

Understanding Landscape Visualisation For Visual Impact

In many enterprises, the number of deployed applications is constantly increasing. Those applications - often several hundreds - form large software landscapes. The comprehension of such landscapes is frequently impeded due to, for instance, architectural erosion, personnel turnover, or changing requirements. Furthermore, events such as performance anomalies can often only be understood in correlation with the states of the applications. Therefore, an efficient and effective way to comprehend such software landscapes in combination with the details of each application is required. In this thesis, we introduce a live trace visualization approach to support system and program comprehension in large software landscapes. It features two perspectives: a landscape-level perspective using UML elements and an application-level perspective following the 3D software city metaphor. Our main contributions are 1) an approach named ExplorViz for enabling live trace visualization of large software landscapes, 2) a monitoring and analysis approach capable of logging and processing the huge amount of conducted method calls in large software landscapes, and 3) display and interaction concepts for the software city metaphor beyond classical 2D displays and 2D pointing devices.

Extensive lab experiments show that our monitoring and analysis approach elastically scales to large software landscapes while imposing only a low overhead on the productive systems. Furthermore, several controlled experiments demonstrate an increased efficiency and effectiveness for solving comprehension tasks when using our visualization. ExplorViz is available as open-source software on www.explorviz.net. Additionally, we provide extensive experimental packages of our evaluations to facilitate the verifiability and reproducibility of our results.

Understanding Metropolitan Landscapes considers and reflects on the fundamental relationships between metropolitan regions and their landscapes. It investigates how planning and policy help to protect, manage and enhance the landscapes that sustain our urban settlements. As global populations become more metropolitan, landscapes evolve to become increasingly dynamic and entropic; and the distinction between urban and non-urban is further fragmented and yet these spaces play an increasingly important role in sustainable development. This book opens a key critical discussion into the relational aspects of city and landscape and how each element shapes the boundaries of the other, covering topics such as material natures, governance systems, processes and policy. It presents a compendium of concepts and ideas that have emerged from landscape architecture, planning, and environmental policy and landscape management. Using a range of illustrated case studies, it provokes discussions on the major themes driving the growth of cities by exploring the underlying tensions around notions of sustainable settlement, climate change adaption, urban migration, new modes of governance and the role of landscape in policy and decision making at national, provincial and municipal levels.

Climb a mountain and experience the landscape. Try to grasp its holistic nature. Do not climb alone, but with others and share your experience. Be sure the ways of seeing the landscape will be very different. We experience the landscape with all senses as a complex, dynamic and hierarchically structured whole. The landscape is tangible out there and simultaneously a mental reality. Several perspectives are obvious because of language, culture and background. Many disciplines developed to study the landscape focussing on specific interest groups and applications. Gradually the holistic way of seeing became lost. This book explores the different perspectives on the landscape in relation to its holistic nature. We start from its multiple linguistic meanings and a comprehensive overview of the development of landscape research from its geographical origins to the wide variety of today's specialised disciplines and interest groups. Understanding the different perspectives on the landscapes and bringing them together is essential in transdisciplinary approaches where the landscape is the integrating concept.

What do you communicate when you draw an industrial landscape using charcoal; what about a hyper-realistic PhotoShop collage method? What are the right choices to make? Are there right and wrong choices when it comes to presenting a particular environment in a particular way? The choice of medium for visualising an idea is something that faces all students of landscape architecture and urban design, and each medium and style option that you select will influence how your idea is seen and understood. Responding to demand from her students, Nadia Amoroso has compiled successful and eye-catching drawings using various drawing styles and techniques to create this book of drawing techniques for landscape architects to follow and - more importantly - to be inspired by. More than twenty respected institutions have helped to bring together the very best of visual representation of ideas, the most powerful, expressive and successful images. Professors from these institutions provide critical and descriptive commentaries, explaining the impact of using different media to represent the same landscape. This book is recommended for landscape architecture and urban design students from first year to thesis and is specifically useful in visual communications and graphic courses and design studios.

Second International Conference, NDT 2010, Prague, Czech Republic

Exploring the Visual Landscape

Understanding Metropolitan Landscapes

Landscape

CRM

Landscape Ecology for Sustainable Environment and Culture

Visual Representations of the Arctic

Basics Landscape Architecture 03: Visual Communication will enable landscape architects to understand why a range of visual communication skills are essential to inform a design process.

A key aspect of town planning, landscape planning and landscape architecture is to identify and then use the distinctive features and characteristics of space, place and landscape to achieve environmental quality. Landscape Analysis provides an introduction to the field both in theory and in practice. A wide range of methods and techniques for landscape analysis is illustrated by urban and rural examples from many countries. Analysing landscapes within a planning context requires both skill and insights. Drawing upon numerous concrete examples, together with an examination of some theoretical concepts, this book guides the reader through a wide range of different approaches and techniques of landscape analysis that may be applied at different scales, from elementary site analysis to historical and regional studies. This is an essential book for students and graduate practitioners working in landscape architecture, planning and architecture.

Michael Batty Centre for Advanced Spatial Analysis, University College London Landscapes, like cities, cut across disciplines and professions. This makes it especially difficult to provide an overall sense of how landscapes should be studied and researched. Ecology, aesthetics, economy and sociology combine with physiognomy and deep physical structure to confuse our - derstanding and the way we should react to the problems and potentials of landscapes. Nowhere are these dilemmas and paradoxes so clearly highlighted as in Australia ¶ where landscapes dominate and their relationship to cities is so fragile, yet so important to the sustainability of an entire nation, if not planet. This book presents a unique collection and synthesis of many of these perspectives ¶ perhaps it could only be produced in a land urb- ised in the tiniest of pockets, and yet so daunting with respect to the way non-populated landscapes dwarf its cities. Many travel to Australia to its cities and never see the landscapes ¶ but it is these that give the country its power and imagery. It is the landscapes that so impress on us the need to consider how our intervention, through activities ranging from resource exploitation and settled agriculture to climate change, poses one of the greatest crises facing the modern world. In this sense, Australia and its landscape provide a mirror through which we can glimpse the extent to which our intervention in the world threatens its very existence.

The question of how to live in the city and increase the quality of urban life creates new challenges for both urban policies and academic research. Urban parks are important keys for achieving a broader understanding of the urban landscape. Open green spaces in every form are essential for life in our ever more urbanised society and are becoming a vital issue for the liveability of the urban environment.The purpose of the present research is to acquire a more thorough knowledge of the evaluation of urban parks. The study uses statistical analysis methods combined with landscape planning and visualisation methods. The research provides an innovative and sophisticated point of view along with the means to improve the comprehension of people's preferences for alternative urban park scenarios. The results are expected to create an advanced discussion platform and make a contribution towards improving knowledge of the public's perception of urban parks. The investigation was conducted with empirical experiments on two parks in Zurich.The functional component of the research is the visualisation of spatial data using powerful visualisation tools. The theoretical prospect is the achievement of broader knowledge about individuals' perception of open green spaces, focusing on previously unexplored experimental research combining conjoint analysis and visualisation methods.The experiments created for the research are effective for modelling and explaining the signifi cance that people assign to specific dimensions characterising different park scenarios. Two motivations are at the base of the research: exploring the use of conjoint analysis methods to study virtual urban parks and evaluating the use of visual stimuli with conjoint analysis.

16th International Conference on Transport Systems Telematics, TST 2016, Katowice-Ustroń, Poland, March 16¶19, 2016, Selected Papers

Three Dimensional Applications In GIS

Imagining Shimmering Worlds in Culture, Literature and Politics

Visualization in Landscape and Environmental Planning Preserving Scenic Values in our Sustainable Future

Visualizing Landscapes in a Digital Age Geographic Visualization: Concepts, Tools and Applications is a [state-of-the-art] review of the latest developments in the subject. It examines how new concepts, methods and tools can be creatively applied to solve problems relevant to a wide range of topics. The text covers the impact of three-dimensional displays on user interaction along with the potentialities in animation and clearly explains how to create temporally sensitive visualizations. It also explores the potential for handling mobile data and representing uncertainty; as well as the role of participatory visualization systems and exploratory methods. Hallmark Features: An introduction to the diverse forms of geographic visualization which draws upon a number of theoretical perspectives and disciplines to provide an insightful commentary on new methods, techniques and tools. Richly illustrated in full colour throughout, including numerous relevant case studies and accessible discussions of important visualization concepts to enable clearer understanding for non-technical audiences. Chapters are written by leading scholars and researchers in a range of cognate fields, including, cartography, GIScience, architecture, art, urban planning and computer graphics with case studies drawn from Europe, North America and Australia This book is an invaluable resource for all graduate students, researchers and professionals working in the geographic information sector, computer graphics and cartography.

A combination of broad disciplinary coverage and scientific excellence, the Encyclopedia of Forest Sciences will be an indispensable addition to the library of anyone interested in forests, forestry and forest sciences. Packed with valuable insights from experts all over the world, this remarkable set not only summarizes recent advances in forest science techniques, but also thoroughly covers the basic information vital to comprehensive understanding of the important elements of forestry. The Encyclopedia of Forest Sciences also covers relevant biology and ecology, different types of forestry (e.g. tropical forestry and dryland forestry), scientific names of trees and shrubs, and the applied, economic, and social aspects of forest management. Valuable key features further enhance the utility of this Encyclopedia as an exceptional reference tool. Also available online via ScienceDirect ¶ featuring extensive browsing, searching, and internal cross-referencing between articles in the work, plus dynamic linking to journal articles and abstract databases, making navigation flexible and easy. For more information, pricing options and availability visit www.info.sciencedirect.com. Edited and written by a distinguished group of editors and contributors Well-organized encyclopedic format provides concise, readable entries, easy searches, and thorough cross-references Illustrative tables, figures, and photographs in every entry, produced in full color Comprehensive glossary defines new and important terms Complete, up-to-date coverage of over 60 areas of forest sciences - sure to be of interest to scientists, students, and professionals alike! Editor-in-Chief is the past president of the International Union of Forestry Research Organizations, the oldest international collaborative forestry research organization with over 15,000 scientists from 100 countries

An overview of issues involved in visualization technologies used in landscape and environmental planning. Covers a classification of the technology as well as a number of specialized applications across agricultural, industrial and urban planning. Editor Bishop from University of Melbourne, Vic.

Winner of the 2017 EDRA Great Places Award (Research Category) Winner of the 2017 VT ASLA Chapter Award of Excellence (Communications Category) The Renewable Energy Landscape is a definitive guide to understanding, assessing, avoiding, and minimizing scenic impacts as we transition to a more renewable energy future. It focuses attention, for the first time, on the unique challenges solar, wind, and geothermal energy will create for landscape protection, planning, design, and management. Topics addressed include: Policies aimed at managing scenic impacts from renewable energy development and their social acceptance within North America, Europe and Australia Visual characteristics of energy facilities, including the design and planning techniques for avoiding or mitigating impacts or improving visual fit Methods of assessing visual impacts or energy projects and the best practices for creating and using visual simulations Policy recommendations for political and regulatory bodies. A comprehensive and practical book, The Renewable Energy Landscape is an essential resource for those engaged in planning, designing, or regulating the impacts of these new, critical energy sources, as well as a resource for communities that may be facing the prospect of development in their local landscape.

Integrated Approaches for Policy Impact Assessment

Methods and Methodology

Landscape Perspectives

Visualizing sustainable landscapes : understanding and negotiating conservation and development trade-offs using visual techniques

Advances in Physiognomic Landscape Research in the Netherlands

Interactive Landscape Visualization as a Tool for Collaborative Planning

Networked Digital Technologies, Part I

This book is the most comprehensive and up-to-date treatment of computer applications in forestry. It is the first text on software for forest management to emphasize integration of computer applications. It also offers important new insights on how to continue advancing computational technologies in forest management. The authors are internationally-recognized.

Forests are an important component in the visual appeal of landscapes. There is an increasing recognition of the importance of this subject among foresters and environmental scientists. Increasingly, forest resource managers must consider the aesthetic consequences of timber harvesting operations and management plans. This book is the first to address this subject into four parts. It brings together not only foresters and ecologists, but also landscape architects, psychologists and philosophers. It should therefore attract a wide readership. Contributors are leading research workers in their subjects, from Canada, the USA and UK.

The volume deals with the effects of digitization on spatial and especially landscape construction processes and their visualization. A focus lies on the generation mechanisms of 'landscapes' with digital tools of cartography and geomatics, including possibilities to model and visualize non-visual stimuli, but also spatial-temporal changes of physical space. Another focus is on the interaction of the social and individual construction of landscape. Potentials of combining modern media of spatial visualization and (constructivist) landscape research are discussed.

If landscape visualizations are applied as tools for participation, they should provide a high level of interactivity to facilitate planning process and outcomes. This book presents evidence for this hypothesis through demonstrative case studies in the Entlebuch UNESCO Biosphere Reserve in Switzerland. In collaborative workshops, interactive real-time visualizations were used to explore the effects of landscape visualization on the planning process. The effects of landscape visualization on the planning process and long-term climate change impacts were illustrated through collapsing time animations.The author, Dr. Olaf Schroth, is a researcher at the University of British Columbia and has studied both geodesy and planning in Hanover, Hamburg and Newcastle upon Tyne. Since then, he has been working at the interface of planning and 3D visualization, and the book summarizes his research in the book VisuLands (2003-2006) and his PhD at ETH Zurich. His research is not technology-driven but rather raises critical issues from a planning perspective. Therefore, the results and hands-on recommendations address researchers as well as practitioners in planning, architecture, geovisualization, geography, cartography and computer visualization.

The Renewable Energy Landscape

Investigating the potentials of space and place

Including Perspectives on Collaboration and Integration

Encyclopedia of Forest Sciences

The Cultural Landscape & Heritage Paradox

A Visual Collection of Landscape Architectural Drawings

Functions, Concepts, Strategies

Describes the combination of landscape research and planning, visual perception and Geographic Information Science. This title showcases possible ways of getting a grip on themes like: landscape openness, cluttering of the rural landscape, high-rise buildings in relation to cityscape, historic landscapes and motorway panoramas.

Climate change communication is a topical and relevant issue, and it is widely acknowledged that public communication about causes, impacts and action alternatives is integral to addressing the challenges of the changing climate. Climate visualization concerns the communication of climate information and data through the use of different information technologies and different modes of visual representation. In the context of climate change communication, climate visualization is highlighted as a potential way of increasing public engagement with climate change. In particular, developments within information technology have provided significant advancements that are claimed to be transformative in engaging lay audiences with issues relating to the mitigation of and adaptation to climate change. Nevertheless, there is a lack of research exploring climate visualization from an audience perspective. This thesis addresses this gap. The overarching aim is thus to explore the role of climate visualization in climate change communication from an audience perspective, focusing specifically on how lay audiences make meaning of climate change as represented in two examples of climate visualization. In addition, the thesis discusses the potential contributions and/or limitations of climate visualization from a communication perspective. Based on a social semiotic theoretical framework, this thesis employs focus group interviews to study participants' meaning-making related to two cases of climate visualization: a dome theatre movie developed for Swedish high school students with the aim of encouraging reflection on climate change causes, impacts and mitigation alternatives, and a web-based tool for climate change adaptation developed to assist Nordic homeowners in adapting to the local impacts of climate change. The results of this thesis show that climate visualization can help audiences concretize otherwise abstract aspects of climate change, and that the localized focus can make climate change appear more personally relevant and interesting for targeted audiences. Nevertheless, despite these communicative qualities, the analyses also show that participants' interpretations are shaped by their preconceptions of climate change as a global and distant issue to be solved by other actors, such as national governments, or through international policy negotiations. Although climate visualization can enhance a sense of proximity with climate change, the localization of climate risk can also lead to participants downplaying the significance of climate impacts. In addition, despite the intentions of inducing a sense of agency in both cases of climate visualization, participants critically negotiated messages concerning their roles as individuals in mitigating or adapting to climate change, and assigned this responsibility onto other actors. These findings show that although climate visualization presents certain communicative qualities, it is not a panacea for engaging lay audiences with climate change. This also underlines the importance of considering cultural and social aspects of the communicative event when studying and developing climate visualization tools as a means of communication.

Kommunikation kring klimatförändringar är ett aktuellt och relevant ämne, och många bedömare anser att kommunikation kring orsaker, effekter och åtgärdsalternativ är en viktig del i arbetet med att möta klimatutmaningarna. Klimatvisualisering är en process för att åskådliggöra klimatinformation och klimatdata med hjälp av olika tekniker och metoder för visuell framställning. I forskningslitteraturen om klimatkommunikation lyfts visualisering fram som ett möjligt sätt att öka allmänhetens engagemang i klimatfrågan. I synnerhet har utvecklingen inom informationsteknik lett till betydande framsteg som kan ses som omvälvande när det gäller att engagera lekmän i frågor som rör utsläppsminskningar och klimatanpassning. Det råder dock brist på forskning om klimatvisualisering ur ett mottagarperspektiv. Denna avhandling adresserar denna kunskapslucka. Det övergripande syftet är således att utforska visualiseringens roller i klimatkommunikation ur ett mottagarperspektiv, med särskilt fokus på hur lekmän tolkar innebörden av klimatförändringar så som de representeras i två exempel på klimatvisualisering. Avhandlingen behandlar även klimatvisualiseringens möjliga bidrag och/eller begränsningar ur ett kommunikationsperspektiv. Med utgångspunkt i ett teoretiskt ramverk som inspirerats av socialsemiotiska teorier genomfördes fokusgruppsstudier för att studera deltagarnas meningsskapande i relation till två exempel på klimatvisualisering: en film som visas i en domteater, framtagen för svenska gymnasieelever med målsättningen att uppmuntra till reflektion kring klimatförändringarnas orsaker, effekter och alternativ för utsläppsminskning, samt ett webbaserat verktyg för klimatanpassning, som utvecklats för att stödja husägare i Norden att anpassa sig till klimatförändringarnas lokala effekter. Resultaten av denna avhandling visar att klimatvisualisering kan stödja mottagarna att konkretisera annars abstrakta aspekter av klimatförändringar och att ett lokalt fokus kan få klimatförändringarna att framstå som mer personligt relevanta och intressanta för målgruppen. Dock visar analyserna även, trots dessa kommunikativa kvaliteter, att deltagarnas tolkningar formas av deras förståelse om klimatförändringar som ett globalt och avlägset problem som ska lösas av andra aktörer, såsom nationella regeringar, eller genom internationella politiska förhandlingar. Även om klimatvisualisering kan förstärka känslan av närhet till klimatförändringar, kan lokaliseringen av klimatriskerna även leda till att deltagare tonar ned de lokala klimatriskernas betydelse. Dessutom, trots att båda fallen av klimatvisualisering avsåg att skapa en känsla av att kunna påverka, blev ansvaret för klimatåtgärder föremål för kritisk förhandling från deltagarnas sida – de förlade ansvaret för att hantera klimatutmaningarna till andra aktörer. Dessa

resultat visar att klimatvisualisering visserligen har vissa kommunikativa kvaliteter, men inte är någon patentiösning för klimatkommunikation. Detta understryker även vikten av att ta hänsyn till kulturella och sociala aspekter av den kommunikativa händelsen när man studerar och utvecklar verktyg för klimatvisualisering.

The importance of visual data mining, as a strong sub-discipline of data mining, had already been recognized in the beginning of the decade. In 2005 a panel of renowned individuals met to address the shortcomings and drawbacks of the current state of visual information processing. The need for a systematic and methodological development of visual analytics was detected. This book aims at addressing this need. Through a collection of 21 contributions selected from more than 46 submissions, it offers a systematic presentation of the state of the art in the field. The volume is structured in three parts on theory and methodologies, techniques, and tools and applications.

“We don’t sell gardens; we sell images of gardens.” This observation on the part of a landscape architect makes it clear just how important it is that a design be effectively communicated to the community, clients, and the public. Drawings, models, simulations, and films communicate the designers’ proposed ideas and solutions, but they also convey their attitude toward the use of nature and the environment. With myriad possibilities – including computer programs as well as hand drawings and models, which continue to be widely used – and strong competition in the field, there is now a huge variety of visual representations, with agreed-upon rules but also a great deal of freedom. In three large sections, this books sifts through the currently commonplace and available techniques and evaluates them in terms of their informative value and persuasive power, always illustrating its points with analysis of examples from international firms. An introductory look at the development thus far is followed by a systematic presentation of modes of representation in two, three, and four dimensions – in the plane, in space, and in the temporal process. The second section deals with the sequence within the workflow: from the initial sketch through concept and implementation planning all the way to the finished product. The third section deals with the strategic use of visualizations in the context of competitions, future schemes, and large-scale landscape planning. The focus in this section is not on the familiar use of the relevant techniques, but rather on the methods and forms of visual representation in contemporary landscape architecture.

Linking Ecology, Sustainability, and Aesthetics

The Holistic Nature of Landscape

Space and Time Visualisation

Visual Data Mining

Analysis, Modeling, Visualization and Protection

Rebalancing Human Impact and Natural Environment

From Information to Participation

Provides a survey of the approaches used and the problems encountered in the model of real geophysical data.

This book constitutes the thoroughly refereed proceedings of the 16th International Conference on Transport Systems Telematics, TST 2016, held in Katowice-Ustrón, Poland, in March 2016. The 37 full and 5 short papers presented in this volume were carefully reviewed and selected from 110 submissions. They present and organize the knowledge from within the field of intelligent transportation systems, the specific solutions applied in it and their influence on improving efficiency of transport systems.

Dynamic Patterns explores the role of patterns in designed landscapes. Patterns are inherently relational, and the search for and the creation of patterns are endemic to many scientific and artistic endeavors. Recent advances in optical tools, sensors, and computing have expanded our understanding of patterns as a link between natural and cultural realms. Looking beyond the surface manifestation of pattern, M’Closkey and VanDerSys delve into a multifaceted examination that explores new avenues for engagement with patterns using digital media. Examining the theoretical implications of pattern-making, they probe the potential of patterns to conjoin landscape’s utilitarian and aesthetic functions. With full color throughout and over one hundred and twenty images, Dynamic Patterns utilizes work from a wide range of artists and designers to demonstrate how novel modes of visualization have facilitated new ways of seeing patterns and therefore of understanding and designing landscapes.

Landscape is a vital, synergistic concept which opens up ways of thinking about many of the problems which beset our contemporary world, such as climate change, social alienation, environmental degradation, loss of biodiversity and destruction of heritage. As a concept, landscape does not respect disciplinary boundaries. Indeed, many academic disciplines have found the concept so important, it has been used as a qualifier that delineates whole sub-disciplines: landscape ecology, landscape planning, landscape archaeology, and so forth. In other cases, landscape studies progress under a broader banner, such as heritage studies or cultural geography. Yet it does not always mean the same thing in all of these contexts. The Routledge Companion to Landscape Studies offers the first comprehensive attempt to explore research directions into the many uses and meanings of ‘landscape’. The Companion contains thirty-nine original contributions from leading scholars within the field, which have been divided into four parts: Experiencing Landscape; Landscape Culture and Heritage; Landscape, Society and Justice; and Design and Planning for Landscape. Topics covered range from phenomenological approaches to landscape, to the consideration of landscape as a repository of human culture; from ideas of identity and belonging, to issues of power and hegemony; and from discussions of participatory planning and design to the call for new imaginaries in a time of global and environmental crisis. Each contribution explores the future development of different conceptual and theoretical approaches, as well as recent empirical contributions to knowledge and understanding. Collectively, they encourage dialogue across disciplinary barriers and reflection upon the implications of research findings for local, national and international policy in relation to landscape. This Companion provides up-to-date critical reviews of state of the art perspectives across this multifaceted field, embracing disciplines such as anthropology, archaeology, cultural studies, geography, landscape planning, landscape architecture, countryside management, forestry, heritage studies, ecology, and fine art. It serves as an invaluable point of reference for scholars, researchers and graduate students alike, engaging in the field of landscape studies.

Technology and Applications

Mathematical Modelling in Geographical Information System, Global Positioning System and Digital Cartography

Concepts, Tools and Applications

Urban Parks Between Safety and Aesthetics

Environmental and Agricultural Modelling:

Protection and Development of the Dutch Archaeological-historical Landscape and Its European Dimension

Visual Communication for Landscape Architecture

This book explores expertise relevant for two working groups of NeDIMAH, a European Science Foundation (ESF) funded Research Networking Programme. It examines mapping methods, procedures, tools, criticism, awareness, challenges and solutions around the concepts of “Space and Time” and “Information Visualization”. The chapters explore digital methods in the representation of natural disasters, industrial design, cultural, and the history of architecture. The conclusions link to related research and present suggestions for further work including representing landscape not just as another 3D model but as historic evolution with specialised tools.

Defining a research question, describing why it needs to be answered and explaining how methods are selected and applied are challenging tasks for anyone embarking on academic research within the field of landscape architecture. Whether you are an early career researcher or a senior academic, it is essential to draw meaningful conclusions and robust answers to research questions. Research in Landscape Architecture provides guidance on the rationales needed for selecting methods and offers direction to help to frame and design academic research within the discipline. Over the last couple of decades the traditional orientation in landscape architecture as a field of professional practice has gradually been complemented by a growing focus on research. This book will help you to develop the connections between research, teaching and practice, to help you to build a common framework of theory and research methods. Bringing together contributions from landscape architects across the world, this book covers a broad range of research methodologies and examples to help you conduct research successfully. Also included is a study in which the editors discuss the most important priorities for the research within the discipline over the coming years. This book will provide a definitive path to developing research within landscape architecture.

On behalf of the NDT 2010 conference, the Program Committee and Charles University in Prague, Czech Republic, we welcome you to the proceedings of the Second International Conference on ‘Networked Digital Technologies’ (NDT 2010). The NDT 2010 conference explored new advances in digital and Web technology applications. It brought together researchers from various areas of computer and information sciences who addressed both theoretical and applied aspects of Web technology and Internet applications. We hope that the discussions and exchange of ideas that took place will contribute to advancements in the technology in the near future. The conference received 216 papers, out of which 85 were accepted, resulting in an acceptance rate of 39%. These accepted papers are authored by researchers from 34 countries covering many significant areas of Web applications. Each paper was evaluated by a minimum of two reviewers. Finally, we believe that the proceedings document the best research in the studied areas. We express our thanks to the Charles University in Prague, Springer, the authors and the organizers of the conference.

Landscape is a stimulating introduction to and contemporary understanding of one of the most important concepts within human geography. A series of different influential readings of landscape are debated and explored, and, for the first time, distinctive traditions of landscape writing are brought together and examined as a whole, in a forward-looking critical review of work by cultural geographers and others within the last twenty to thirty years. This book clearly and concisely explores ‘landscape’ theories and writings, allowing students of geography, environmental studies and cultural studies to fully comprehend this vast and complex topic. To aid the student, vignettes are used to highlight key writers, papers and texts. Annotated further reading and student exercises are also included.

For researchers and lecturers, Landscape presents a forward-looking synthesis of hitherto disparate fields of inquiry, one which offers a platform for future research and writing.

Our Visual Landscape

Visualizing Landscape Architecture

Live Trace Visualization for System and Program Comprehension in Large Software Landscapes

The Routledge Companion to Landscape Studies

Research in Landscape Architecture

Computer Applications in Sustainable Forest Management

Exploring Urban Green Space Using Visualisation and Conjoint Analysis Methods

Climate change and the pressures of escalating human demands on the environment have had increasing impacts on landscapes across the world. In this book, world-class scholars discuss current and pressing issues regarding the landscape, landscape ecology, social and economic development, and adaptive management. Topics include the interaction between landscapes and ecological processes, landscape modeling, the application of landscape ecology in understanding cultural landscapes, biodiversity, climate change, landscape services, landscape planning, and adaptive management to provide a comprehensive view that allows readers to form their own opinions. Professor Bojie Fu is an Academician of Chinese Academy of Sciences and Chair of scientific committee at the Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing, China. Professor K. Bruce Jones is the Executive Director for Earth and Ecosystem Sciences Division at Desert Research Institute, University of Nevada, Las Vegas, USA.

An overview of issues involved in visualization technologies used in landscape and environmental planning. Covers a classification of the technology as well as a number of specialized applications across agricultural, industrial and urban planning.

An examination of how visual and aesthetic dimensions amplify the functional interpretation of cultural landscape.

This book represents the collected works of Environmental and Resource Management (ERM) Alumni as well as young professionals and researches who are involved in the field of ERM. The connecting theme of these works is the successful implementation of ERM in a wide range of issues including: energy innovation and management, climate change response and sustainable development aspects of resource management in developing countries. This book aims to expose some of the research outputs of ERM Alumni and present perspectives and critical questions of ERM application. The research results can provide empirical bases on which ERM study programmes and/or working environments can be problematised in order to more effectively meet the objectives of ERM. The intended audience of this volume is wide including potential and current ERM students who want to understand how ERM is being applied; and teachers and researchers who want to understand the roles and interactions of ERM Alumni and their workplace.

The Visual Elements of Landscape

Exploring the Role of Visualization in Climate Change Communication – an Audience Perspective

Modern Approaches to the Visualization of Landscapes

Representing Landscapes

Design for Regenerative Cities and Landscapes

Challenge of Transport Telematics

Spatial Models for Natural Resource Management and Planning

"Papers presented at the Training Programme on Mathematical Modelling in GIS/GPS and Digital Cartography, held at Jaipur during 1st February to 2nd March 2005".--[Source inconnue].

Agriculture increasingly faces the challenge of balancing its multiple functions in a sustainable way. Integrated assessment and modelling (IAM) can provide insight into the potential impacts of policy changes. However, concepts to address the wide range of issues and functions typical for agriculture are still scarce. Environmental and Agricultural Modelling reviews and presents our current understanding of integrated and working tools to assess and compute, ex-ante, alternative agricultural and environmental policy options, allowing: 1. Analysis at the full range of scales (farm to European Union and global) whilst focusing on the most important issues emerging at each scale; 2. Analysis of the environmental, economic and social contributions of agricultural systems towards sustainable rural development and rural viability; 3. Analysis of a broad range of issues and agents of change, such as climate change, environmental policies, rural development options, effects of an enlarging EU, international competition, and effects on developing countries.

Privileging the visual as the main method of communication and meaning-making, this book responds critically to the worldwide discussion about the Arctic and the North, addressing the interrelated issues of climate change, ethics and geopolitics. A multi-disciplinary, multi-modal exploration of the Arctic, it supplies an original conceptualization of the Arctic as a visual world encompassing an array of representations, imaginings, and constructions. By examining a broad range of visual forms, media and forms such as art, film, graphic novels, maps, media, and photography, the book advances current debates about visual culture. The book enriches contemporary theories of the visual taking the Arctic as a spatial entity and also as a mode of exploring contemporary and historical visual practices, including imaginary constructions of the North. Original contributions include case studies from all the countries along the Arctic shore, with Russian material occupying a large section due to the country’s impact on the region

Visual Communication for Landscape Architecture&C Black

Theory, Techniques and Tools for Visual Analytics

Geographic Visualization

Landscape Analysis and Visualisation

Implementing Environmental and Resource Management

Dynamic Patterns

Forests and Landscapes

Landscape Analysis

The basic problem is to what extent we can know past and mainly invisible landscapes, and how we can use this still hidden knowledge for actual sustainable management of landscape’s cultural and historical values. It has also been acknowledged that heritage management is increasingly about ‘the management of future change rather than simply protection’. This presents us with a paradox: to preserve our historic environment, we have to collaborate with those who wish to transform it and, in order to apply our expert knowledge, we have to make it suitable for policy and society. The answer presented by the Protection and Development of the Dutch Archaeological-Historical Landscape programme (pd/bbo) is an integrative landscape approach which applies inter- and transdisciplinarity, establishing links between archaeological-historical heritage and planning, and between research and policy.