

Collaborative Teamwork **GRAWI '97**:

The Third Attempt to "Internet-Design" [#1]

English - [Deutsch](#)

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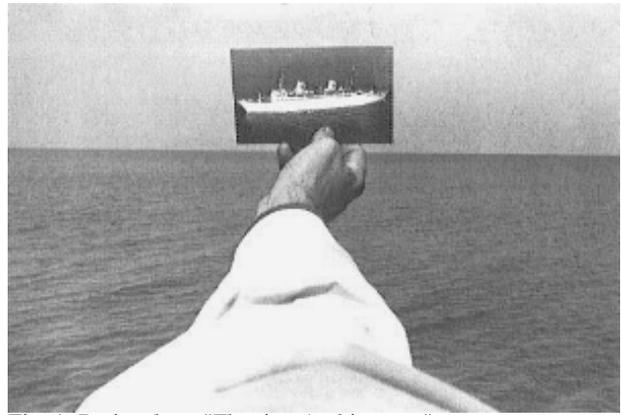


Fig. 1: Project logo "Floating Architecture"

Abstract

The abbreviation [GraWi](#) is made up of the combination of first letters of the Austrian university sites of [GRAz](#) and [Wien](#) (Vienna) and stands for the follow-up model of [BraGraLuWi](#) having involved also the universities of [BRATislava](#) and [LUton](#) in 1996. A joint project-design had already been carried out in 1995 ([BraGraLu](#)). The present contribution is aimed at assessing the project.

Introduction

Special attention of the educating staff was directed to the general implementation of EDP-assisted methods throughout the architectural design work full interest being given to **collaborative teamwork**. (Basic) EDP-training was also incorporated in the curricula by the teaching staff thus enhancing the scope of CAAD-instruction courses. Based on previous experience with **collaborative teamwork** a new project topic was introduced with accordingly matching working structure and schedules. If study conditions differ too widely and the lecture courses within the project framework are rated according to differing scores the situation is not regarded as fair.

The restrictions of **collaborative teamwork** arising within the first two attempts in 1995 and 1996 were to be traced back to the lack of practical experience with Internet and EDP-network, the differing rating of specific courses within the curricula and the age structure of students participating, this leading to a "relapse" to conventional working methods.

Conditions of study for architectural studies in Graz and Vienna do not differ much due to the governing Austrian study regulations, this also applying to the obligatory course "**designing**" where [GraWi '97](#) was incorporated. The design-exercises are rated as nucleus of architectural studies both in Graz and Vienna, nevertheless local shadings can be determined regarding practical procedure. A so-called "**Major Design-Course**" [#2] usually extends to at least two terms at the Graz University of Technology, this causing some asynchronisms regarding the two locations. Therefore, completion of the project at the same time would require an earlier start at one of the sites.

Handling and working the EDP-equipment at the two universities is to be regarded as "compatible", but entails a great amount of self-organization. The available "advanced" communication infrastructure offered many possibilities, however, also distracting from design work as such. Interest in cooperative

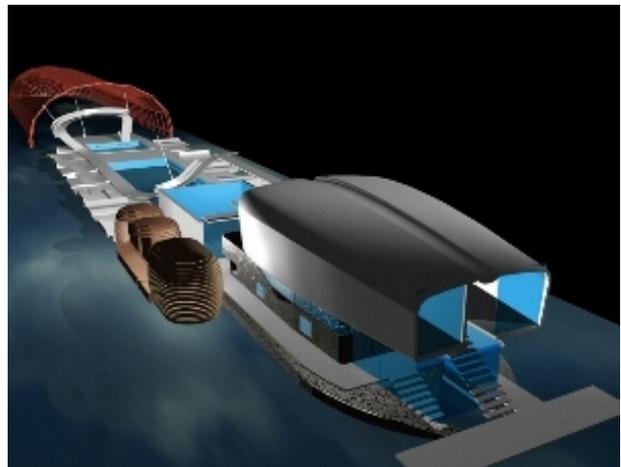


Fig. 2a: Project Anton Mariacher (Graz)

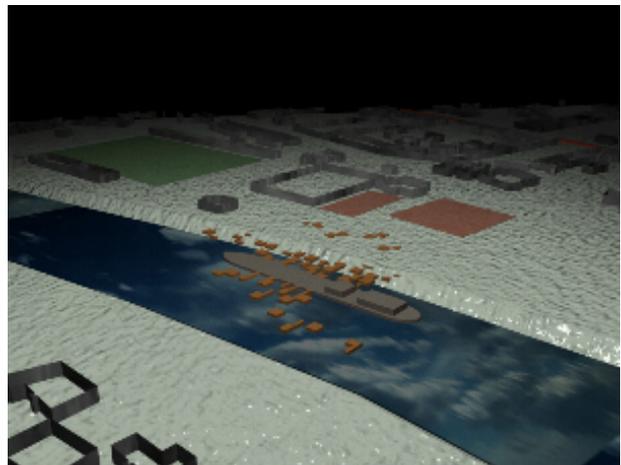


Fig. 2b: Project Anton Mariacher (Graz)

designing and communication via Internet was expected, thus adequate EDP-knowledge and willingness to further training in this field was a basic prerequisite for participation, not being exclusively tailored for "computerfreaks", however.

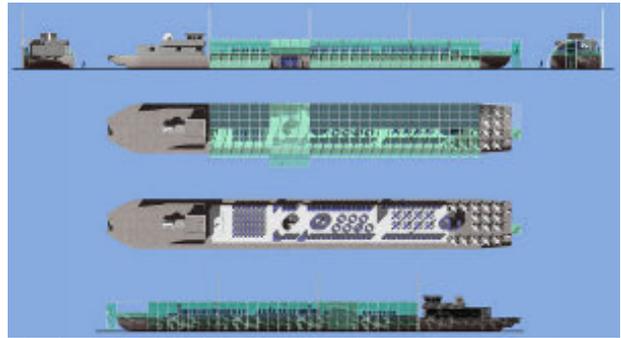


Fig. 3a: Project Borislav Petrov (Wien)

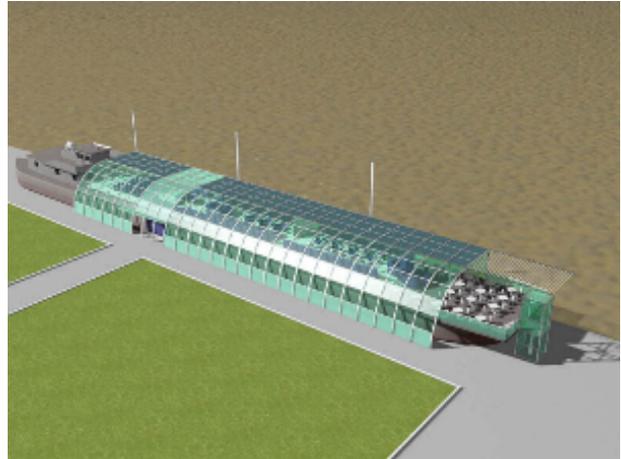


Fig. 3b: Project Borislav Petrov (Wien)

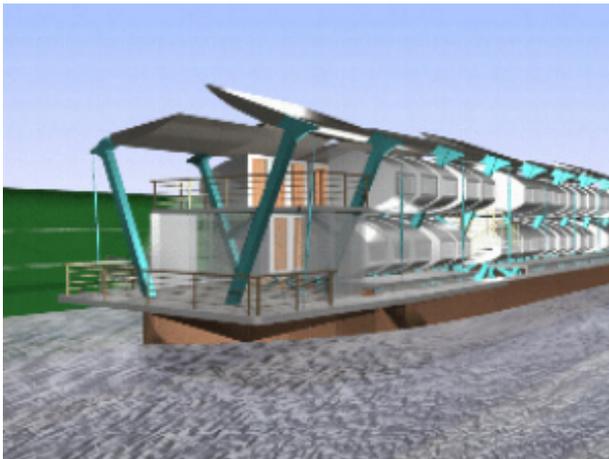


Fig. 4a: Projekt Michael Dautermann (Graz)



Fig. 4b: Projekt Michael Dautermann (Graz)

Description of Project and Scope of Performance

A design concept on the [recycling of motor freight vessels \[#3\]](#) was to be developed, the utilization of which was to be either of a public or innovative nature. In addition the phenomenon "water in the city" was to be taken into account, according to the differing impact due to location. This resulted in a mutual conceptual basis suited for spotting any connective or differing aspects. The main motif "floating architecture" was determined pretty early so as to encourage participation of other university sites. This had already been applied for the "BraGraLu(Wi)"-setup making use of an existing component, e.g. a [water tower](#) or a [gasometer](#) acting as the guiding principle.

The scope of performance for the GraWi-project was defined as follows:

- stock-taking analysis and development of a utilization concept;
- design studies (extension or modification) including elaboration of technical aspects for the scale ranges 1:100 to 1:1;
- full representation of design idea including a global consideration of site conditions;
- production of an architecture and/or VRML-model and
- presentation of a www homepage.

Procedure and Course of Project

The thematic framework was developed in the beginning, resulting principally in acquiring of **information** and the **basic conceptual outline** of the project. Preliminary work and combined CAD-modeling and model structures followed (**VRML-standard model** and vessel structures). The conceptual phase was completed by an **individual idea placing**. Within a two-day intensive seminar at the Graz University of Technology both the plenary presentation of concept and the division into three different groups according to subject matters took place. The concluding "Internet-design work" was to be issued by end of the semester. Not only final results but also any significant intermediate steps were to be presented in the world-wide-web.

Participation was satisfactory. A certain "fundamental set" appeared, the group of participants was easy to attend to without representing a mass approach. The intensive seminar at the Graz University of Technology not only served the purpose of getting to know each other and promoting exchange of experience (all participants had already submitted a concept), but was particularly intended for grouping the design contributions issued into thematic fields according to specific **bulletin boards**.

The **bulletin board leisure time** worked out somewhat, but participation was not really lively regarding the other topics, even though the participants had already met and rated the **bulletin boards** as useful. In view of the expected larger information quantities to be issued the grouping into three fields seemed an adequate tool for handling such, a information flood might have also resulted in resignation. The creation of division theoretically also should limit the possibilities of withdrawal. Still it might not come easy to speak up practically "in public" or is discretion to be granted as agreed upon between two participants? As a rule a "third party" will never find out what has been communicated amongst individual participants on a direct e-mail basis.

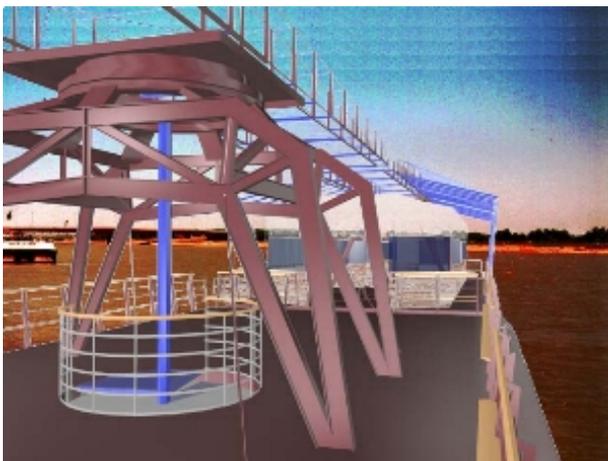


Fig. 7b: Project Johann Strasser (Wien)



Fig. 5: Project Mario Mihaljevic (Wien)

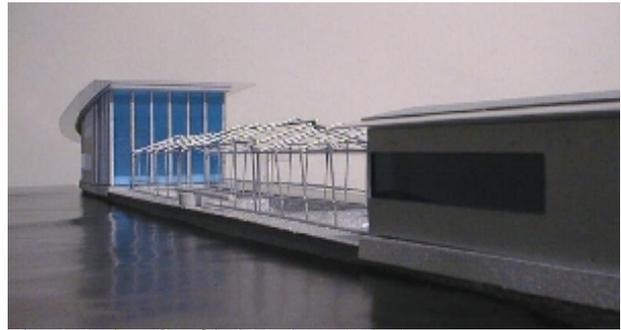


Fig. 6: Project Gottfried Markom (Wien)

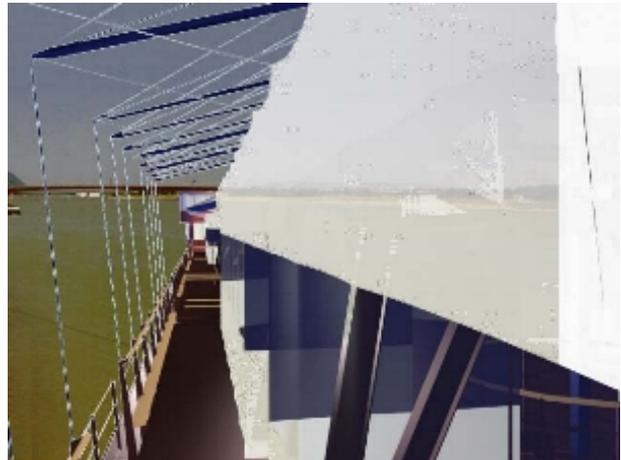


Fig. 7a: Project Johann Strasser (Wien)

Presentation and Results

At the beginning of the project not all participants provided of a homepage-setup or HTML-knowledge. This was, however, overcome with ease as soon a students' cooperation set in also setting the stage for a self-organized exchange of experience. [#4] The scope of experience in dealing with EDP-assisted methods varied considerably this often encouraging an advancement of students' knowledge.

As the respective state of development of the design process was to be reported continuously the precise documentation of changes (sequence of project development steps) deserves major attention. A homepage not to be made out clearly concerning its information content will not be read and changes and new developments performed might not even be spotted. Specific signals of information-consumers concerning such shortcomings were taken seriously by the students issuing a **redesign**, but also immature developments ("childrens' sketches") were fed into the network.



Fig. 7c: Project Johann Strasser (Wien)

[Review conversations \[#5\]](#) were recorded as summarized comments of guest critics or the tutoring staff in the network. Though this only became popular in the course of the [GraWi '97](#) project work it proved very useful, as also "third parties" - such as students of the same study line - could participate in the global watch and react accordingly.

Conclusions

There is an art to scetchlike work via "Internet" in a world-wide web environment. The proportion of pure graphics and project information sometimes proves difficult, predominantly due to the main limitation on account of the "small format" resulting from the www-environment: screen dimension is the limiting factor. Solutions were, however, found for this problem, such as parcelling followed by scaling up the ground plan section by section.

A next attempt might obligatorily set up small groups made up of participants from different sites developing the project together, thus solving the problem of "sponging within a working group". [\[#6\]](#) Suitable solutions are to be devised, as a well-working group work is not to be taken as granted. With a single exception design work was performed individually which has also been documented by the structure of the [homepage](#). The idea of [collaborative teamwork](#) limited to one location was accomplished much more than in other comparable workshops.

The possibility of network-designing "together with a stranger" differs significantly from conventional design methods, this amounting to an adequate degree of "pressure" emphasizing the necessity for site-overlapping cooperation. [\[#7\]](#) Thus the initial step of concept development and following seminar with the required group formation granting concrete work throughout one common project should be stressed. Perhaps more "analogue" meetings in the initial phase would have to be offered, making for more intense exchange via network throughout the project. [Collaborative teamwork](#) as such is pretty time-consuming likely to lead to a disproportion regarding effort and profit.