Preface

This volume contains the proceedings of the 35th Computer Applications and Quantitative Methods in Archaeology (CAA) Conference, held April 2–6, 2007, in Berlin, Germany.

CAA began in 1973 as a small organisation with an annual meeting at the University of Birmingham. As participation grew over the years, the conference was first held outside the UK in Denmark in 1992, and 15 years later, CAA was invited to Germany for the first time. Looking back, it seems hard to understand what took us so long to organise a CAA conference in Germany, as the origins of CAA-related activities reach back here as far as the early 1980s, when the first interest groups on quantitative methods in archaeology were formed in both East and West Germany. Nevertheless, the Berlin conference provided us with an apt opportunity to finally announce that the successor of those early precursors, the former "Arbeitsgemein-schaft Quantitative Methoden", had been renamed to become the German chapter of CAA.

The idea to host the CAA conference in Germany was originally proposed in 2004 by Benjamin Ducke (then at the University of Kiel) and Axel Posluschny (Roman Germanic Commission [RGK] of the German Archaeological Institute [DAI]) and soon found ample interest and support. In the end, the Berlin conference was jointly organised by the DAI, the German chapter of CAA, the Interdisciplinary Centre for the Study of the Ancient World at the Free University of Berlin and the Collection of Classical Antiquities of the National Museums in Berlin. We received generous financial support from the German Research Foundation (DFG) and the aforementioned Berlin-based institutions, as well as from our sponsors (Eastern Atlas and Verlag Philipp von Zabern), advertisers and exhibitors. Without their support, it would not have been possible to host this conference.

A Look Back at the Berlin Conference

With 554 participants from 39 countries, the 2007 conference was the largest CAA conference to date. In 42 sessions organised around a wide range of topics, 287 papers, 47 posters and 6 demos were presented. Furthermore, 10 workshops and a round table discussion were offered. The volume of contributions required up to 10 parallel sessions to be held over 4½ days. Certainly not everyone was happy with a conference of this size, but it nevertheless shows that CAA continues to be an attractive meeting point for professionals from a variety of backgrounds. The scientific programme of the conference was put together by the editors of this volume (Axel Posluschny, Karsten Lambers and Irmela Herzog), who were supported by many colleagues whose contributions are acknowledged below.

Some particularities of the Berlin conference as compared to previous conferences are worth mentioning. We fully integrated the workshops into the conference programme in order to avoid holding the opening session when the conference was already in full swing. We also gave the poster and demo session a prominent place in the programme by keeping its time slot free of any parallel sessions. While we feel that these choices were fully justified by the broad attendance of the poster and demo session as well as the workshops, they were also an expression of the freedom of each local organising team to try out new concepts, thereby continuously adapting the CAA format to new requirements. We enjoyed this freedom and encourage future conference organisers to make full use of it as well.

The sessions and workshops were complemented by a variety of other activities. In the central conference lobby, 16 exhibitors presented a wide range of CAA-related products, among them archaeological journals and monographs, visualisation software, 3D scanners and excavation databases. The European Network of Excellence EPOCH chose to convene during the CAA conference and organised sessions as well as workshops on the topics of their research. Most importantly, the Berlin conference saw the foundation of both the German and the North American chapters of the worldwide CAA community.

The Free University was a perfect location for the conference. We are grateful to the local organising team led by Agnes Henning and Hauke Ziemssen and supported by Katja Moede and others for their dedicated efforts before and during the conference. We also appreciate Jörg Denkinger's contribution, who developed a highly recognisable graphic design for all conference materials and co-produced, together with Hauke

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Ziemssen, an attractive and easy to use abstract book. Warm thanks also go to the IT department of the DAI head office as well as to staff members from both the DAI and the Free University for contributing to the success of the conference instead of enjoying their Easter holidays.

The CAA 2007 conference was held under the auspices of His Excellence Dr. Frank-Walter Steinmeier, the German Minister of Foreign Affairs. We are grateful for his support and for the opportunity to host the welcome reception at the Federal Foreign Office. The National Museums in Berlin offered free entry and special guided tours for all conference participants and were in charge of the organisation of the conference dinner and the farewell reception. The contributions of Martin Maischberger to these activities are gratefully acknowledged. Michael Meyer, then member of the Archaeological Service of the Brandenburg State Office for Historical Monuments arranged the post-conference tour to various sights in Brandenburg. The social programme, as well as the wide choice of other cultural highlights and activities in Berlin gave conference attendees ample opportunities to use their conference badges for free rides on the Berlin subway to see the sights and enjoy more than just an inspiring conference.

About this Volume

The present volume contains a selection of the papers, posters, and workshops presented in Berlin. Of the papers given in Berlin but missing here, the majority were not submitted for publication, while a few others were rejected during the review process. Some sessions held in Berlin are not represented here as none of the papers were submitted. Therefore we organised the remaining papers into new sections that in our view give a good idea of the main topics currently discussed within the CAA community. For the purpose of publication, long and short papers as well as posters were all treated alike and allowed approximately 6 pages. Following CAA's publication policy, discussed during previous General Annual Meetings, we decided to publish all accepted papers on CD and only a selection of them in print. We generally selected those papers recommended for printed publication by the reviewers, regardless of their topic. This explains why some sections contain more printed papers than others. For the sake of user-friendliness the titles, abstracts and file names of all those papers published in their entirety on CD only are also listed in the printed volume. Many papers published both in print and on CD contain colour figures that could only be reproduced correctly on CD, as the book had to be printed in black and white. In all cases where captions make reference to coloured elements of figures, the reader is therefore referred to the corresponding PDF file on the accompanying CD.

The peer-review procedure comprised two steps: (1) All abstracts were reviewed prior to the conference. (2) After the conference, all papers submitted for publication were again reviewed. Such an elaborate review procedure required the willingness and expertise of many volunteers, which was indeed generously offered to us by the many colleagues mentioned below. Unfortunately, we had to impose a tight schedule on the whole process. As the discussion during the General Annual Meeting in Berlin clearly showed, delayed publication of proceedings is currently one of the most pressing issues among the CAA community. Therefore we strove to publish this volume in time before the following CAA conference in Budapest. Shortly before Budapest, however, a most unfortunate series of technical issues and communication problems with the company commissioned to do the language editing and typesetting of the manuscripts for the printed volume caused a delay of several months, requiring the re-negotiation of the original contract. We apologise for any discord that our tight publication schedule and the subsequent delayed publication of this volume may have caused.

Our major concern was the quality of the proceedings, as in our opinion CAA proceedings should continue to be reference publications for people interested in computer applications and quantitative methods in archaeology. While most reviewers contributed to this quality control by submitting detailed and insightful comments on the reviewed papers, for which we are extremely grateful, the varying quality and elaborateness of other reviews sometimes left authors and editors alike at a loss how to respond. We therefore recommend future proceedings editors to take a more structured approach to the review procedure.

These minor issues aside, we greatly enjoyed working with all people who made the publication of this volume possible. The scientific committee was comprised of all reviewers of abstracts and papers as well

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as chairs of sessions and workshops, mentioned here in alphabetical order. We very much appreciate their valuable assistance.

Dean Abernathy (chair)

Craig Alexander (abstracts, papers, chair)

Jens Andresen (papers) Michael Ashley (chair) Juan Barceló (papers, chair) Ruth Beusing (abstracts, papers) Wolfgang Börner (abstracts, papers)

Kai-Christian Bruhn (abstracts, papers, chair)

Jeffrey Clark (chair) Erich Claßen (chair) Ortwin Dally (papers) Bruno Deiss (abstracts)

Benjamin Ducke (abstracts, papers, chair)

Harrison Eiteljorg (papers) Jörg Faßbinder (abstracts, papers) Kelly Fennema (papers, chair)

Kate Fernie (chair)

Arne Flaten (abstracts, papers, chair)

Friederike Fless (chair)

Reinhard Förtsch (abstracts, chair) Bernard Frischer (abstracts, papers, chair)

Andreas Georgopoulos (chair)

Alyson A. Gill (abstracts, papers, chair)

Armin Gruen (chair) Thomas Hanusch (chair)

David Haskiya (abstracts, papers, chair)

Robert Hecht (chair)

Katja Heine (abstracts, papers, chair) Markus Helfert (abstracts, papers)

Agnes Henning (chair)

Irmela Herzog (abstracts, papers, chair) Henner von Hesberg (abstracts, chair)

Elisabeth Jerem (papers, chair)

Hans Kamermans (abstracts, papers, chair)

Tim Kerig (abstracts, papers, chair) Rainer Komp (abstracts, chair)

Martin Kuna (papers)

Mark Lake (abstracts, papers, chair) Karsten Lambers (abstracts, papers, chair)

Guus Lange (papers)

Jutta Lechterbeck (abstracts, papers, chair) P. Martijn van Leusen (abstracts, chair) Gary Lock (abstracts, papers, chair) Scott Madry (abstracts, chair)

Emilia Masci (chair)

Nicolas Melard (abstracts, chair)

Katja Moede (abstracts) Vincent Mom (chair) Mark Mudge (papers, chair)

Johannes Müller (chair) Matthias Müller (chair) Nils Müller-Scheeßel (chair) Franco Niccolucci (papers) Laure Nuninger (papers) Clive Orton (abstracts, papers)

Hans Paijmans (chair) Daniel Pletinckx (papers)

Axel Posluschny (abstracts, papers, chair) Marin Posselt (abstracts, papers, chair) Luke Premo (abstracts, papers, chair) Knut Rassmann (abstracts, papers, chair)

Karina Rodriguez (chair) Nick Ryan (papers)

Martin Sauerbier (abstracts, papers, chair)

Ladislav Smejda (papers)

Stephen Stead (abstracts, papers, chair)

Hanna Stoeger (chair)

Burkart Ullrich (abstracts, chair) Philip Verhagen (papers, chair)

David Wheatley (chair)

Tom Whitley (abstracts, papers, chair)

Ben Wood (chair) Samuel Wood (chair)

Ulrike Wulf-Rheidt (abstracts, papers, chair) Andreas Zimmermann (abstracts, papers, chair)

Michèle Eller, Markus Helfert and Hauke Ziemssen provided essential editorial assistance during various stages of the reviewing and editing process. Hermann Parzinger, then president of DAI, endorsed our efforts from the beginning and provided ample organisational and financial support. The same applies for Friedrich Lüth, director of RGK, who furthermore helped us by agreeing to publish this volume in a suitable RGK book series. Finally, we owe substantial advice on the layout and contents of the volume to Susanne Sievers, vice director of RGK. Without these valuable contributions, this volume could not have been published.

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All in all, organising the Berlin conference and preparing this volume was a very time-consuming, yet highly rewarding and inspiring experience. We are glad to have followed the example of so many colleagues who took on this task before us, and encourage all others to share this experience in the future.

Frankfurt, Bonn, Konstanz, Berlin, November 2008

The Editors and the Conference Organisers

Ortwin Dally, Friederike Fless, Irmela Herzog, Tim Kerig, Karsten Lambers, Axel Posluschny, Andreas Scholl