introduction
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in

virtual studio   distance learning in architectural studies

At the University of Ljubljana, the Faculty of Architecture has successfully practiced distance learning as a part of the regular study program. Two distinguished professors have conducted a studio entitled Architecture and New Media, an upgraded subject within the study program at the Faculty of architecture: Tom Kovac, Melbourne and Mark Goulthorpe (dECOi), Paris, have taught two groups of students. The communication within this study program has been taking place exclusively on the Internet.

CODE (concurrent design) or long distance project (via Internet) is a new step in the development of architectural presentation. The currently available software AutoCAD 2000i with the help of different website software enables this new way of graphic presentation of architecture that is at its best when using the long distance CODE project. Multimedia becomes the only possible method of work and design for architects collaborating in different parts of the world. The practice shows that this is also the only possible way of teaching architectural composition when students and tutors are physically dislocated, being in different countries of the world.

The result of this experiment has provided much surprise because of the quality of student projects. It is quite obvious that the level of graphic presentation is at least highly professional and creative. The students have proved to be extremely motivated by the new media and their challenges that coincided with extreme professional qualities of our visiting professors as well as with an excellent assistance of the young architects and computer experts from our faculty, Vesna Petresin and Rupert Gole.

reading space
Uroš Rosker

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Reading, also comprising the processes of watching and observing, is an increasingly complex activity that can involve various media. In my project, I tried to set some borders, but in the end I realised that even films as presented on TV and cinema could be read in a banal way (i.e. as in the case of subtitles). So I've decided to offer them all.

When designing my Reading room, I concentrated on the communication between the architecture and its user trying to establish a symbiosis between alphabetics and electronics, as it is the case with media, as well as between optics and chemics. In that matter information unleashes the colour effect. The body of a person reading is controlling the visual aspect of architecture; this means that the room is reading the subject's body thus transforming the results to premodified patterns. These patterns depend on the type and intensity of the reader's emotions that are being measured while the user/subject is reading a book or other media. It is that particular activity of reading that challenges him to respond emotionally. So the room is literally reading its reader.

Computer patterns have a range of colours defined according to the spectrum diagram. Whenever there are more readers present in the space I designed, there is an effect of colour mixing or even separated action parts making the feelings puzzle. The experience of the reader is subsequently shown on the facade of the building. The differences among characteristics of people as well as among books, their originality provide an enormous ammount of possible architectural scenarios; these are demonstrated as decoration.

The architectural form is developed out of four-sided hinge squares that can slide and move along two axes. They are mutually supported, carrying each other as the hinges are solid. Their individual movements are result of a path on the architecture's location.

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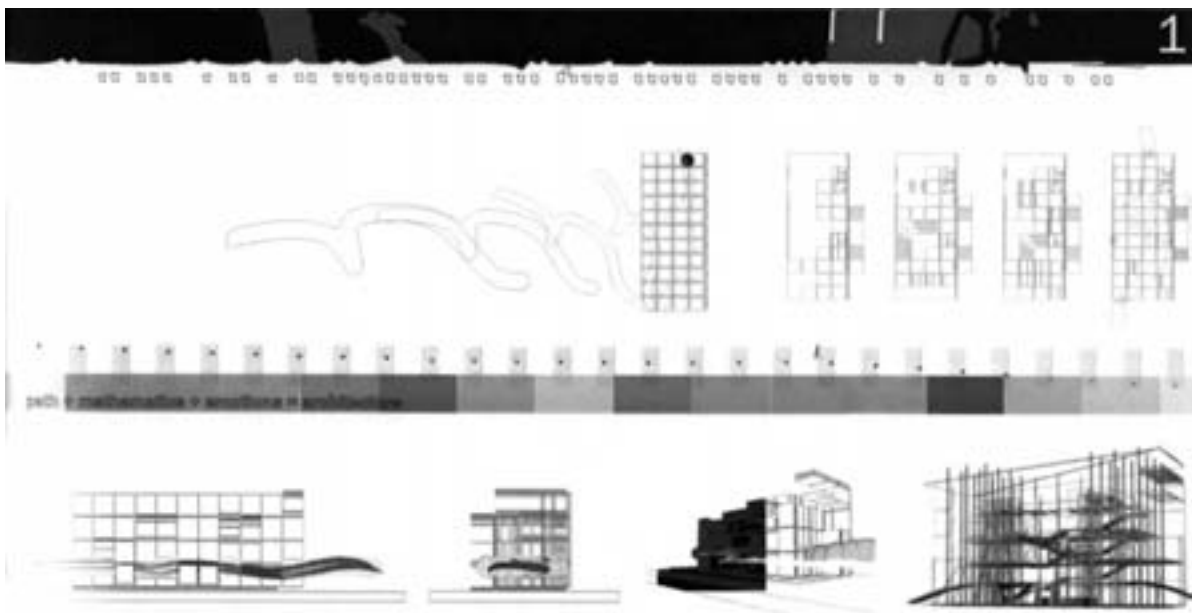
RAČUNALNIK IN METODA V ARHITEKTURI
THE COMPUTER AND METHOD IN ARCHITECTURE

raziskava, *research*

povzetek

Analitično delo, predvsem pregled obstoječe literature pretežno na Internetu in le delno tudi v klasični knjižni obliki, je omogočilo postavitev teoretične platforme za metodološki pristop do uporabe računalnika v zasnovi in prezentaciji arhitekture. Na tem arhitekturnem nivoju je uporaba računalnika bistveno drugačna kot na strogo inženirskih področjih. Izkazalo se je, da je računalnik v arhitekturi pravzaprav le nenadomestljivo in visoko sposobno orodje za preverjanje zasnovanih rešitev v dvodimenzionalnem ravninskem in tridimenzionalnem prostorskem smislu. Še boljše rezultate omogoča pri vseh načinih prezentacije arhitekture: dvodimenzionalnih risbah, tridimenzionalnih prostorskih prikazih in pri najvišjih oblikah prezentacije, ki jih stroka poimenuje kot spletne, multimedijske predstavitve in se kot take tudi lahko objavljajo na spletnih straneh Interneta. Prav spletna stran Fakultete za arhitekturo je tak projekt, ki je nastal kot rezultat te raziskovalne naloge.

summary

The analysis of the existing literature mainly available through the Internet and only rarely in the classical book form has made the launch of a theoretical platform for the methodological approach to the computer application in architectural plans and presentations possible. The computer application at the described architectural level significantly differs from the application in purely engineering fields. In the field of architecture, the computer reveals to be an indispensable and perfectly capable tool for the verification of the solutions planned in the two-dimensional plane or the three-dimensional space. The computer produces even better results when applied in all architectural presentation techniques, i.e. two-dimensional drawings, three-dimensional space demonstrations or web multimedia presentations and the state-of-the-art presentations which may be presented on web sites. The web site devised by the Ljubljana Faculty of Architecture, the result of the above-mentioned research project, is a brilliant example of such a project.

doseženi cilji, namen in rezultati

Rezultati raziskave dokazujejo, da so bili cilji in namen doseženi. Računalnik je bil metodološko umeščen v proces zasnove, izvedbe in prezentacije arhitekturne naloge. S tem se je bistveno razširil instrumentarij razpoložljivih orodij za projektiranje. Rezultati omogočajo aplikativno uporabo računalnika v vseh fazah projekta.

aims achieved, intentions and results

The results show that both the purpose and aims of the research have been achieved. The computer has been methodologically inserted in the planning, execution and presentation process of an architectural assignment. Thus, the projecting instrumentaria have increased significantly. The results obtained allow for a computer application in all the project stages.

problematika v arhitekturi, umestitev obravnavane teme v te tokove in njen pomen

Računalnik se je dodobra uveljavil v številnih zvrsteh človekovega dela. Najprej v inženirsko tehničnih, kasneje tudi v administrativno uradniških, v medicini, v raziskavah vesolja, v vojaških tehnikah in tudi v arhitekturi, ki s svojo posebnim mestom med tehniko in umetnostjo uporablja računalnik na svojstven način.

problematics, topic placement and significance in architecture

The computer has well established itself in numerous human activities, starting from those of an engineering and technical nature, moving into the field of administrative, bureaucratic and medical activities, space research and military applications, as well as in architecture where the computer plays a special role by bridging the gap between technique and art.

ključne besede

metodologija, računalnik, arhitektura, grafika, prezentacija

key words

methodology, computer, architecture, graphics, presentation