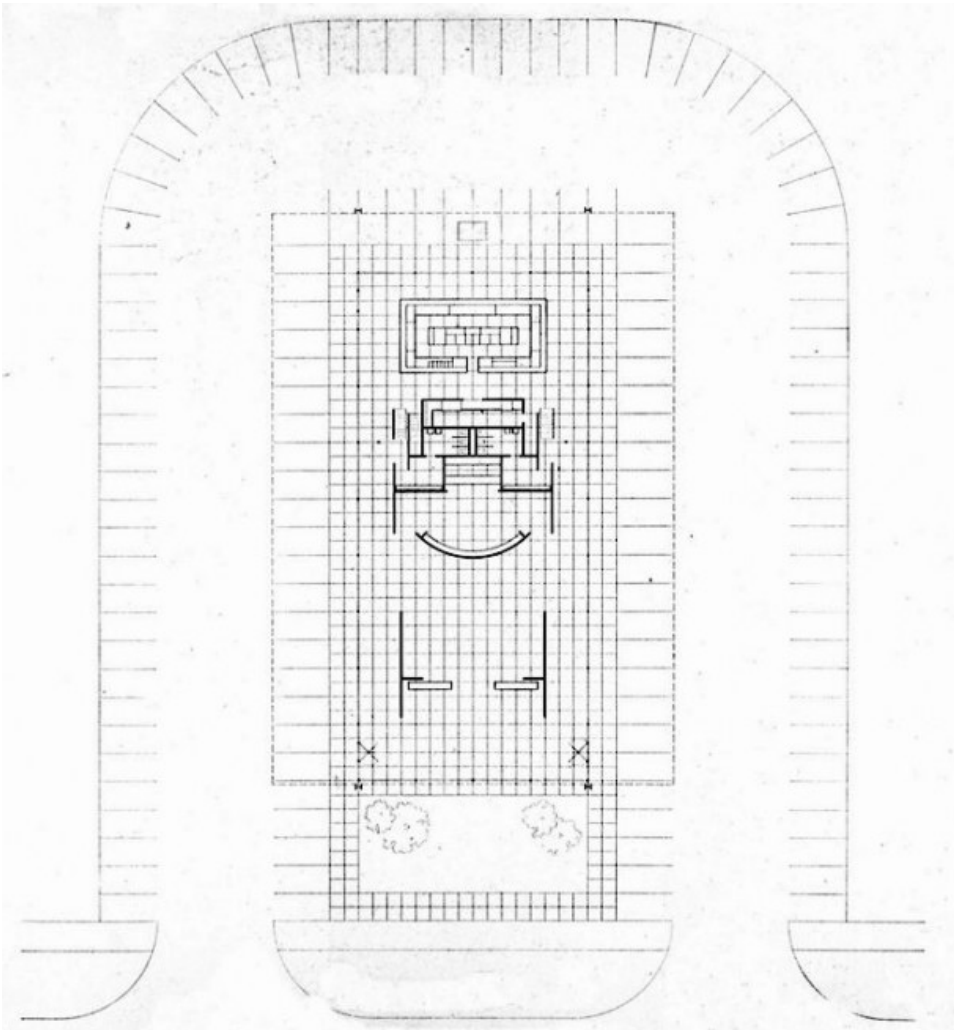


## Illustrations 1

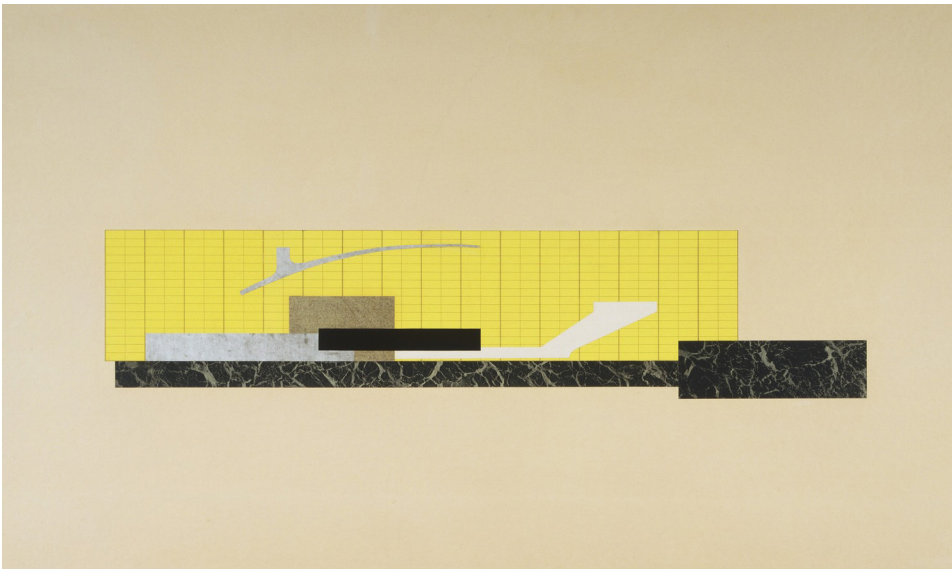
Cantor Drive-In Restaurant  
Ludwig Mies van der Rohe  
1945-50



Models



Plan

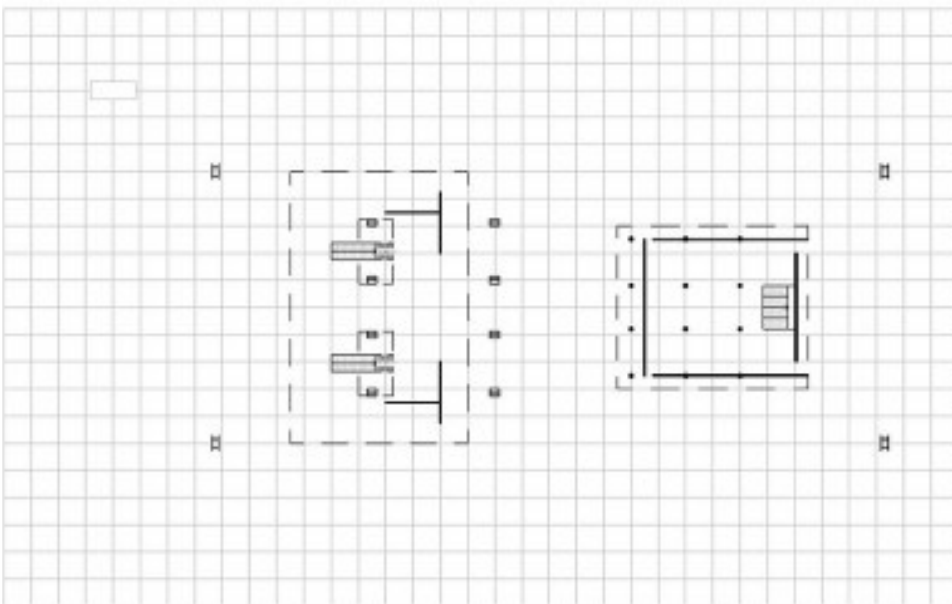


## Illustration 2

Project for a Theater  
Ludwig Mies van der Rohe  
1947

Credit: MoMA Archive

Collage

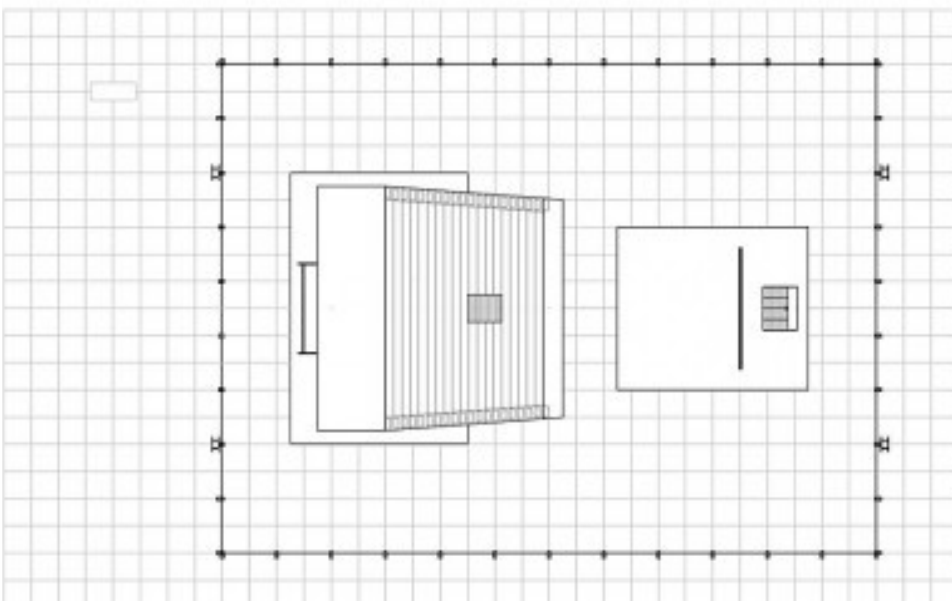


## Illustration 3

Master's Thesis / A Theater  
Reginald Malcolmson  
1949

Credit: Luciana Fornari  
Colombo

Ground floor plan

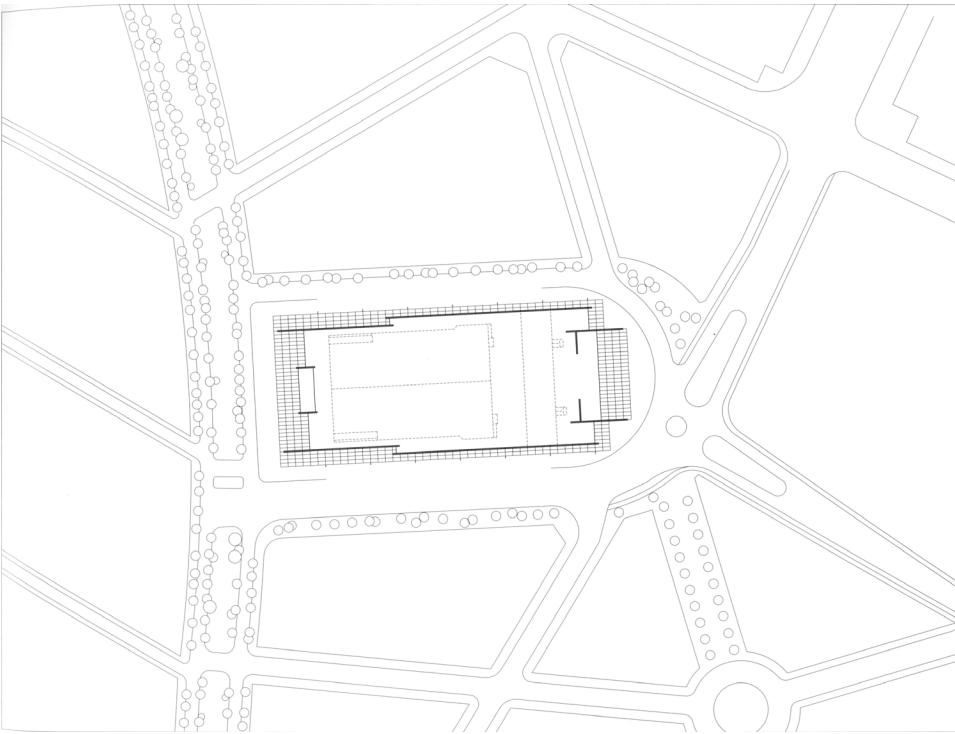


Main floor plan

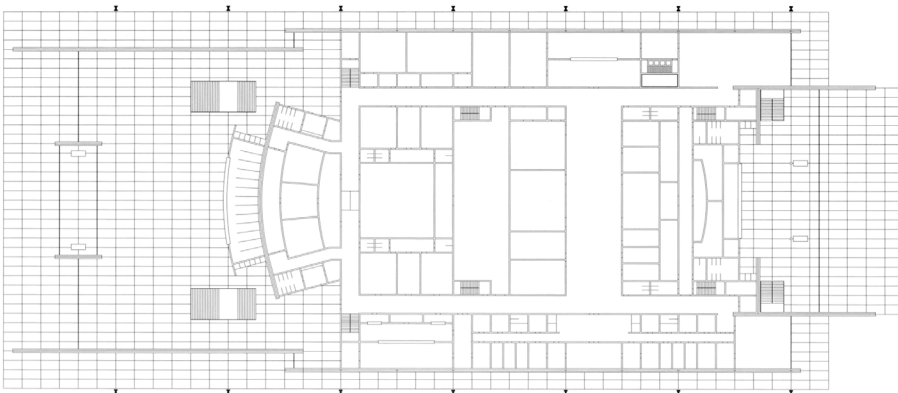


#### Illustrations 4

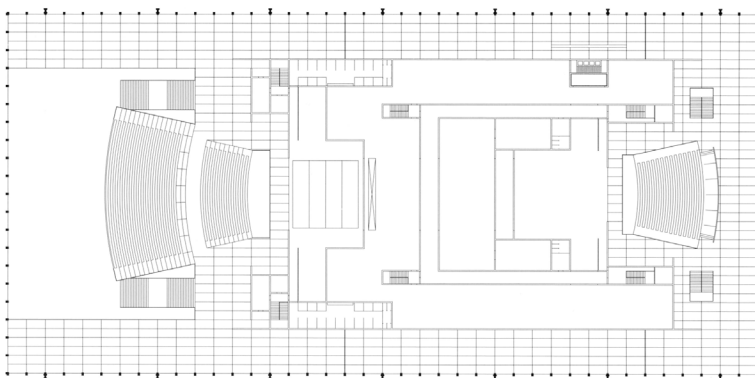
Mannheim National Theater  
Ludwig Mies van der Rohe  
1953



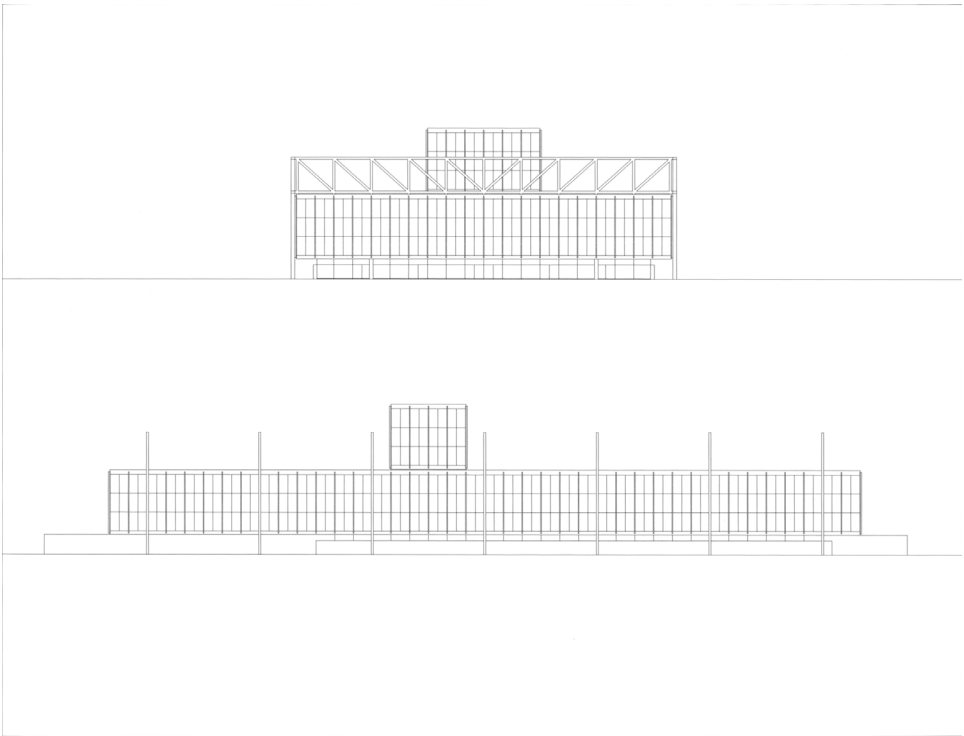
Situation plan



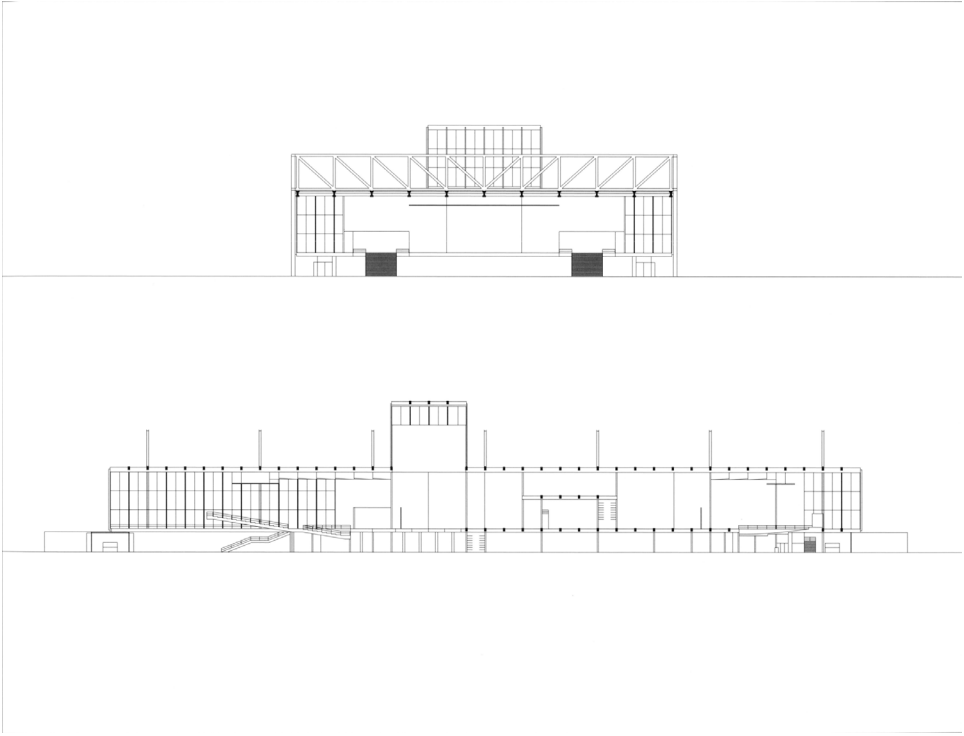
Ground floor plan



Main floor plan



Elevations

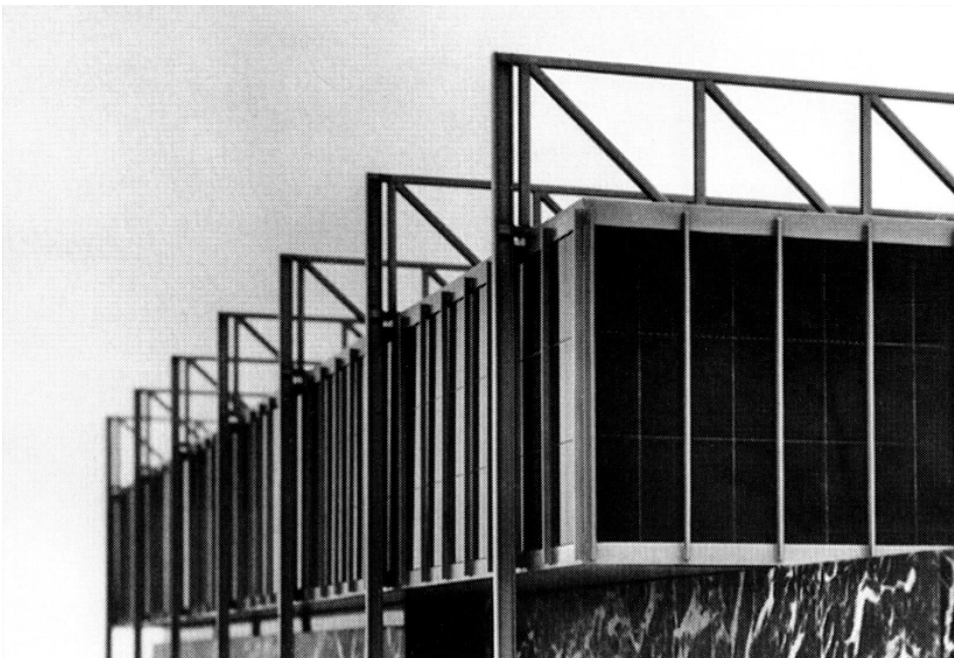
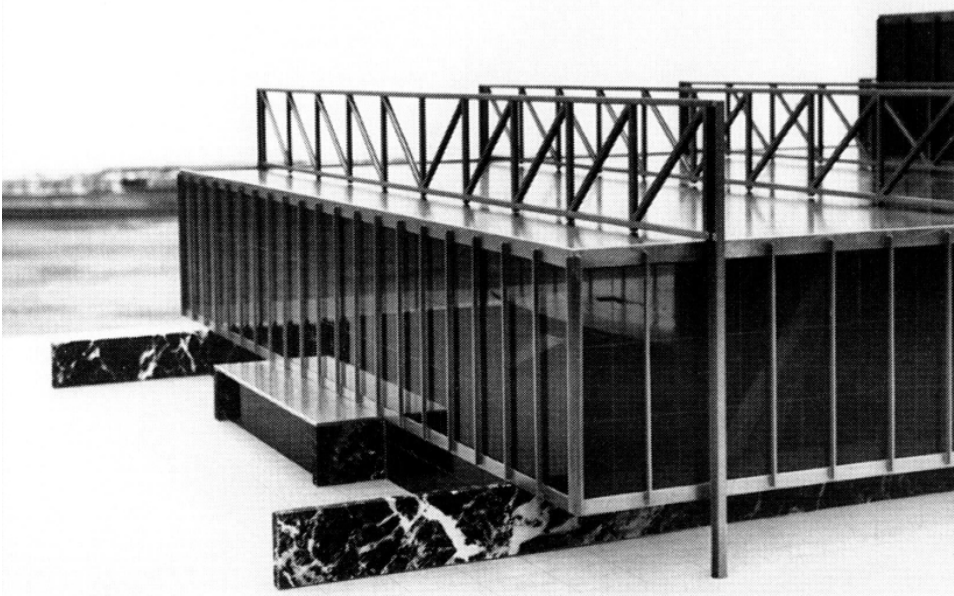
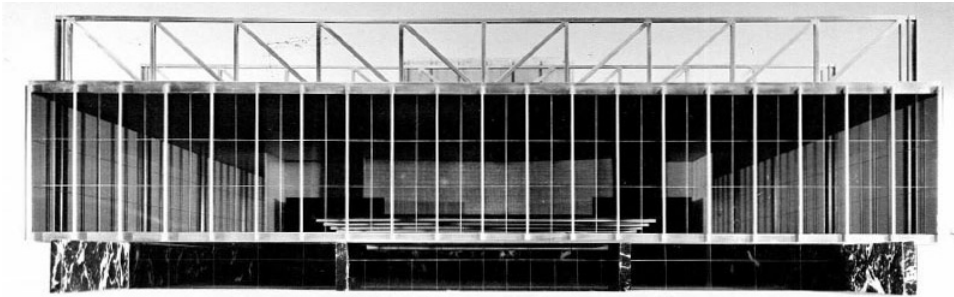
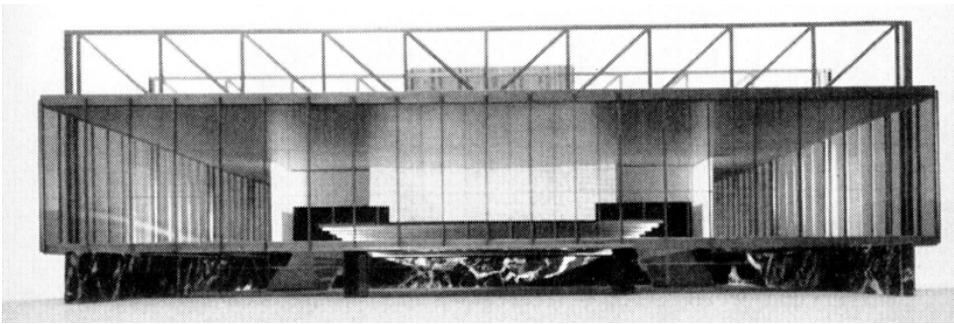


Sections

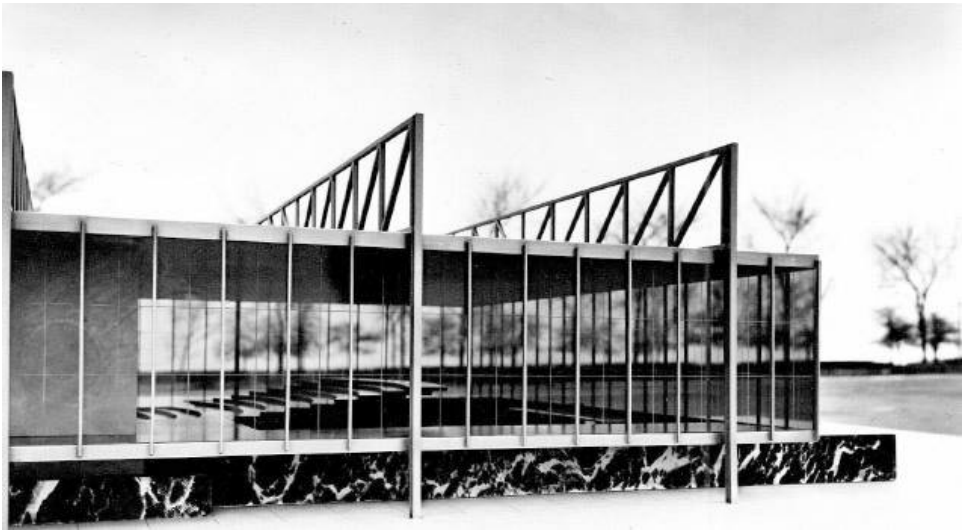
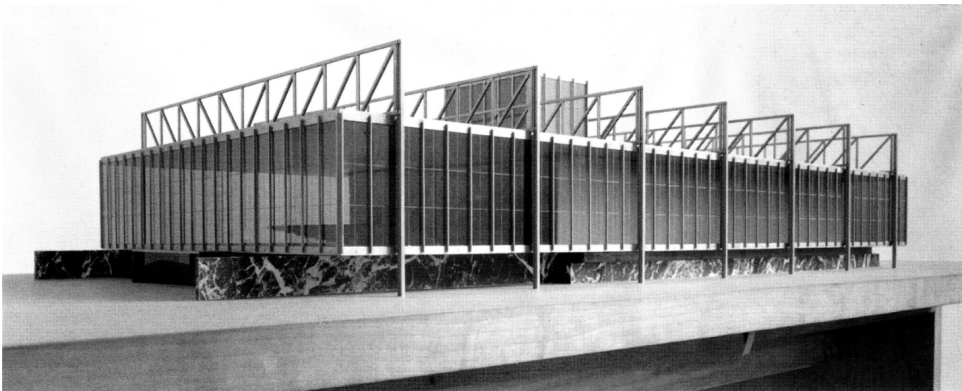
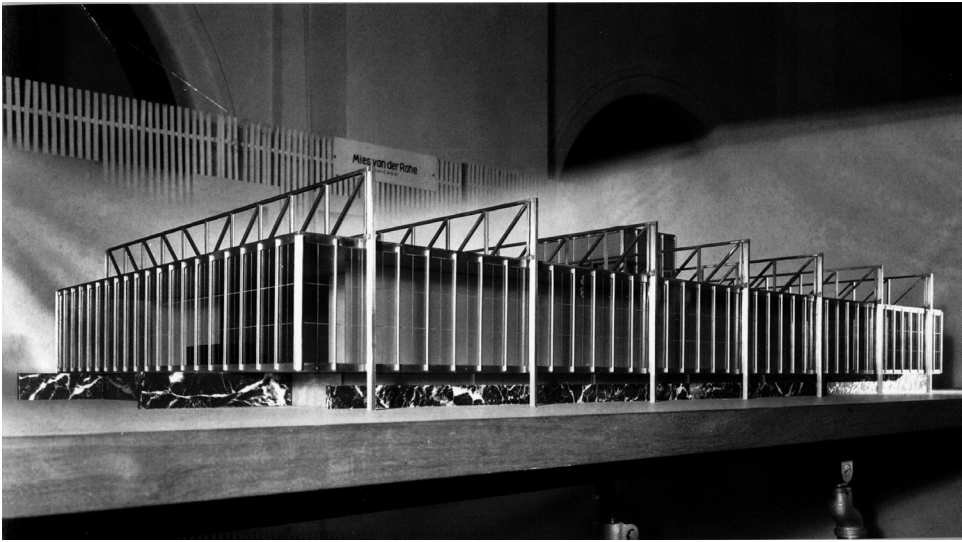
## Illustrations 5

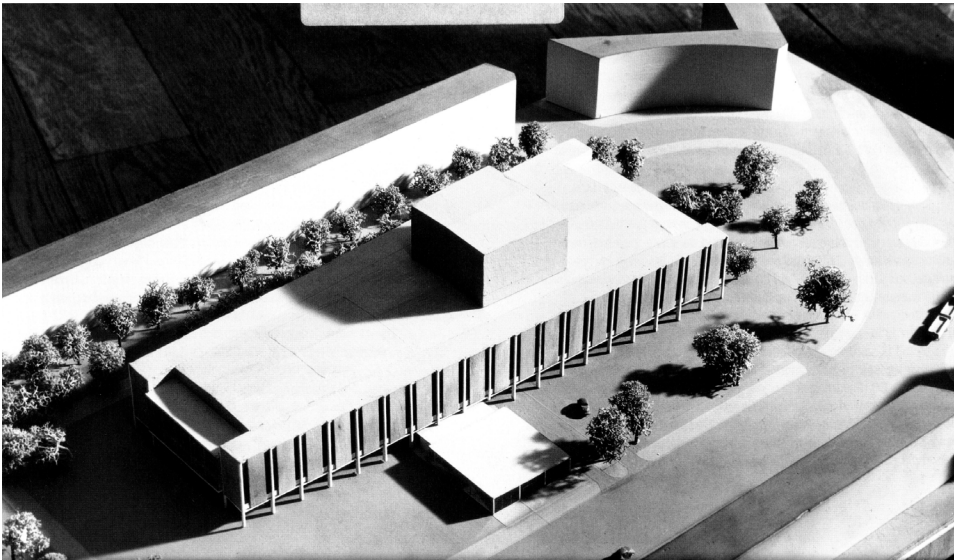
Mannheim National Theater  
Ludwig Mies van der Rohe  
1953

Credit: Artur Pfau, Bill  
Hedrich









## Illustrations 5

Mannheim National Theater  
Gerhard Weber  
1955-57

Credit: Artur Pfau



## Notes

- 1 Hilpert, Thilo. Mies van der Rohe im Nachkriegsdeutschland / Mies in Postwar Germany. Das Theaterprojekt Mannheim 1953 / The Mannheim Theater. 2001
- 2 ibid. Introduction.
- 3 An Illustrated Catalogue of the Mies van der Rohe Drawings in the Museum of Modern Art. The Garland Architectural Archives. Twenty volumes. 1992
- 4 Lefaivre, Liane. The Missing Diner Or: Dirty Real Mies
- 5 Malcolmson, Reginal & Blum, Betty J. Oral History of Reginald Malcolmson Interviewed by Betty J. Blum, 1987. Chicago Architects Oral History Project, The Art Institute of Chicago, 2004. p52-55
- 6 Norberg-Schulz, Christian. A Conversation with Mies van der Rohe. 1953
- 7 First published: Arts and Architecture, 70. October 1953. p17-19
- 8 Carter, Peter. Mies van der Rohe At Work. 1999. p92-93
- 9 Goldsmith, Myron & Blum, Betty J. Oral History of Myron Goldsmith Interviewed by Betty J. Blum, 1986. Chicago Architects Oral History Project, The Art Institute of Chicago, 2001. p47-48
- 10 Oral account, Briey-en-Forêt, February 24th 2001. From Hilpert, Thilo. Mies van der Rohe im Nachkriegsdeutschland / Mies in Postwar Germany. Das Theaterprojekt Mannheim 1953 / The Mannheim Theater. 2001
- 11 ibid.
- 12 Refer to previous book for more information on the matter, particularly the chapters of the after-math of the competition and the politics involved in it. ibid.
- 13 Norberg-Schulz, Christian. A Conversation with Mies van der Rohe. 1953