Communication and representation of the project: the Rietveld Schröder House in Utrecht
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The word representation, in its etymological meaning, means to present again, to make something known, to show and to reproduce reality by images.
Against the traditional means of architectural representation, such as drawings and models, the computer nowadays opens up new prospects and possibilities.
The thesis means to study in depth especially the way the computer can communicate certain specific architectural contents, starting from the analysis of an existing building.
In order to work out this purpose, the Rietveld Schroder House was chosen as subject of the research. On the other hand, the method was based on the comparison between the capacity of communication of a written text, as it can be deduced from the critics, and that of an image, accurately built in the two and three dimensions using different medias.

The Rietveld Schröder House in Utrecht (picture -1924)

By means of images different from the ones available in the existing books (usually drawings or black and white pictures), this representation intends to demonstrate and visualize all the features that define the space in the building.

Considering the existing texts and interpretations as a critical basis of the representation, the visualization of the same texts in images, entirely computer-implemented, is achieved. The aim of this thesis is not to carry out a new interpretation of the building, but to look for a new way of representing it, using the computer and trying to make use, at the most advanced level, of the recent available techniques, such as 3d programs and models and renderings.

Regarding the content of the representation, the first step is to understand the building that is going to be analysed and to have the most deep and detailed knowledge of it, to pick out then the information to be used and visualized.

In the study of the representation of the Schroder House, the so-called "architectural language indicators" were first considered – divided in spatial articulation, structural archetypes, morphological archetypes, distributive elements, furniture, materials and colour – checking for a comparison and for the role they play in the real existing building. In this way the vision of both the entire building and the single parts was fully conscious and complete of all the meanings, formal and not-formal, main responsible for the perception.

As this knowledge of the building has been acquired, the real and effective content of the representation is made of images, visualizations of those sides and features that, according to critics, define the house space and its perception; that is to say the relationship between exterior shape and interior functions, the use of structural elements, the use of colour, and so on.
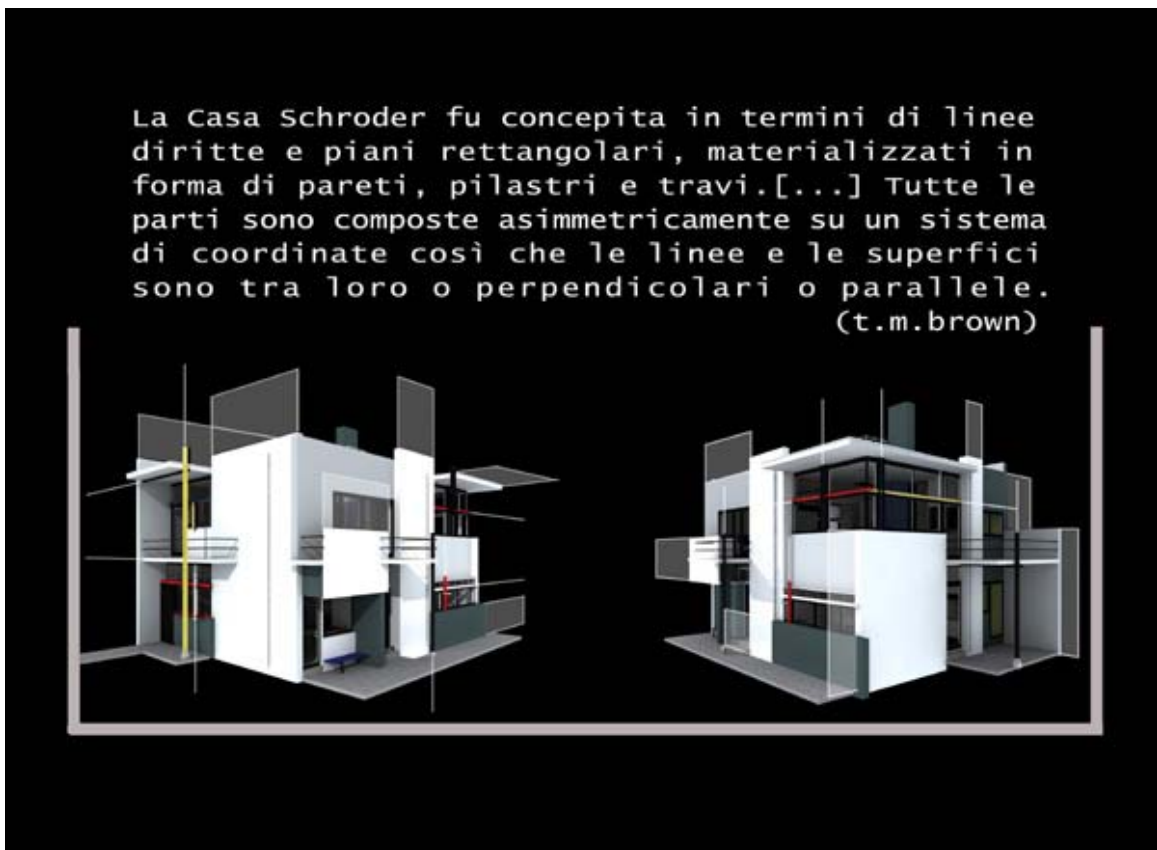
example of presentation of computer-implemented images
supported by the crytical text

Images are presented and supported by the critic quotations they intend to visualize. They have been divided into basic concepts, each defining a specific characteristic of the

architecture of the house; for every characteristic then, a corresponding representation was searched through images created starting from papers and surveys in the house. To accomplish this purpose, it has been important and useful to stay in Holland for two months in order to go often inside the house and to get the needed documentation.

To produce all the images it was first built an accurate 3d model with the available software (AutoCad and 3dStudio), reproducing the existing building in geometry as well as in materials. Afterwards, the same images were modified (in Photoshop) to fit them in the context and to increase the level of realism.

image of the first floor of the house created starting from the 3d model
and successively modified in Photoshop.

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