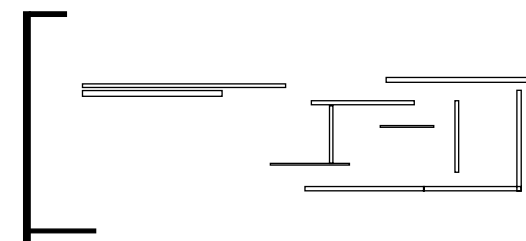
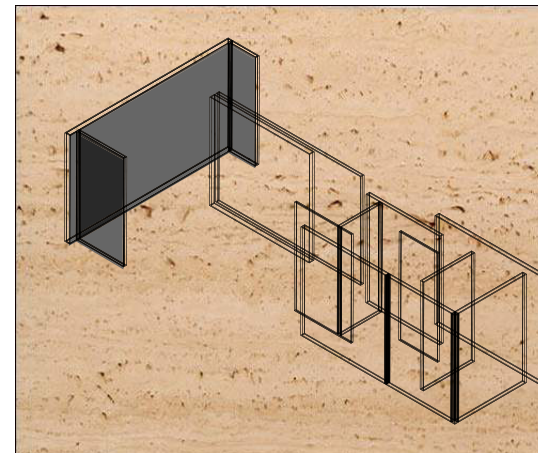
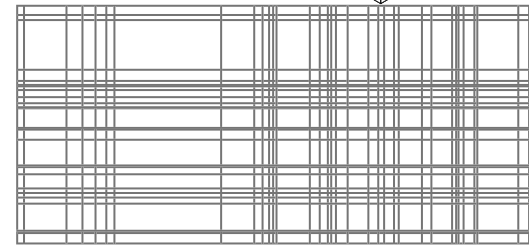
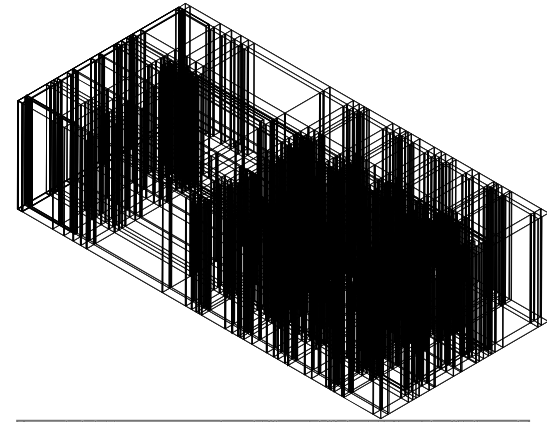


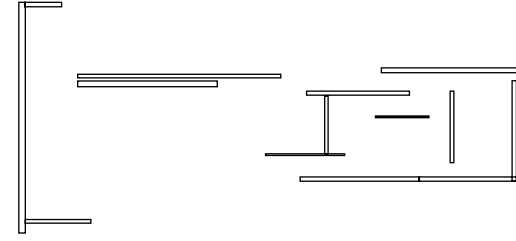
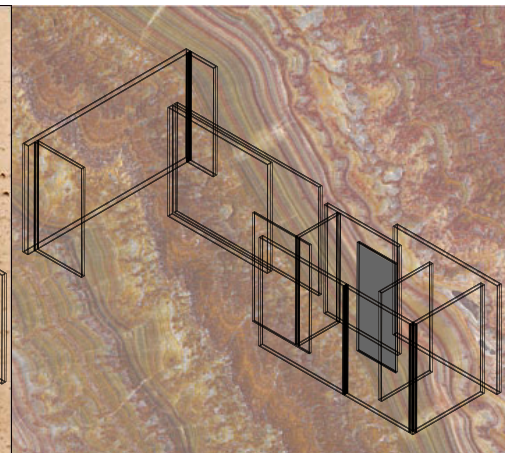


technique
barcelona pavilion
Heather Finley
EVDA 621 November 23, 2010

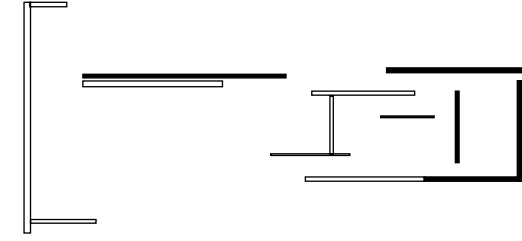
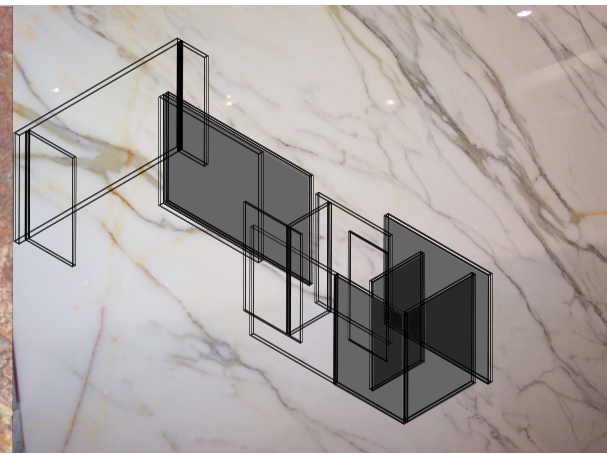
introduction of materiality



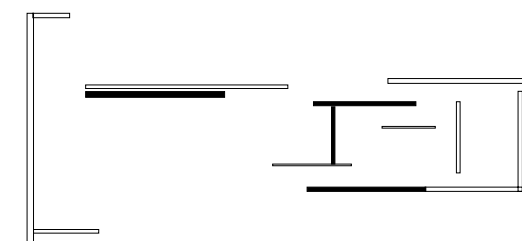
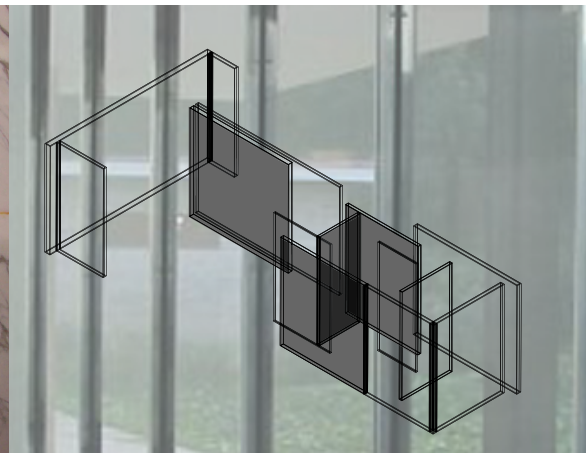
travertine



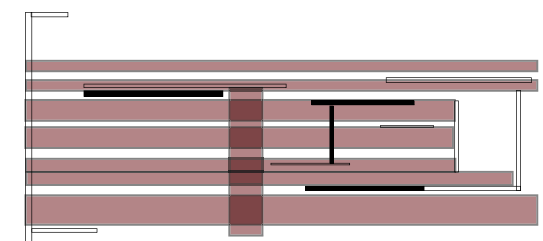
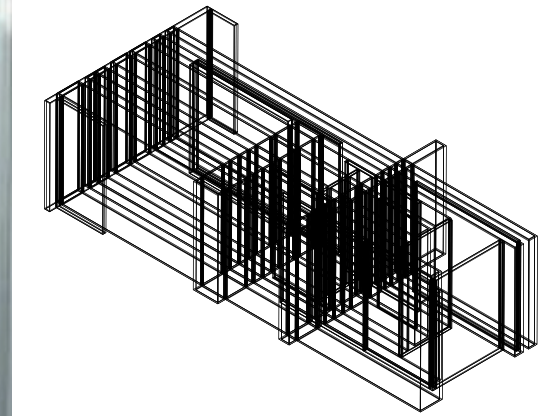
onyx



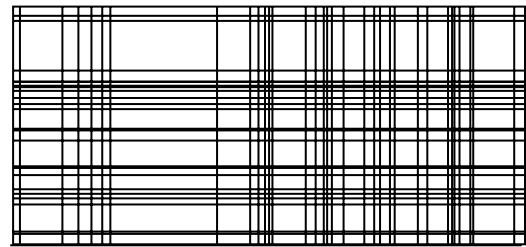
marble



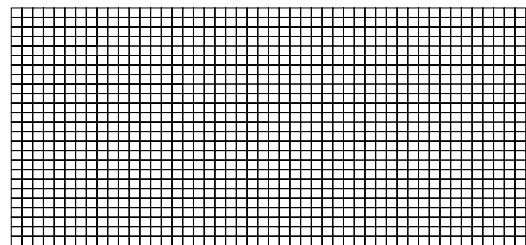
glass



materials placement
define views



remove to create voids



grid of lines, no materiality

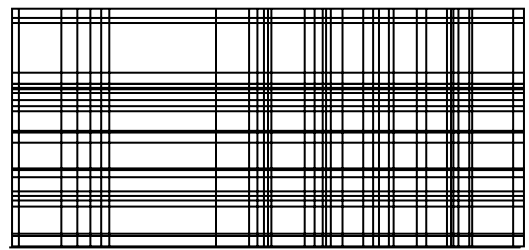
The creation of order in a mutable and finite world is the ultimate purpose of man's thought and action.

-Alberto Perez-Gomez-

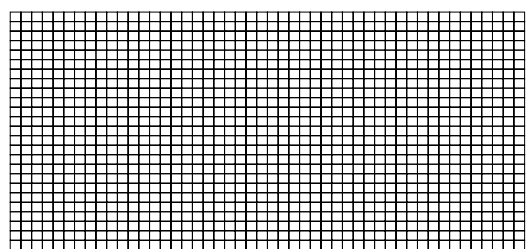
The statement by Alberto Perez-Gomez exemplifies Mies Van der Rohe's intention for the Barcelona Pavilion. His desire to represent the strength and power of the German Nation and her ability to rise up from tribulation and repression suggest that the methods he would employ in his design would be regular and allow for repetition. The final outcome also intimates that techniques grounded in order and regularity were used in the design. The context surrounding the instigation of the design provides the opportunity for the architect to employ the grid system in his design decisions.

grid for materiality

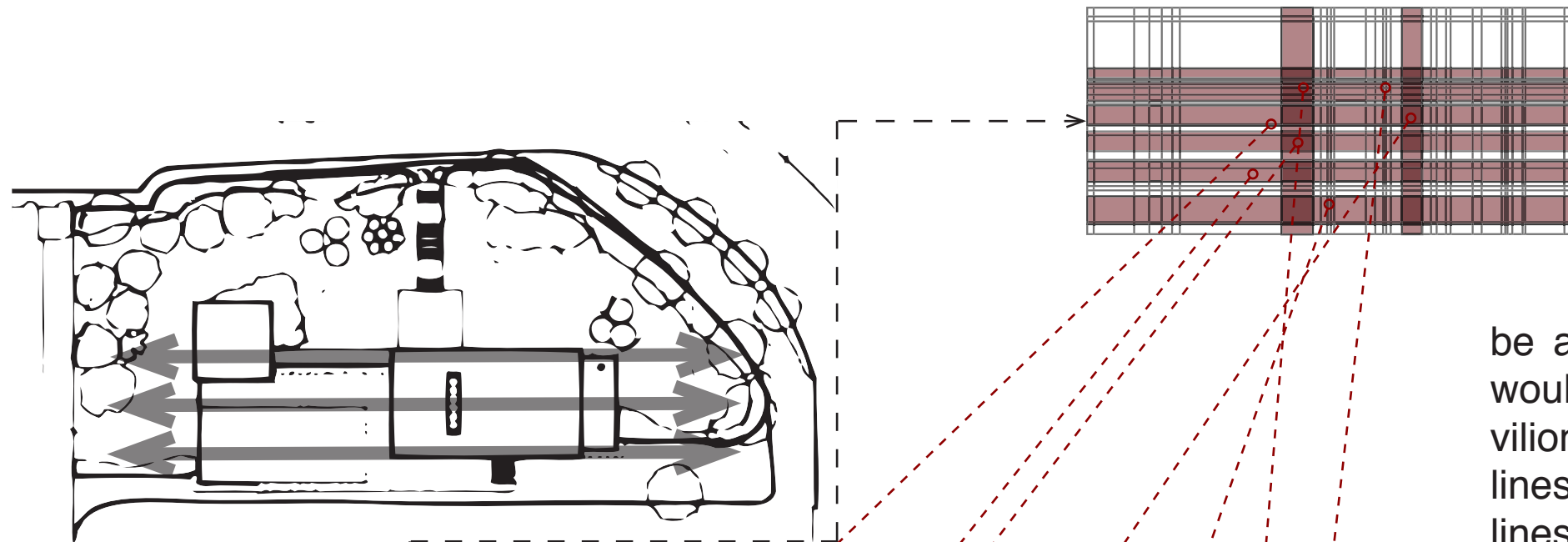
In his essay "The Structure of Vagueness" Lars Spuybroek describes experiments by Frei Otto involving strings of wool and water and the geometry that can be made with the interaction of the two. The result of the experiments demonstrated general principles that apply to a grid system technique (Spuybroek, 1996). The first step contained materiality with no geometry: a simple geometrical surface. In Van der Rohe's Barcelona Pavilion this would be the grid system. The second involved materiality: string and water, marble, onyx, etc. The third step involved a complexity between geometry and materiality in which the final mode is revealed. For both Otto and Van Der Rohe this involved taking the materiality of their chosen techniques and letting it define the space.



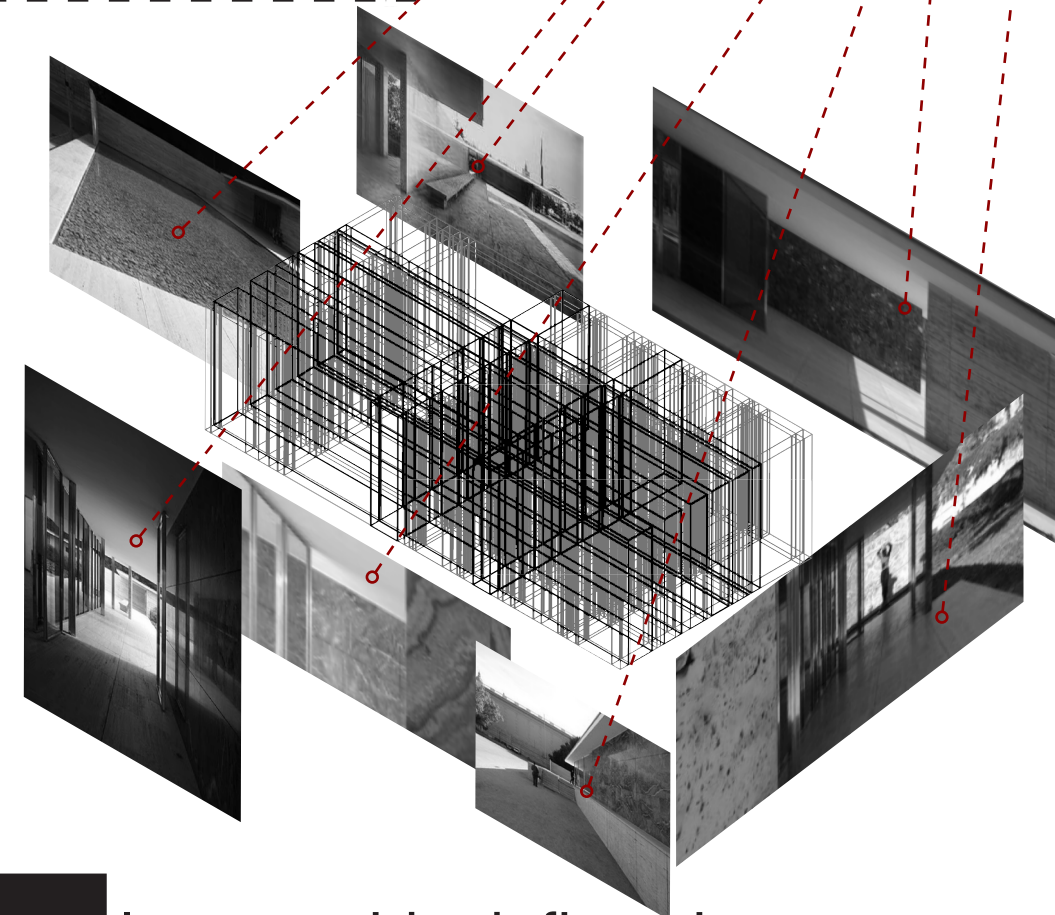
remove to create voids



grid of lines, no geometry



maximize views



larger voids define views

Cecil Balmond (Balmond, 1998) viewed the method of the grid system as making "frameworks ...out of a Cartesian compulsion" creating "exact subdivisions" and "repetitive fixings of space."

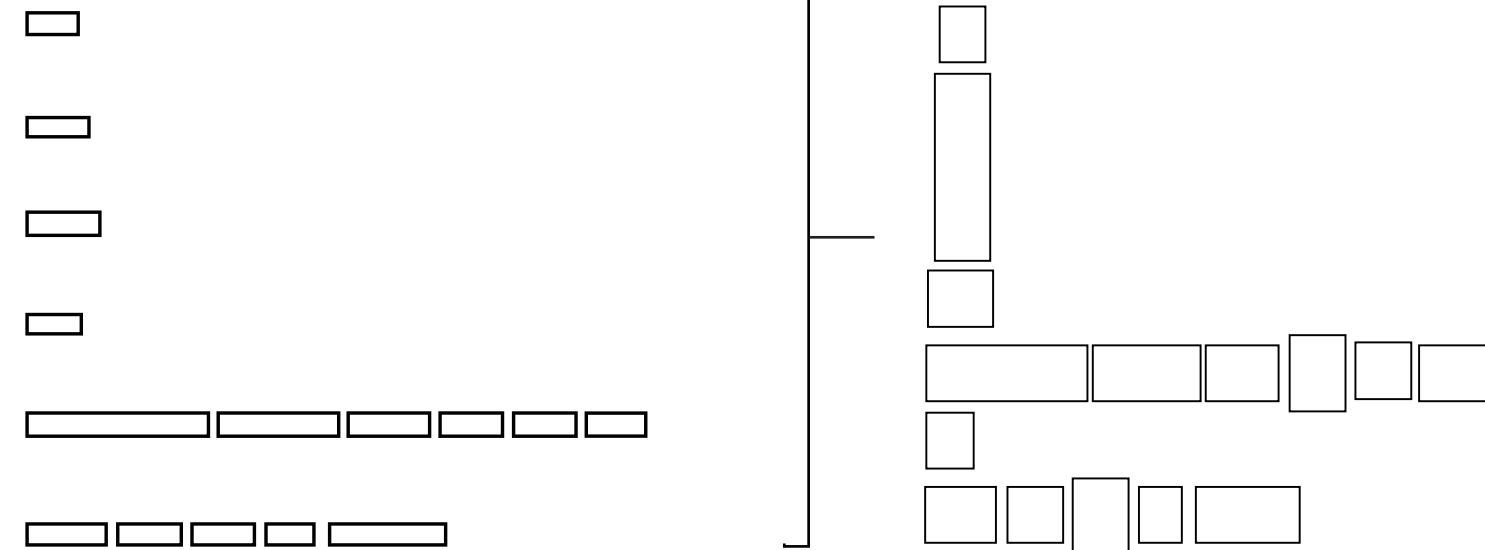
Although he perhaps thought this to be a negative aspect, this type of technique would have worked well in the Barcelona Pavilion in light of Van der Rohe's goals. Once lines from the grid are removed the remaining lines would serve three purposes: one to reveal where partitions and materials can go, one to reveal where possible views could be expressed and finally to maintain the straight and powerful face of the Germany that he wanted to be represented at the expo and after.

With specific lines removed the pattern created began to show areas where material could be placed. Taken together with voids that were created both of these aspects began to shape the views that Van de Rohe would want to emphasize. In this way he would be directing the subject's line of site and controlling what the subject could see. The result would most likely have been away from any potential "competition" and more of a representation of the strength in Germany.

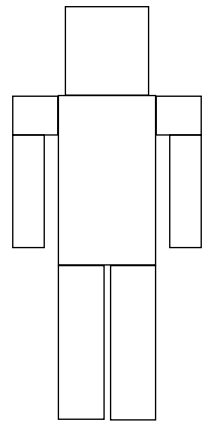
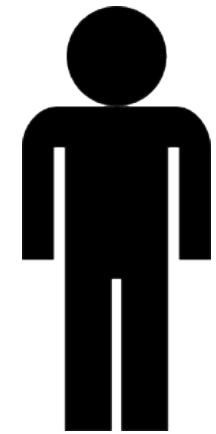
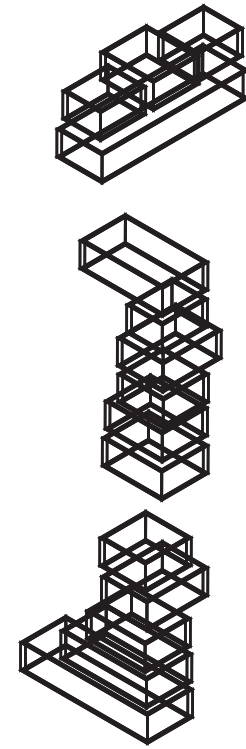
grid for views



mechanization of shipping
conatiners as example

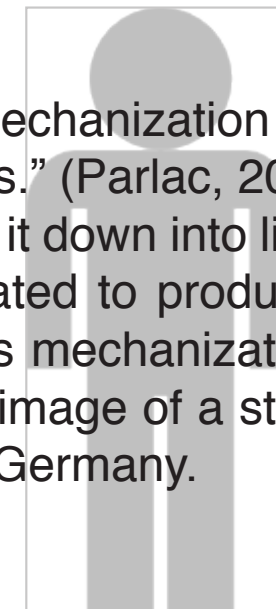


repetition: strength in numbers

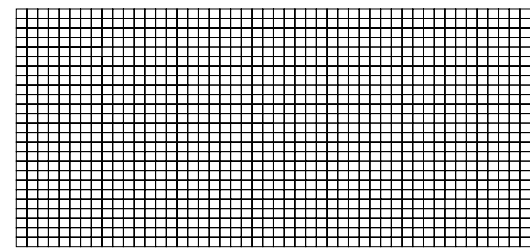


strength in straight lines

“One of the important aspects of mechanization is that work has to be dissected into its component operations.” (Parlac, 2010) In the case of the Barcelona Pavilion Van der Rohe broke it down into lines and rectangular boxes. These were then extruded and rotated to produce straight lines and clean edges throughout the building. This mechanization of the component parts of the building served to create the image of a strong and powerful building, representing a strong and powerful Germany.

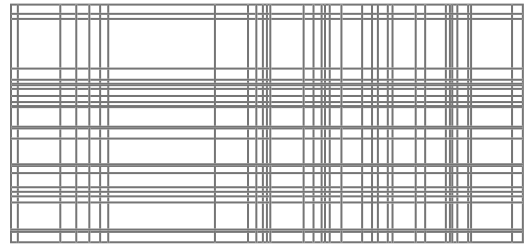


mechanization of gender

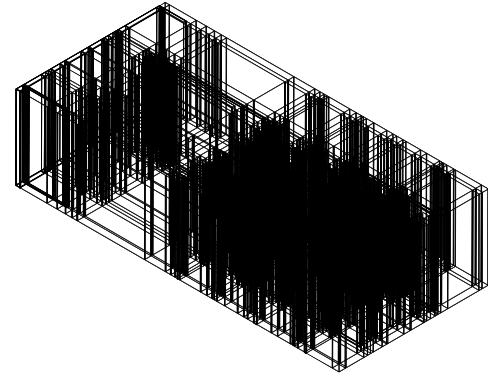
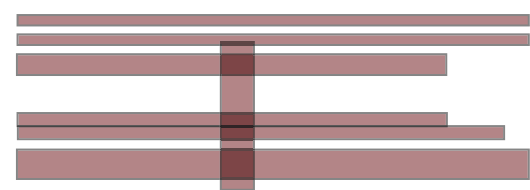


create Grid

remove lines based on lines of the building

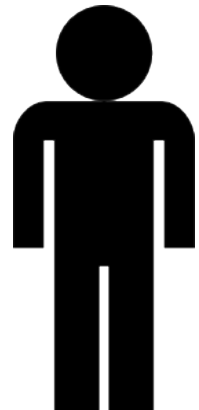


where would material go?
where would the views be?
how can the grid answer these questions?

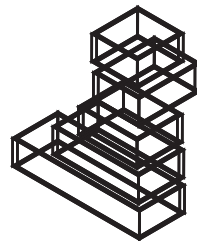


computer aided extrude and bevel to get a better understanding of the space

grid



what would it look like to combine the "strength" of a man with the repetition involved in mechanization? What kind of a building would you get?



The use of the grid system in determination of a design for a building that is to represent strength and durability proved to be a successful venture for Mies van de Rohe in the Barcelona Pavilion. The materials used, views created and lines projected gave the sense of a Germany that would rise again strong and sure of itself.

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