

Since its establishment in 1999, the Department of Architecture, Faculty of Engineering, University of Thessaly has set itself a fundamental task with a twofold philosophical core; that is, both the recognition and the comprehension of the complex and multivalent nature of the field of architectural practice on the one hand, and of the job market on the other, along with the host of particularities that characterize it. Therefore, the specific program of studies has been so conceived as to expose the students to a wide range of knowledge related to the diverse and multifold levels of architectural practice, that is, the practice of design and creative spatial organization. Hence, the focus is on educating architects, designers, and creative space managers on every scale and aspect of the environment and becoming well conversant with the technical requirements of their subject. Furthermore, the curriculum seeks to equip students with social and cultural sensibility, as well as with the ability to deal with the entire range of issues which involve the human presence in the built environment (e.g., behaviour, expectations, fulfilment of needs, etc.). The focus of this presentation is on one of the objectives of the curriculum, namely the exploration of the potential of audio-visual media and digital technologies in collecting, processing, and presenting technical, historical, and social data which particularly involve the elements of sound and the moving picture in both the study and the (re)presentation of space. The thematic areas this presentation focuses upon are Audio-Visual Design and Plastic Arts, Technologies of Representation and finally Computers and Multimedia.

Student work carried out at the Department of Architecture is presented through two distinctive threads:

1. Ten final year thesis projects distilling ten years of time-based media and computing focused teaching deeply woven into the research and design process, empowering representation and communication of design ideas.
2. Four foundation work courses “responsible” for the abovementioned projects; helping students towards better understanding and skill built-up in their design quests. The interactive installation presented incorporates students’ work from the four courses as well as material from the ten final year thesis projects.

Vassilis Bourdakis, Evelyn Gavrilou, Iris Lycourioti and Costis Paniyiris

Spiros Papadopoulos graduated in architecture from the National Technical University of Athens (NTUA) in 1991. He holds a PhD from the Polytechnic University of Madrid (E.T.S.A.M., 1997). He has been teaching at the Department of Architecture (U.TH.) since 2000 in the field of Architectural Design and Time Based Media. He has also been teaching at two intradepartmental postgraduate courses in NTUA and University of Athens. He has lectured in several universities abroad. He is professionally active in architectural design, audiovisual productions and new media installations. His work, which focuses on the interdisciplinary interaction between architecture and visual arts, has been presented at architectural exhibitions and film festivals. He produced and directed several documentaries and TV programs. He is co-editor of the international art and architectural journal METALOCUS, awarded for the diffusion and publication of architecture.

Image - Sound - Multimedia (thematic area: multimedia art & design)

instructors: Spiros Papadopoulos, Alexandros Psychoulis

The course focuses on the combined use of digitized information in order to explain the methods of creating interactive mechanisms and forms of spatial representations through examples of hybrid environments.

In the first part, students are asked to process representations of their personal space in order to produce a “creative self-portrait” by using digitized forms of data exclusively. Moreover, they are instructed how to use non-linear systems in their narration. Thus they acquaint themselves with the meaning of links, essential for building multimedia applications. The final product of this part of the course is an interactive webpage, which constitutes the technical

core of each student’s personal webpage. The aim of the second part of the course is the construction of an installation by using multimedia; more specifically, the design of an environment whose main characteristics are controlled or activated by means of digitized technology (i.e., digitized picture, video, sound, projections, etc.). At last, the separate digitized data should be combined following the given instructions. Thus the relation of the real space to the immaterial form of the digitized world is studied, while at the same time the students discover the range of combined applications of the new media, as well as the impact of new technologies on the design procedure of digitized environments.



- 01. Thesis: Constructed Narrations of a Familiar / Uncanny Environment. Installation in an old slaughterhouse in Volos (student: Chryssa Papasaramtoui).
- 02. Thesis: Perceptive Mappings (students: Sofia Xanthopoulou, Giorgos Desteranos).
- 03. Thesis: Hospitium (student: Maro Mavri).
- 04. Thesis: Swimming with Matter-Waves (student: Stefanos Papadatos).
- 05. Thesis: Concert Stage at Panthessaliko Stadium in Volos (student: Ourania Antoniou).

01



02

Alexandros Psychoulis, artist, was born in Volos, Greece in 1966. He studied painting in the School of Fine Arts in Athens. His first works were interactive installations activated by the spectator investigating his subconscious, changing in pictures or sounds, his fears, his wishes or his memories. The investigation of the landscape of digital reality constitutes the key of his work. His work includes installations, animation, and paintings. In 1997 he participated in the 47th Venice Biennale, where he received the “Bennese” prize for the interactive work *Black Box*. His work has been shown in galleries and museums around the world. He realized 17 solo exhibitions. He has also taken part in many team exhibitions. (www.psychoulis.blogspot.com)

Art and Contemporary Technology (thematic area: multimedia art & design)

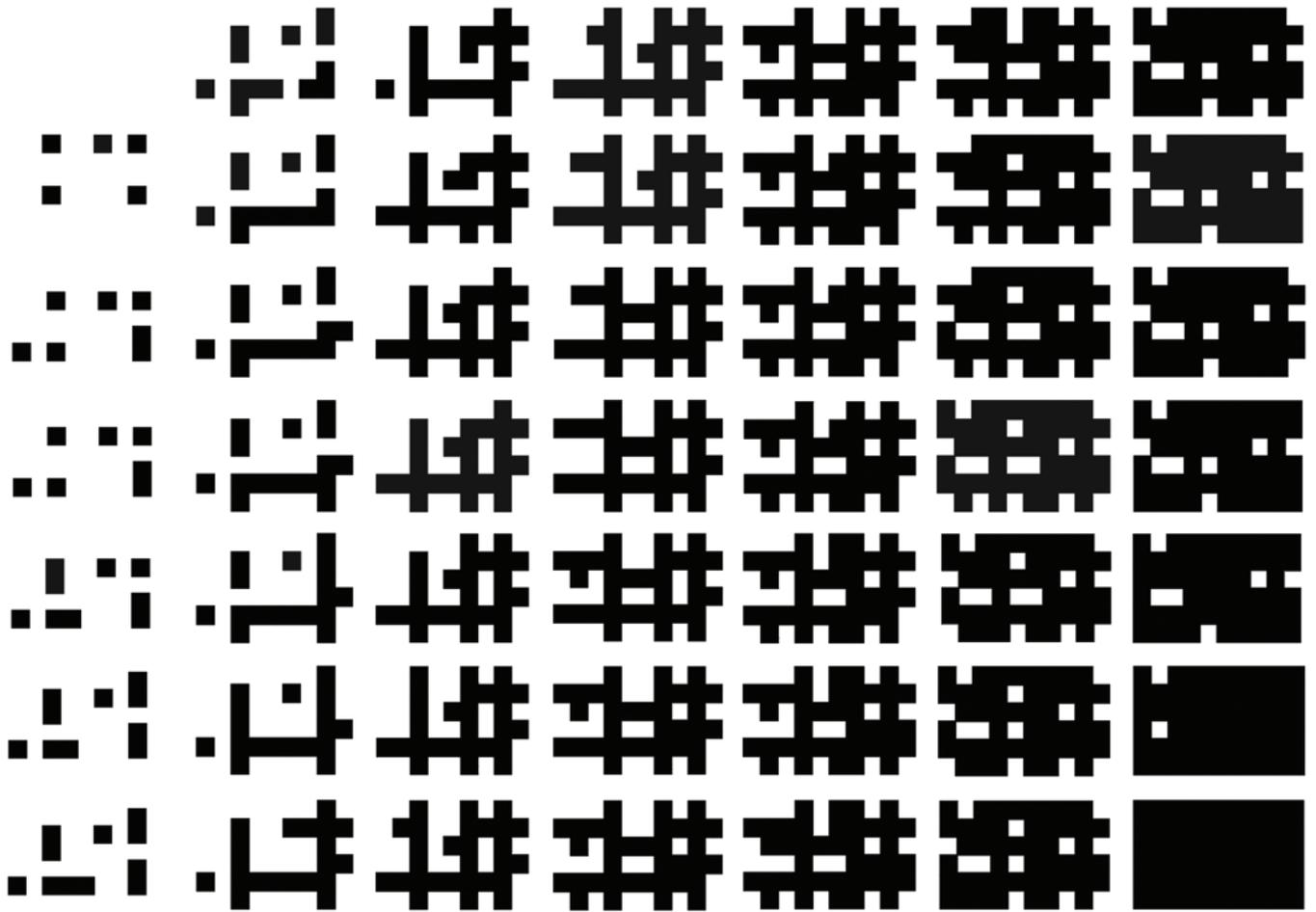
instructors: Spiros Papadopoulos, Alexandros Psychoulis

The course aims at familiarizing students with the use of new technologies for the production of art works; students are taught to exploit the properties and potentialities of digital technologies in order to achieve not only consumptive or strictly utilitarian objectives, but mainly synthetic/plastic work.

Teaching is divided into two sections: theoretical and creative/research. In the former, references are made to the most significant periods of the History of Art focusing mainly on those which have been broadly influenced by the use of

Technology. The actual teaching program includes video projections, movie samples of the early cinema, animation and video art works, interactive CD-ROM presentations, as well as on line tours of Net Art.

The creative part of the course is thus organized as to enable each student to depict a short autonomous project by using audiovisual means; during this process, students learn to use commercial software packages in order to perform digital processing of still images, sprite animation and video movies in an innovative way.



Vassilis Bourdakis graduated in architecture from the National Technical University of Athens (NTUA) in 1987 and received his PhD from University of Bath, UK in 1994.

For the last twenty years he has researched and worked extensively in the field of Computer Aided Architectural Design (CAAD) and Virtual Reality (VR), investigating 3D modelling strategies and developing modelling software and researching the structure, properties and visualisation of large scale urban models. He has built interactive digital urban models (London's West end, Bath city, Ag. Varvara Athens, Volos old city) and developed applications for their evaluation and utilization. He has published extensively on VR in architecture and urban planning, digital democracy and public participation. He is also active in architectural and industrial design and his design work has received national and international awards.

Virtual Reality: Designing Synthetic Space (thematic area: computing)

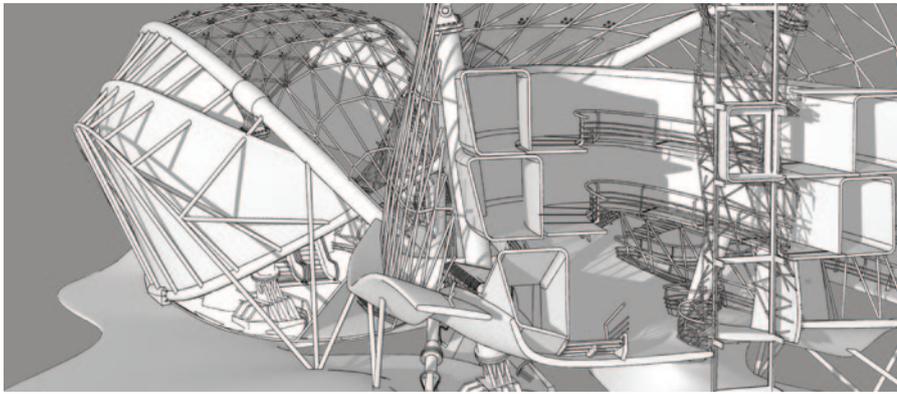
instructor: Vassilis Bourdakis

The aim of the course is to provide a deeper understanding of design issues related to virtual / synthetic space and to explore tools suitable for the “design” and “habitation” of virtual environments (VEs). During this course, students delve into the notion of cyberspace and become familiar with the concepts surrounding the wider scope of Virtual Reality (VR).

The initial theoretical approach examines and analyses cyberspace, its characteristics, applications and even depiction in art and cinematic visualisations. Following, the focus shifts to VR, its history, characteristics, physiology and perception, classification in terms of technologies implemented, contemporary examples and

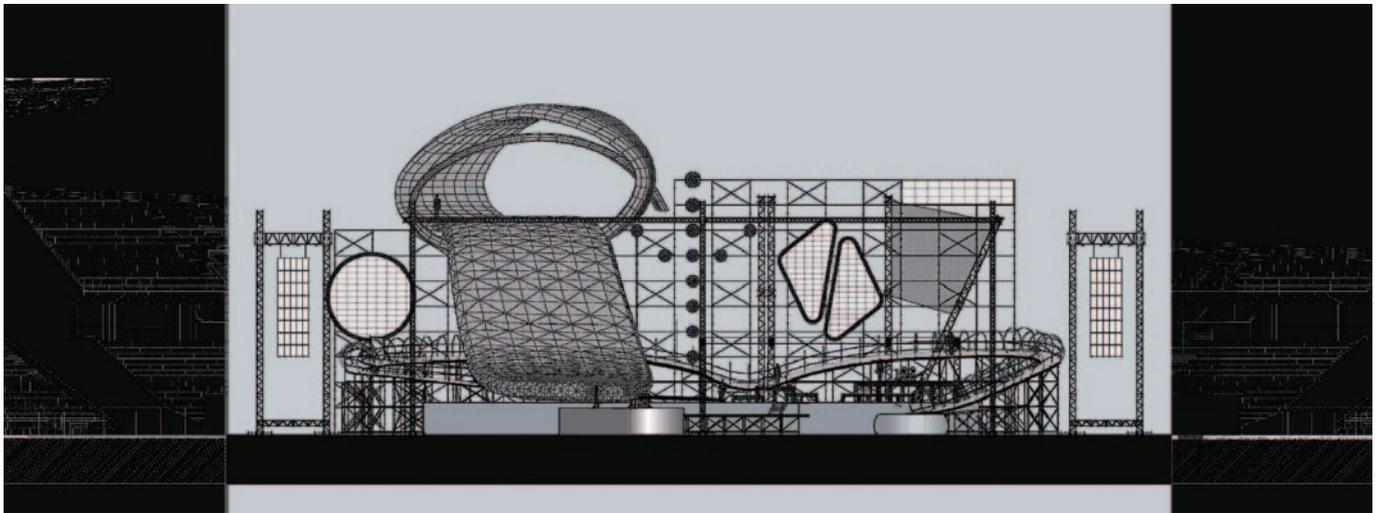
analysis of current application domains with an emphasis in art, architecture and urban design. Issues related to VE design, codes of practice, tools, ways forward into the future are also discussed with the theoretical part of the course ending with the discussion and presentation of advanced design tools for the design of VEs.

A third into the semester, the VR design studio starts with students working in groups employing the theories, concepts and techniques taught towards the realisation of an interactive VR application. Course website (online teaching material in Greek) and all student projects completed are available at vr.arch.uth.gr/VR-Arch.



students: Ourania Antoniou, Elina Axtoti, Christos Charalampopoulos, Giorgos Desteferanos, Kyriaki Kastri-naki, Dimitris Kekefas, Maro Mavri, Thanasia Papageorgiou, Stefanos Papadatos, Chryssa Papasarantou, Giorgos Sarmaniotis, Sofia Xanthopoulou.

04



05

Giorgos Papaconstantinou graduated in architecture from the National Technical University of Athens in 1976, and studied Cinema, Video and Animation at the National Superior School of Decorative Arts in Paris, France. He holds a specialization in interactive multimedia (1984-86), DEA (1988-89), from the University of Paris. From 1983 to 1989 he worked on the realization of experimental video tapes on subjects concerning the conception of space and the electronic image specificity. Since 1989, he has directed and produced a great number of documentary films and interactive multimedia projects. He has obtained awards for both architectural projects and film & multimedia productions and published over 20 articles in the field. His research interests focus on representation technologies and the new conceptions of space in interactive multimedia.

Audiovisual Urban Portrayals

instructor: Giorgos Papaconstantinou

The course concentrates on the conjunction of the cinematic language and the city as it has been played out in a wide range of audiovisual creations, starting with the interwar city symphonies to the present interactive installations (such as those of Jeffrey Shaw, Miguel Chevalier and others). The cinematic language has a distinctive ability to capture and express the spatial complexity, diversity and social dynamism of urban environment. An emphasis is given to how knowledge on the human visual perception strongly affects our representation models and techniques. The course also aims at the creation of an audiovisual archive on contemporary architecture and urban space in Greece.

The lectures address the parallel evolution in both cinematic language

and space representation. Categories of cinematic space (architectural space which is the space of the shot, iconic space which is the space of the image frame and the narrative space).

Pre-cinema city representations. The city in early film news reels, the interwar City symphonies and the interwar avant-garde movements. The relation of space and time in experimental cinema and video art. The role of space in the video installations. New concepts of space in contemporary interactive installations.

Students, working in teams, create short audiovisual portraits of urban spaces or specific buildings. A special interest is given to parts of the city that are undergoing major changes.