eaSt Elementares architektonisches Seh – Training basic visual training

University of Applied Sciences Berlin
Department for Architecture and Building Services Engineering
lab for cad in architectural studies
Luxemburger Str. 10 • 13353 Berlin - Germany

The research project “eaSt” concentrates on modules for enhancing our visual perception of architectural spaces (proportions, dimensions, lighting, colors, surfaces, atmospheres) through conceptual employment of media software (Photoshop, Indesign, Illustrator, Freehand, CAD - Software, 3D-modelling software), for usage in architecture and interior design as forms of computer-supported cooperative learning (CSCL).

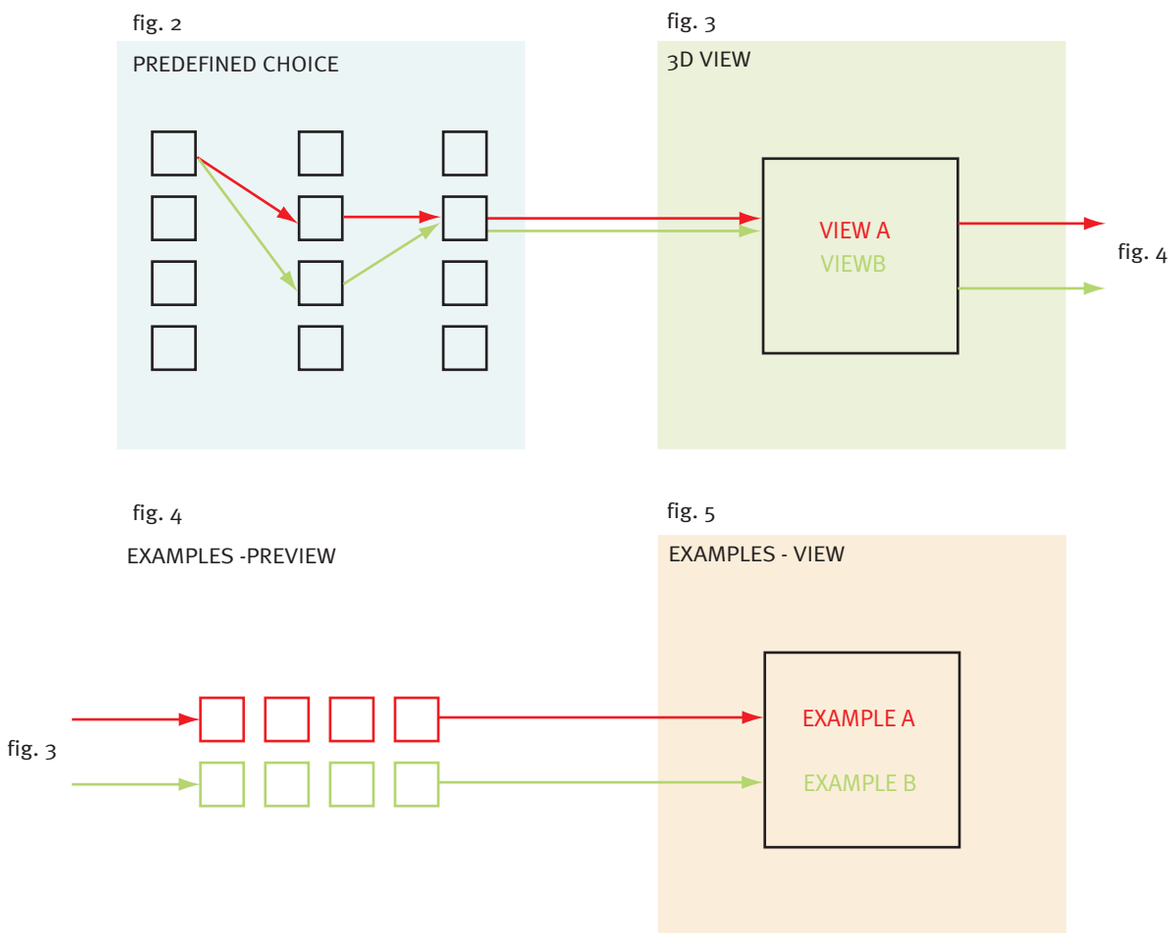
The modules extend consequently the possibilities for "classic exercises" and lectures on architectural design in the bachelor courses and seminars in the Architecture Department at the University of Applied Sciences Berlin. To each basic element of architectural design, selections of students' work are analyzed and broken down into individual elements (fig. 1) that can be digitalized (graphics, animations, short video clips, simulations and accompanying texts).

fig. 1

The modular system contains a navigation which enables users to create "one's own room" within a module through alterations of elements and their dimensions (for example the shapes of the corners and their height, width, lighting, etc.). Through alterations in "pre-defined selection" (see the diagram of the system, fig. 2 - fig. 5) the "three dimensional statement" layer changes automatically as well as its corresponding selection of "sample pictures ". Moreover, users are provided with further architectural design proposals according to their personal selections.

eaSt Elementares architektonisches Seh – Training basic visual training

Even though users may lack training in 3D-modelling software, this system enables them to design in detail one's own room through the system's multitude of selection and assembly options.



The aim of the research project is to provide students with the opportunity for "playful interaction" with essential design elements (forms, space, proportions, colors, light, etc.). At the same time the project is to train students to shape their perception of space through exercises and to introduce them to new media.

Technically the system is realized with Macromedia Flash/ActionScript in combination with XML. The advantage of this program and its software combination is the platform- overlapping system which is very easy for software designers to administrate. The system reacts to the alterations in contents by adjusting itself automatically; therefore, no further software skills are required (like Flash, ActionScript, XML) to work with the module structure and to update the data. The users, i.e. the students, receive a CD-ROM with a fully functional, self-triggering system which assists users without sophisticated computer and software knowledge by explaining itself while it is being employed.

eaSt Elementares architektonisches Seh – Training basic visual training

Test flows were and are carried out at the business of our cooperation partner (Dreispringer Mediengestalter). At the same time workshops were held in the basic study of architectural design at the University of Applied Sciences Berlin in the summer term of 2005. In the future the prototype is further developed with the results and evaluations of the field experiments with the students. Presentations are scheduled in the upcoming terms at the TFH-Berlin and at our international partner universities.

fig. 6

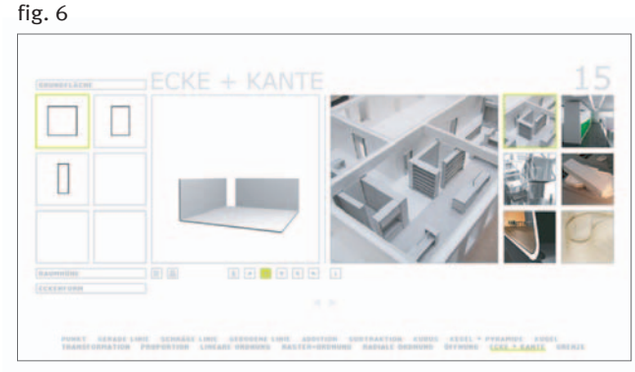


fig. 7

For further information please contact out homepage: http://architektur.tfh-berlin.de/east

Scientific assistant:

Dipl.-Ing. Architektur Dirk Müller | phone: 030 / 45 04 25 62 | mobile: 0179 / 46 58 336 | email: dmueller@tfh-berlin.de

previously: Dipl. - Ing. Ben Renner

Professorship:

Prof. Dr.-Ing. Susanne Junker | phone.: 030 / 45 04 25 62 | fax: 030 / 45 04 20 06 | email: suju@tfh-berlin.de

Co-operation partner:

Dreispringer Mediengestalter | phone:: 030 / 25 79 87 57 | fax: 030 / 25 79 87 59 | web: http://www.dreispringer.de

TECHNISCHE FACHHOCHSCHULE BERLIN
University of Applied Sciences

ESF
Europäischer
Sozialfond

DREISPRINGER