Foreword

Although Prof. Lothar Späth, CEO of Jenoptik AG, stated at the Leipzig Book Fare in March, 2002: „...There will be a time after the Virtual Reality (VR), a time where we look behind these virtual worlds, searching for more inner values and contemplation..." these proceedings are still about how we start to deal with virtual environments for the benefit of the real physical environment. The contributions will show that we are just learning to take the first virtual steps in landscape architecture and planning. However, because VR has the tendency to consume us totally, it is good to hear from one of Germany's visionaries that there will be even other worlds beyond this.

These proceedings cover contributions from most of our speakers at the international conferences on "Virtuality in Landscape Architecture" in May 3rd and 4th 2001 and on "GIS Trends in Environmental Planning" in May 2nd and 3rd 2002, both held at the Center for Technology and Research of Anhalt University of Applied Sciences in Bernburg. While the first conference focused on VR, planning the second conference on new GIS technologies soon made it clear to us that these new technologies are interwoven. This motivated us to publish the papers of both conferences in one proceedings. Because of the fast pace of the technology, the authors of the first conference updated their contribution before the publication. All the papers are therefore, as of March 15, 2002, "state of the art".

The conferences on new technologies in environmental design and planning are an integral part of the Master of Landscape Architecture Program (MLA) with focuses on preparing international students for the task of European Landscape Architecture Practice using New Technologies.   All papers are given to international graduate students who are gaining a second degree in landscape architecture. Most of the speakers are landscape architects themselves. Their heart is in design and/or planning. Both aspects are important for any project scale in environmental planning and design.   A design without the legal planning parameters will never be built, and a plan, that has no design quality will (hopefully) never be accepted.

We already have a broad spectrum of GIS and Database Management Systems for the planners. For designers there is the world of 3-D CAD. Imaging, Visualization, VR, Desktop Publishing, Internet Interfaces are common for both sides of the profession. The development of these instruments in the direction of 3D, VR and WWW, and its implication for the profession is addressed in twenty articles that appear in these proceedings.

In order to structure this plenitude, we have sorted the more application-oriented contributions into three different "map scales", the "**GIS and Environmental Planning Level**", the **"Visualization and Landscape Planning Level",** and the **"VR and Design Level".** The last chapter focuses on the instruments of "**New Technologies",** where we also asked members of the GIS industry to give their point of view. We start with a chapter introduction. Each article in the introduction is followed up by the in-depth articles in the above named four main chapters. Our hope is that each article overlaps in some way with others, giving the reader some orientation for navigating through the rich contributions on virtual planing and designing.

We first need to thank all of our writers. Most of them have no difficulty giving a fascinating presentation showing their recent research work. But especially this group has little time to write. So thank you to all of you for contributing these articles. It also should be mentioned that the editor at Wichmann Gerold Olbrich made it possible to have the proceedings edited and printed during the Easter holidays. Then there are those who are not named in this book; our GIS expert Ingo Voigt who became our layout person for some days and our English language consultant Jeanne Colgan, both of ATELIER BERNBURG; from the MLA team, Matthias Jähne for additional GIS-rendering "just on time" and our secretary Anke Friedrich for all the additional correspondence, our guest professor John Nicholson for many hours in helping to rewrite the English of some of the "Germanized" sentences and Heiko Schrenner for the technical backup of the conference itself. To all of them thank you for work above and beyond the call of duty!

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