

Conference Report

CMV 2005 & IV05

London, England

3rd International Conference on Coordinated & Multiple Views in Exploratory Visualization

July 5, 2005

9th International Conference on Information Visualisation

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The annually in London held IV conference is the second largest conference in the field of Information Visualization. Its collocated sister conference CMV is traditionally held one day before IV. Both events are important forums for international Information Visualization research in Europe. Unfortunately, this year's conference was overshadowed by the terrible terror attacks in London at July 7, 2005.

Conference Venue

For the first time this year, the conferences moved from Central London to Greenwich. The Maritime Greenwich Campus (Old Royal Naval College) is located in a green and quiet suburban neighborhood that can be reached easily via Dockland Railways' driverless trains from the center of London.



CMV 2005

The *Conference on Coordinated & Multiple Views in Exploratory Visualization (CMV)* is a one-day conference that has been organized for the third time by Jonathan Roberts from the University of Kent, UK. This year, thirteen papers have been accepted for the conference whereas twelve of them have been presented. The conference was divided into the four sessions *Exploratory Techniques*, *Exploration and Workflow*, *Scientific Visualization*, and *Spatial and Geovisualization*. Noticeable is, that five out of the thirteen presented works dealt with some form of *Parallel Coordinate* visualization [Inselberg and Dimsdale, 1987].

Always particularly interesting is the Closing Session chaired by Jonathan Roberts. He summarized this year's conference contributions as "*more applications and less theory*" than last year. Moreover, he tries to identify the strengths and weaknesses of the community and gives some outlook to future directions of the field. Regarding this, areas the field is doing well are *changing parameters to explore*, *Details on Demand*, *manipulation*, *simultaneous exploration*, and *various abstractions / overviews / levels of detail*. Areas the field is not yet doing very well are *comparing results from (previous) sessions*, *support for knowing what to change / explore & where to go*, *adventure / creativity*, *visualization quality (measurement of success)*, and *different expert opinions / alternative viewpoints*.

Furthermore, Jonathan Roberts is going to edit a book about CMV's which is planned to appear in 2006. Contributions to this book are welcome and should be submitted by christmas. As being the first book in this field, it should contain sections on *Fundamentals*, *Theory*, *Tools & Infrastructure*, *HCI*, *Usability*, *Applications*, and *Future of MV's*.

IV 05

This year's *International Conference on Information Visualisation (IV)* was a three-day conference with 22 different Symposia. With about 300 participants, it is the second largest international conference on Information Visualization. All in all, 264 papers have been submitted with an acceptance rate of about 50%. The papers, posters, and demos were mostly presented in five parallel sessions.

The Keynote Lecture on *Research Advances in Geovisualization and Remaining Challenges* was given by Mikael Jern of Linköping University, Sweden. The Keynote mostly followed Jern's personal research and work path over the years, because he deals with Geovisualization since decades. Apart from presenting related projects, he emphasized that Geovisualization is a field of growing interest because the majority of data is geo-

referenced. Furthermore, he pointed out that there are many exciting new ideas but little theory in general as well as a lack of empirical evaluation in particular. From his point of view, remaining challenges are to provide *convincing evidence* (including usability testing, controlled experiments, case studies / success stories), the creation of *benchmark repositories*, and *general public applicability*.

That *evaluation* is a topic of major importance could be clearly observed throughout the whole conference. In discussions after presentations, evaluations were demanded if they have not been done or closely looked at in case they were conducted.

An interesting kind of knowledge visualization was presented by Remo Burkhard et al. [Burkhard et al., 2005] who applied the familiar tube map representation to the completely different domain of visualizing temporal project data. *Beyond Guidelines - What Can We Learn from the Visual Information Seeking Mantra?* is the title of Brock Craft and Paul Cairns's contribution [Craft and Cairns, 2005] who conducted a literature review of papers that cite the *Visual Information Seeking Mantra* by Ben Shneiderman [Shneiderman, 1996] in order to search for design methodologies in Information Visualization. Several different guidelines were found, but a general methodology could not be identified. Related to the topic of *evaluation*, Thomas Bladh et al. presented a study on *The Effect of Animated Transitions on User Navigation in 3D Tree-Maps* [Bladh et al., 2005]. They performed a comparative empirical study where an animated and a non-animated version of treemap navigation transitions have been compared. Results are, that the animated version did better in terms of errors and taking shortcuts but no significant difference could be observed in task times.

As social event, a very nice boat cruise on the River Thames was organized on the second day of the conference. The tour took us across London while passing many famous places like the Tower Bridge, Tate Modern, Houses of Parliament, the London Eye, and many more. Apart from that, it was an excellent opportunity to get in touch with other researchers.



Tower Bridge



London Eye

Unfortunately, the conference was overshadowed by the terrible terror attacks in London on July 7, 2005. Although, the conference was not held in Central London, many participants lived there for the conference and had to take public transport in order to get to the conference venue. Fortunately, except of some disruptions and schedule changes, no participant was affected directly to my knowledge. Special thanks to the conference organizers of *GraphicsLink* who did everything possible to manage most difficulties, e.g. in case participants were stuck and needed accommodation and also bore the costs for this.

The Closing Session comprised two invited talks given by Hans-Jürgen Frank (Dialogarchitect) and Bradford Paley (Columbia University). The first talk was entitled *Designing the Future Process Visualisation (ProVis) in Companies, International Organisations and Society* and was very different from most other presentations given at the conference. Frank mainly presented experiences of a project with PricewaterhouseCoopers revolving around the topics of *dialogue, knowledge exchange, and communication*. Particularly outstanding was the presentation style of Hans-Jürgen Frank who used many different (unconventional) types of media and was able to engage the audience. No less passionate was Bradford Paley's presentation that was entitled *Tying Beauty to Truth*. Paley emphasized the importance of *Story Telling* for information and knowledge exchange between humans (*"people learn through stories"*) as well as the benefits of using *Metaphors*. Basis for further explanations was a model of the development of the human perceptual system that showed the different stages of perceiving visual information.

Austrian Participation

Austrian Information Visualization research contributed strongly via one paper at CMV and four papers at IV:

Kresimir Matkovic, Josip Juric, Zoltan Konyha, Jurgen Krasser, Helwig Hauser (VRVis Research and AVL List GmbH):

Interactive Visual Analysis of Multi-parameter Families of Function Graphs

Wolfgang Aigner, Silvia Miksch, Bettina Thurnher, Stefan Biffl (TU Vienna):

PlanningLines: Novel Glyphs for Representing Temporal Uncertainties and their Evaluation

Monika Lanzenberger, Silvia Miksch, Margit Pohl (TU Vienna):

Exploring Highly Structured Data: A Comparative Study of Stardimates and Parallel Coordinates

Wolfgang Kienreich und Michael Granitzer (Know-Center Graz):

Visualising Knowledge Maps for Encyclopedia Articles

Michael Zeiller (FH Burgenland):

A Case Study Based Approach to Knowledge Visualization

References

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