

# THE BAUHAUS LEGEND

## STUDENTS IN DARMSTADT REBUILD FORGOTTEN MASTERPIECES



*A glass office building by Mies van der Rohe interpreted by Michael Wiesner*

The tremendous impact that the Bauhaus had on architecture is legendary. Today the Bauhaus is undergoing a renaissance.

This current 1920s revival has come about mainly because of the striking parallels which have emerged between the 1920s and the 1990s. In the 'twenties people were looking for a new perspective, new hope after the old order had broken down. The modern archi-

ecture of the Bauhaus embodied that belief in the future and the search for a new world order. It was at the point when that new system for world order - Communism - broke down in the Eastern bloc that the current revival of Bauhaus architecture began.

Also the Bauhaus - sharply interrupted after only 14 years of activity - is searching to find a new orientation. Is it going to be an

experiment, or is the apparent Bauhaus revival after all the "-isms" we have lived through in the past decades still an experiment?

Obviously, it is worthwhile scratching the surface of architectural history in order to discover the designs for non-existing buildings and to visualize and document the ideas.

By means of state-of-the-art computer technology it is today feasible for the first time in the history of architecture to carry out "critical reconstructions". At the risk of losing the illusions and myths that surrounded them, frequently quoted masterpieces of famous Bauhaus artists were put to the test in order to decipher the spirit of their designs.

The works represented here are the result of a two-term senior class seminar at the Technical University of Darmstadt. Entitled "Bauhaus - seminar", it was jointly directed by Manfred Koob, Visiting Professor and Professor Johann Eisele.

At the beginning of the seminar most of the students had no knowledge whatsoever of CAD. Therefore in the winter term 1992/93 they were trained in CAD basics during weekly sessions and simultaneously were taught the theoretical background - in the form of block seminars - of actual Bauhaus projects "on the spot" in Dessau. The students' seminar projects were then worked out during summer term '93.

At the outset only the unpublished projects of Bauhaus architects and artists were to be elaborated, but because of the students' exceptionally high level of interest, the subject matter was extended to include the European avant-garde that marked the beginning of the Modern style. The list of elaborated projects includes the work of Walter Gropius, Hannes Meyer, Hans Wittwer, Mies van der Rohe, Oskar Schlemmer, Marcel Breuer, Bruno Taut, Theo van Doesburg who represented the De Stijl movement, the Russian Constructivists El Lissitzky, Leonidov, Melnikov and Tatlin, and Le Corbusier. The one factor that all the projects have in common is the fact that none of them exists. They were either built and then destroyed or were designed but never realised.

### **Objectives of the seminar**

The objectives of the seminar went beyond getting trained in CAD and learning to use all



(Below) Hannes Meyer's Peterserschule, Basel interpreted by Simone Mann. (Bottom left) Bruno Taut's glass industry exhibition pavillion interpreted by Sandra Hilbert and (bottom right) Tatlin's Monument to the Third International interpreted by Claudia Drilling/Matthias Wehrle and Birgit von Lukas/Andreas Bergmann

programme functions: by integrating a prestigious architectural subject - the Bauhaus - CAD training was more strongly incorporated with architectural studies. Additionally, students were highly motivated to intensify their CAD training as with it they were able to quickly test and complement the theoretical background learned in the previous term. Unsurprisingly then, participants in this seminar had much higher expectations of their course than participants in ordinary seminars, and, impressively, almost all of them had produced a finished model of their project by the end of the term .

#### Basic methodology and approach

Quite a variety of basic material for the projects was input into the system. The quality of this material varied widely - it was rare for all details necessary for CAD elaboration to be in existence and it was unusual for the drawings to be fully or even partly dimensioned. But with the aid of the architects' sketches or isometric views, and by analysing dimensions and their proportions, in most projects it proved possible to draw conclusions. Texts and other verbal statements of the architects in respect of colour, movement and means of projecting their particular design were taken into consideration as additional methodological bases for elaboration.

Thus, students not only faced the demanding task of progressing their chosen projects, but also had to study the entire oeuvre of the respective architect in order to work out what the missing project details could be. Comparable objects which architects referred to in various publications were thoroughly analysed by the students.

#### Model building and visualisation

In all projects, building areas and floors were put in as volumetric elements in various floor plan levels. From their combination volumetric models of sections or the entire building could be derived. Depending on the structures defined by the students, thus different storeys were realized upon each other or elements such as walls, beams, columns, slabs, roofs or facades were combined. Students then derived from one central building model elevations, sections and perspectives as well as floor plans. At the same time, precise quantity take-off of both



volumes and surfaces were carried out. All surfaces of building models were embellished with colours, textures and various light effects. Thus students created not only artificial horizons and skies, they also generated beautiful images and succeeded in representing virtual space.

As the technical requirements for adequate computer simulation of the project were slightly beyond the facilities at the faculty of architecture, some additional support was required from asb baudat, Bensheim. Thanks to this support, students were able to input their projects into high-performance graphic workstations and to produce impressive images of the projects with the help of experienced asb personnel. A video has been produced of these images.

We would like to express our sincere thanks to those who have supported the project: Hewlett-Packard for providing workstations and IEZ AG Bensheim for providing their AEC software speedikon.

#### How to interpret the results of project work

Although the students carried out precise research into details of projects and the intentions of the architects, they make no claims as to the completeness or accuracy of their work. Their completed projects cannot therefore be regarded as accurate overviews of the architects' or artists' completed works.

The seminar objectives and the projects realised by the students should be regarded as a promising experiment carried out within a limited period of time to link CAD training to thorough analysis of a famous architect's oeuvre. Thus, through the handling of a new medium, fascinating views of projects were presented - views that not only revealed the incompleteness of an architectural thought or a conceptual idea, but above all revealed the genius of these projects which could not be realised in their own time. Thanks to the use of a new technology, they have returned from oblivion to be appreciated by a wide audience. □

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