CITYSCAN - a digital urban experience

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Abstract: CITYSCAN is a series of interactive city documentations produced with contemporary multimedia techniques. It is offered as an elective course offered at the Department of Architecture by Prof. Dr. Ludger Hovestadt at ETH Zurich. Digital processing of information, multimedia programs, interactive presentations, teamwork and visualisation, are objects of investigation. A dense global CITYSCAN map elaborated together with students is our long-term goal.

Keywords: conceptual multimedia technologies, digital documentation, education

Introduction

CITYSCAN is a series of interactive city documentations. It includes different kinds of contemporary multimedia techniques, such as digital movies and photos, animations and games. Result of CITYSCAN is a hybrid multimedia DVD.

Possibilities to process digital information, which are mature in a technological way as well as artistically appealing, are focus of our interest. Combination between technical possibilities and conceptual requirements of interactive presentations are of great importance for us.

CITYSCAN is an elective CAAD semester course offered at the Department of Architecture by Prof. Dr. Ludger Hovestadt at ETH Zurich, and taken by approximately 20 students from higher semesters. Course and field research focuses on teachings of multimedia programs, interactive presentations, teamwork, visualisation and documentation.

Workflow

Until now Rotterdam, Barcelona and Warsaw were objects of our investigations. Approaching to a city is divided in three steps:

1. research
2. "seminar week"
3. DVD production

These are focussing on different tasks. As every step contains its own conceptional and technical requirements the course concentrates separately on content and technique.

Different software programs like Apple i-Movie, Apple FinalCutPro and BIAS Peak, for film and sound editing, and Discreet Cleaner, an encoding software, are in use. The main tool, however, is Macromedia Director. It is used to assemble edited data as an interactive presentation of high standard. Also Directors script language Lingo is of main interest. While programming specific tools and actions in Lingo the students determine the resulting software's functionality. It can be of different complexity depending on every single task. All students are required to create at least simple programs.

At the beginning of the course student teams in Zurich get acquainted with the city to be visited. Its architectural, urban, and social characteristics as well as literature and movies serve as stimuli for topics of further investigation.

In a second step, during the so-called "seminar week", research on site takes place. During that time photographs, films and interviews are digitally recorded. Scripts of future multimedia stories impose the structure of takings as much as possible. Nevertheless, on site a certain amount of improvisation and intuition becomes necessary.

Back in Switzerland, during the last part of the course, the collected material is edited and brought into a usable form. An exhibition of the CITYSCAN project presenting the interactive DVD concludes the course.

Working with a group of people on one project demands different organization of workflow then working alone. To avoid content repetitions and overlapping of work areas constant information flow between students and teaching persons, coordination of group members, and exchange of material are necessary.

During the first two courses the work process based on a scheme elaborated by Konrad Wachsmann (1901-80), a German architect whose interest laid in prefabricated wooden constructions. During his teaching activities in the United States he came to new conclusions about group work.

In his book "Wendepunkt im Bauen" (Turning Point of Building, 1959) he proposes a new form of teamwork. To ameliorate work results Wachsmann demands rotation of all tasks between groups. In that way every course participant obtains insight into every project and the possibility to work on it. Advantages of this method are distinct inputs and critical reflection on the own work.

In our case, the Wachsmann concept led only partly to sufficient results. Exchange of tasks provoked repetition in workflow and turned out to decrease productivity. All tasks were part of a bigger structure, the multimedia DVD, but remained independent in their conceptional form.

The amount of time needed for organizing groups and communicating between them was minimized with use of electronic equipment especially in forms of using a wiki based http server called swiki. We emphasize the use of it. Users of swiki can easily create and edit web pages, without use of awkward html editors or use of complicated content management systems. The initial learning curve for contributing information on a wiki based system is very low which makes it a very good choice to confront students with internet technologies. It also supports nicely group communication via common pages, where all group members may participate. In this way collective work gains on efficiency.

Therefore the last course used a conventional approach and every team stayed responsible for its own project.

Conclusion

The CITYSCAN course should be understood as part of basic education in CAAD offered by the chair of Prof. Dr. Ludger Hovestadt. The approach to multimedia tools is less scientific then intuitive and pragmatic. The education contains programming and visualisation of information as well as evolution of concepts. As observed this long-term knowledge finds use in different contexts such as semester presentations, diploma documentations as well as in student's activities as architect, whose medial appearance is often decisive for future success. These reasons and the popularity the course enjoys among students strengthen us in our efforts.

Further on CITYSCAN and a similar elective course named Re>>play, which won't be explained here, are both basis for several theses at the Chair of Prof. Dr. Hovestadt. They serve as experimental fields for exploration of digital data environments in connection with architecture.

Even though the exploratory methods of CITYSCAN were always the same resulting documentations appear very different. Every project is a unique contemporary document, which emphasizes the characteristics of every city visited. Our intention for the future is a dense global CITYSCAN map elaborated together with students, where social and architectural environment of cities stand in the centre of our observations.

References

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