Beiträge zur
Wirtschaftsgeographie
München

Ludwig-Maximilians-Universität (LMU) München, October 17-19, 2012

The International Symposium

Reconstruction and the Historic City:

Rome and Abroad - *an interdisciplinary approach*

Abstracts

edited by

Chrystina Häuber, Franz-Xaver Schütz and Gordon M. Winder

The International Symposium

Reconstruction and the Historic City:

Rome and Abroad - *an interdisciplinary approach*

Abstracts

edited by

Chrystina Häuber, Franz-Xaver Schütz and Gordon M. Winder

Preface

The idea to organize this Symposium on `Reconstruction and the Historic City: Rome and Abroad - *an interdisciplinary approach*' came on May 18, 2011, when the classical archaeologist Dr. Chrystina Häuber asked the geographer Dr. Franz-Xaver Schütz (Fakultät für Geoinformation at the Hochschule München) and the Head of the Department of Geography at the Ludwig-Maximilians-Universität (LMU) München, Prof. Dr. Jürgen Schmude, whether they would like to organize with her an interdisciplinary Symposium on the reconstruction of historic cities at the LMU München. Since December 2010, Dr. Häuber is based at the Department of Geography at the LMU München. For some time she and Dr. Schütz had wanted to invite the international cooperation-partners of their research project "AIS ROMA" to present their work on ancient Rome in München. Prof. Dr. Schmude und Dr. Schütz agreed to collaborate in this Symposium and all three decided not to focus the presentations on ancient Rome alone, but to broaden the perspective in geographical, as well as in terms of time periods. By the end of the day, a first draft describing the objectives of this Symposium was written, and the archaeologists Dott.ssa Susanna Le Pera (Comune di Roma) in Rome and Prof. Eugenio La Rocca (Università di Roma "La Sapienza"), as well as Prof. Amanda Claridge (The University of London, Royal Holloway & Bedford New College) in London had agreed to come. The latter also helped to create the title of the Symposium. The other cooperation-partners of the project "AIS ROMA", who could not be reached by telephone, were informed by Email. From the beginning, one major aim of this Symposium was to discuss methods of reconstruction from the points of view of history, geography and archaeology, and to allow the presentation of paper-based reconstructions as well as those generated on computer. Luckily Prof. Dr. Gordon M. Winder of the Department of Geography at the LMU agreed not only to present his work on Auckland in New Zealand at this Symposium, but also to lend his expertise as an editor and in some cases translator of the CVs and abstracts supplied by the invited speakers and published here. Fortunately, soon after the very beginnings of these plans, Prof. Dr. Stefan Ritter, the Chair for Classical Archaeology of the LMU, agreed to collaborate. In the following months the Symposium Committee, comprising Prof. Dr. Schmude, Prof. Dr. Ritter, Dr. Schütz and Dr. Häuber, shaped the objectives of this Symposium in detail, as well as the programme, as presented here. Dr. Häuber and Dr. Schütz acted as conveners of the Symposium. Prof. Dr. Winder, Dr. Schütz and Dr. Häuber edited the texts, Dr. Schütz published the programme of the Symposium in the internet and produced the pdf-file of this publication.

The editors thank Prof. Dr. Schmude and Herrn Michael Bischof M. A. for accepting the manuscript as volume 4 of *Beiträge Wirtschaftsgeographie München* and for their generous support and help.

München, October 9th, 2012, C. Häuber, Franz-Xaver Schütz and Gordon M. Winder

Contents

DEPARTMENT FÜR GEOGRAPHIE
LEHRSTUHL FÜR
WIRTSCHAFTSGEOGRAPHIE UND TOURISMUSFORSCHUNG

INSTITUT FÜR KLASSISCHE ARCHÄOLOGIE
LEHRSTUHL FÜR KLASSISCHE ARCHÄOLOGIE

Programme

The International Symposium Reconstruction and the Historic City: Rome and Abroad - an interdisciplinary approach

Universität München (LMU)
Hauptgebäude, Senatssaal, Geschwister-Scholl-Platz 1, 80539 München
17-19 October 2012

This symposium brings together experienced researchers from diverse disciplines to discuss methodologies for researching the city as a historical phenomenon and to reflect on the possibilities and limits of interdisciplinary collaboration. In this event, scholars from the Research Unit for Economic Geography at the Universität München (LMU) and the Chair for Classical Archaeology of the Universität München (LMU) collaborate for the first time. Separately, as archaeologists, historians, geographers and computer scientists, we have begun to collaborate in urban research, and have discovered that such collaboration will be greatly facilitated by a fundamental discussion of methods. We will explore trans-disciplinary applications of methods by focusing on reconstructions and visualizations of historic cities.

We have chosen as case study the ancient city of Rome, which has traditionally attracted a unique number of international research projects. Accordingly, the symposium will feature scholars who specialize in ancient Rome, and, through their direction of international co-operation projects in Rome, know the challenge of urban research in theory and practice. A second group of speakers comprises researchers at the Universität München (LMU), who either belong to the Research and Teaching Unit Economic Geography or to the Chair of Classical Archaeology, and who are interested to explore possible common projects. The chairs of these two fields desire to introduce their young scholars to new perspectives and skills that will allow them to pursue path-breaking research. Deliberately, students, Doktoranden, post docs and Habilitanden will be encouraged to participate.

The third group of invited speakers consists of specialists from a variety of other, related disciplines including Egyptology and architecture. Thus, the symposium assembles speakers and discussants not only from Germany, Italy, the United Kingdom and the USA, but also, deliberately and, perhaps for the first time in this variety and combination, gathers together scientists from architecture, archive studies, classical archaeology, Egyptology, geography, GIScience, heritage studies, history and history of architecture. The researchers come from different phases of their careers and are based at diverse research institutes.

The Symposium Committee:
Prof. Dr. Jürgen Schmude, Prof. Dr. Stefan Ritter, Dr. Chrystina Häuber, Dr. Franz Xaver Schütz

Conveners of the Symposium:
Dr. Chrystina Häuber, Dr. Franz Xaver Schütz

Contact:
Dr. Chrystina Häuber
Email: chrystina.haeuber@geographie.uni-muenchen.de

Conference Programme

All of the presentations will be given in the Senatssaal of the Universität München (LMU), Hauptgebäude, Geschwister-Scholl-Platz 1, 80539 München

Wednesday, 17. October 2012

14.00 Registration.
15.00 Introduction.

Official Welcome from the Prodekan Ludwig of the Fakultät für Geowissenschaften at the LMU
Official Welcome from the Symposium Committee.

Introductory Lecture History
How do we know? Prof. T. P. Wiseman (Ancient History and Classics, University of Exeter, UK). Prof. Wiseman will discuss reconstructions of ancient Rome from an historical perspective. (45 minutes)

Introductory Lecture Archaeology
The perception of space in ancient Rome. Prof. Eugenio La Rocca (Classical Archaeology, Università di Roma "La Sapienza", Italy). Prof La Rocca will discuss reconstructions of ancient Rome from an archaeological perspective. (45 minutes)

Introductory Lecture Geography
Disciplinary, interdisciplinary or transdisciplinary research: imperatives and constraints. Prof. Dr. Jürgen Schmude (Geography, Director of the Department of Geography, Universität München (LMU)). Prof. Schmude will discuss the prospects for interdisciplinary collaboration. (45 minutes).

18.00 End of Presentations.
19.00 Reception.

Thursday, 18. October 2012

I. Session: Visualization Today

8.15-9.00 Presentation (20 minutes) and Discussion (25 minutes)
Rome: the city of memories: Or, why and how reconstruct and visualize ancient and post-antique Rome using digital technologies? The "AIS ROMA", diachronic and phase maps of (ancient) Rome in the WWW. Dr. Chrystina Häuber (Classical Archaeology, Lehr- und Forschungseinheit für Wirtschaftsgeographie am Department für Geographie, Universität München (LMU)).

9.00-9.45 Presentation (20 minutes) and Discussion (25 minutes)
De Roma Instaurata (1446) - Nuova Forma Urbis Romae (2011): ricostruzione in quattro dimensioni di un paesaggio urbano complesso. Il Caso di Roma, metodologia ed esempi. Dott.ssa Susanna Le Pera (Classical Archaeology, Responsabile of the project "Nuova Forma Urbis Romae", Roma Capitale, Sovraintendenza ai Beni Culturali, Roma, Italy).

9.45-10.30 Presentation (20 minutes) and Discussion (25 minutes)
Descriptio Urbis - Un webgis per ricostruire i paesaggi urbani di Roma. Dott. Paolo Buonora (Archive Studies, Archivio di Stato di Roma, Italy), Dott.ssa Susanna Le Pera (Classical Archaeology, Roma Capitale, Sovraintendenza ai Beni Culturali, Italy), Prof. arch. Paolo Micalizzi (Architectural History, Roma Tre Università degli Studi, Italy) and Dott. Luca Sasso D'Elia (Classical Archaeology, Roma Capitale, Sovraintendenza ai Beni Culturali, Italy).

10.30-11.00 Coffee Break
11.00-11.45 Presentation (20 minutes) and Discussion (25 minutes)
Why work with geographers in reconstructions and visualizations of ancient Rome? Dr. Franz Xaver Schütz (Geography, Hochschule München, Fakultät für Geoinformation).

II. Session: Case Studies: Reconstructions of Single Buildings

11.45-12.30 Presentation (20 minutes) and Discussion (25 minutes)
Reconstructing the Temple of Apollo on the Palatine Hill in Rome. Prof. Amanda Claridge (Classical Archaeology, Royal Holloway, University of London, UK).

12.30-13.15 Presentation (20 minutes) and Discussion (25 minutes)
Methodische Überlegungen zur Rekonstruktion einer Decke in der `Casa di Augusto´ auf dem Palatin. Dr. Johannes Lipps (Classical Archaeology, Institut für Klassische Archäologie, Universität München (LMU)).

13.15-15.15 Lunch – participants are encouraged to take their meal at the Mensa of the Universität München (LMU).

III. Session: Historical Visualizations

15.15-16.00 Presentation (20 minutes) and Discussion (25 minutes)
Alle Wege führen aus Rom hinaus! Die Wahrnehmung des Suburbium in Kartographie und Archäologie der Neuzeit. PD Dr. Jochen Griesbach (Classical Archaeology, Martin von Wagner Museum, Würzburg).

16.00-16.45 Presentation (20 minutes) and Discussion (25 minutes)
Changing interests: The city as topic in Roman Art. Prof. Dr. Stefan Ritter (Classical Archaeology, Institut für Klassische Archäologie, Universität München (LMU)).

16.45-17.15 Coffee Break

17.15-18.00 Presentation (20 minutes) and Discussion (25 minutes)
Reconstructions of Early Rome. Prof. Christopher J. Smith (Ancient History, Director of the British School at Rome, Italy).

18.00-18.45 Presentation (20 minutes) and Discussion (25 minutes)
The Life and Death of Ancient Roman Cemeteries. Prof. John Bodel (Ancient History, Brown University, USA).

20.30 Symposium Dinner.

Friday, 19. October 2012

IV. Session: Reconstructions of City Districts

9.00-9.45 Presentation (20 minutes) and Discussion (25 minutes)
Le domus dell´aristocrazia romana repubblicana sul Palatino. Prof. Filippo Coarelli (Classical Archaeology,Università degli Studi di Perugia, Italy).

9.45-10.30 Presentation (20 minutes) and Discussion (25 minutes)
La necropoli lungo la via Triumphalis: storia dei rinvenimenti, della tutela e della ricostruzione di un tratto del paesaggio suburbano di Roma. Prof. Francesco Buranelli (Archaeology, Segretario della Pontificia Commissione per i Beni Culturali della Chiesa, Città del Vaticano).

10.30-11.00 Coffee Break

V. Session: Communication Processes

11.00-11.45 Presentation (20 minutes) and Discussion (25 minutes)
Tripheion – Atripe. Reconstructing the changes of sacred space in a late antique Upper Egyptian town. Dr. Rafed El-Sayed and Dr. des. Konstantin Lakomy (both are Egyptologists and both are based at the Seminar für Ägyptologie und Koptologie, Universität Göttingen).

11.45-12.30 Presentation (20 minutes) and Discussion (25 minutes)
The Environment & Society Portal: Connecting environmental events geographically, chronologically and conceptually. Dr. Wilko von Hardenberg (History, Rachel Carson Center for Environment and Society, Universität München (LMU)).

12.30-13.15 Presentation (20 minutes) and Discussion (25 minutes)
Reconstruction and Narrative: Re-imagining Auckland's Heritage in Walking Tour Guides. Prof. Dr. Gordon Winder (Economic Geography, Department of Geography, Universität München (LMU)).

Final Words from the Symposium Committee.

13.30 Parting Snack.

Discussants

The Classical Archaeologist Prof. Dr. Rolf Michael Schneider (Institut für Klassische Archäologie, Universität München (LMU)).

The Geographer Prof. Dr. Gordon Winder (Department für Geographie, Universität München (LMU)).

The Ancient Historian Prof. Richard Gordon (Universität Erfurt).

DEPARTMENT FÜR GEOGRAPHIE
LEHRSTUHL FÜR
WIRTSCHAFTSGEOGRAPHIE UND TOURISMUSFORSCHUNG

LUDWIG-
MAXIMILIANS-
UNIVERSITÄT
MÜNCHEN

INSTITUT FÜR KLASSISCHE ARCHÄOLOGIE
LEHRSTUHL FÜR KLASSISCHE ARCHÄOLOGIE

Das Internationale Symposium Reconstruction and the Historic City: Rome and Abroad - an interdisciplinary approach

17.-19. Oktober 2012
Universität München (LMU)
Hauptgebäude, Senatssaal, Geschwister-Scholl-Platz 1, 80539 München

Ziel des Symposiums ist es, methodische Ansätze verschiedener Forschungsdisziplinen, die die Stadt als historisches Phänomen untersuchen, zusammenzuführen. Als Gastgeber fungieren zwei Partner der Universität München (LMU), die aus Anlaß dieses Symposiums und seiner Vorbereitung erstmals zusammenarbeiten. Es handelt sich um die Lehr- und Forschungseinheit Wirtschaftsgeographie am Department für Geographie einerseits, und um den Lehrstuhl für Klassische Archäologie andererseits. Dahinter steht die Erkenntnis, dass im Rahmen konkreter Stadtforschungs-Projekte Archäologen, Historiker, Geographen und Informatiker zwar zunehmend zusammenarbeiten, dieses Zusammenwirken aber einer grundsätzlichen Methodendiskussion bedarf, um die fachspezifischen Potentiale optimal zu nutzen. Unter Fokussierung auf Fragen der Rekonstruktion und Visualisierung historischer Städte verfolgt das Symposium den Zweck, Fragestellungen und Methoden über Fächergrenzen hin verstehbar zu machen und in reger Diskussion auf ihre transdisziplinäre Anwendbarkeit hin zu prüfen. Die eingeladenen Referenten haben gemeinsam, dass sie durch ihre Tätigkeit auf verschiedenen Feldern der Stadtforschung mit den Grenzen und Möglichkeiten interdisziplinärer Zusammenarbeit vertraut sind.

Als Fallbeispiel steht das antike Rom im Mittelpunkt, da die größte Metropole der Antike traditionell ein einzigartiger Anziehungspunkt internationaler Forschungsprojekte ist. Eine größere Gruppe der Referenten besteht daher aus Forschern, die Kooperationsprojekte in Rom leiten oder geleitet haben und die Herausforderungen kennen, vor denen historische Stadtforschung in Theorie und Praxis steht. Eine zweite Gruppe der Vortragenden besteht aus Forschern, die an der Universität München (LMU) der Lehr- und Forschungseinheit Wirtschaftsgeographie und dem Lehrstuhl für Klassische Archäologie zugehören und lebhaft daran interessiert sind, die Möglichkeiten gemeinsamer Projekte auszuloten. Die beiden Lehrstuhlinhaber sind zugleich von dem Wunsch motiviert, anhand des für beide Seiten gleichermaßen relevanten Tagungsthemas ihren Nachwuchswissenschaftlern neue und wegweisende Qualifizierungsperspektiven zu eröffnen. Daher werden gezielt Studierende, Doktoranden, Post-Doktoranden und Habilitanden in die Tagung eingebunden.

Eine dritte Gruppe der Referenten besteht aus Spezialisten verschiedener anderer Disziplinen. Die Vortragenden und Diskussionsleiter kommen aus Italien, England, den USA und Deutschland und vertreten folgende, in dieser Zusammensetzung und Vielfalt wohl erstmals gezielt aufeinander treffende Fächer: Klassische Archäologie, Geographie, GIScience, Geschichte, Ägyptologie, Architektur, Bauforschung, Denkmalpflege und Archivwesen. Die Wissenschaftlerinnen und Wissenschaftler befinden sich dabei in unterschiedlichen Phasen ihrer Karriere und sind an ganz verschiedenen Wissenschaftsstandorten beheimatet.

Organisationskomitee des Symposiums:
Prof. Dr. Jürgen Schmude, Prof. Dr. Stefan Ritter, Dr. Chrystina Häuber, Dr. Franz Xaver Schütz

Sprecher des Organisationskomitees:
Dr. Chrystina Häuber, Dr. Franz Xaver Schütz

Im Senatssaal steht nur eine begrenzte Anzahl von Sitzplätzen zur Verfügung, deshalb wird um schriftliche Anmeldung gebeten. Die Teilnahme an diesem Symposium ist grundsätzlich kostenlos. Wenn Sie teilnehmen möchten, bitten wir Sie um Antwort bis zum 1. Oktober 2012. Am 18. Oktober findet ab 20.30 Uhr auf dem Olympiaturm (dem Münchener 'Fernsehturm ') das Symposiums-Dinner statt, zu dem alle Vortragenden und Discussants eingeladen sind. Die Kosten für die übrigen Teilnehmer und Teilnehmerinnen des Symposiums für dieses Dinner belaufen sich pro Person auf 60 EUR, für Studierende auf 40 EUR. Um Anmeldung wird gebeten unter: chrystina.haeuber@geographie.uni-muenchen.de

Ansprechpartner:
Dr. Chrystina Häuber
Email: chrystina.haeuber@geographie.uni-muenchen.de

Tagungsprogramm

Alle Vorträge finden im Senatssaal der Ludwig-Maximilians-Universität (LMU) München statt, Hauptgebäude, Geschwister-Scholl-Platz 1, 80539 München

Mittwoch, 17. Oktober 2012

14.00 Uhr Registrierung der Symposiumsteilnehmer.
15.00 Uhr Einführung in die Thematik.

Begrüßung der Teilnehmer des Symposiums durch den Prodekan Ludwig der Fakultät für Geowissenschaften der LMU

Begrüßung der Teilnehmer des Symposiums durch das Organisationskomitee.

Einführungsvortrag Geschichte
How do we know? Prof. T. P. Wiseman (Althistoriker, University of Exeter, Großbritannien). Prof. Wiseman wird Rekonstruktionen der antiken Stadt Rom aus historischer Sicht diskutieren. (45 Minuten)

Einführungsvortrag Archäologie
The perception of space in ancient Rome. Prof. Eugenio La Rocca (Klassischer Archäologe, Università di Roma "La Sapienza", Italien). Prof. La Rocca wird einen Vortrag zu Rekonstruktionen der antiken Stadt Rom aus archäologischer Sicht halten. (45 Minuten)

Einführungsvortrag Geographie
Disciplinary, interdisciplinary or transdisciplinary research: imperatives and constraints. Prof. Dr. Jürgen Schmude (Geograph, Direktor des Departments für Geographie, Universität München (LMU)). Prof. Schmude wird die Chancen interdisziplinärer Zusammenarbeit diskutieren. (45 Minuten).

18.00 Uhr voraussichtliches Ende.
19.00 Uhr Empfang.

Donnerstag, 18. Oktober 2012

I. Themenblock: Visualisierung heute

8.15-9.00 Uhr: Vortrag (20 Minuten) und Diskussion (25 Minuten)
Rome: the city of memories. Or, why and how reconstruct and visualize ancient and post-antique Rome using digital technologies? The "AIS ROMA", diachronic and phase maps of (ancient) Rome in the WWW. Dr. Chrystina Häuber (Klassische Archäologin, Lehr- und Forschungseinheit für Wirtschaftsgeographie, Department für Geographie, Universität München (LMU)).

9.00-9.45 Uhr: Vortrag (20 Minuten) und Diskussion (25 Minuten)
De Roma Instaurata (1446) - Nuova Forma Urbis Romae (2011): ricostruzione in quattro dimensioni di un paesaggio urbano complesso. Il Caso di Roma, metodologia ed esempi. Dott.ssa Susanna Le Pera (Klassische Archäologin, Responsabile des Projektes "Nuova Forma Urbis Romae", Roma Capitale, Sovraintendenza ai Beni Culturali, Roma, Italien).

9.45-10.30 Uhr: Vortrag (20 Minuten) und Diskussion (25 Minuten)
Descriptio Urbis - Un webgis per ricostruire i paesaggi urbani di Roma. Dott. Paolo Buonora (Archivar, Archivio di Stato di Roma, Italien), Dott.ssa Susanna Le Pera (Klassische Archäologin, Roma Capitale, Sovraintendenza ai Beni Culturali, Italien), Prof. arch. Paolo Micalizzi (Bauforscher, Roma Tre Università degli Studi, Italien) und Dott. Luca Sasso D'Elia (Klassischer Archäologe, Roma Capitale, Sovraintendenza ai Beni Culturali, Italien).

Kaffeepause: 10.30-11.00 Uhr

11.00-11.45 Uhr: Vortrag (20 Minuten) und Diskussion (25 Minuten)
Why work with geographers in reconstructions and visualizations of ancient Rome? Dr. Franz Xaver Schütz (Geograph, Hochschule München, Fakultät für Geoinformation).

II. Themenblock: Fallbeispiele von Rekonstruktionen einzelner Bauten

11.45-12.30 Uhr: Vortrag (20 Minuten) und Diskussion (25 Minuten)
Reconstructing the Temple of Apollo on the Palatine Hill in Rome. Prof. Amanda Claridge (Klassische Archäologin, Royal Holloway, University of London, Großbritannien).

12.30-13.15 Uhr: Vortrag (20 Minuten) und Diskussion (25 Minuten)
Methodische Überlegungen zur Rekonstruktion einer Decke in der `Casa di Augusto´ auf dem Palatin. Dr. Johannes Lipps (Klassischer Archäologe, Institut für Klassische Archäologie, Universität München (LMU)).

Mittagspause 13.15-15.15 Uhr, für die Symposiumsteilnehmer besteht die Möglichkeit, die Mensa der LMU München zu besuchen.

III. Themenblock: Historische Visualisierungen

15.15-16.00 Uhr: Vortrag (20 Minuten) und Diskussion (25 Minuten)
Changing interests: The city as topic in Roman Art. Prof. Dr. Stefan Ritter (Klassischer Archäologe, Institut für Klassische Archäologie, Universität München (LMU)).

16.00-16.45 Uhr: Vortrag (20 Minuten) und Diskussion (25 Minuten)
Alle Wege führen aus Rom hinaus! Die Wahrnehmung des Suburbium in Kartographie und Archäologie der Neuzeit. PD Dr. Jochen Griesbach (Klassischer Archäologe, Martin von Wagner Museum, Würzburg).

Kaffeepause: 16.45-17.15 Uhr

17.15-18.00 Uhr: Vortrag (20 Minuten) und Diskussion (25 Minuten)
Reconstructions of Early Rome. Prof. Christopher J. Smith (Althistoriker, Direktor der British School at Rome, Italien).

18.00-18.45 Uhr: Vortrag (20 Minuten) und Diskussion (25 Minuten)
The Life and Death of Ancient Roman Cemeteries. Prof. John Bodel (Althistoriker, Brown University, USA).

Ab 20.30 Uhr Symposiums-Dinner.

Freitag, 19. Oktober 2012

IV. Themenblock: Rekonstruktion von Stadtquartieren

9.00-9.45 Uhr: Vortrag (20 Minuten) und Diskussion (25 Minuten)
Le domus dell´aristocrazia romana repubblicana sul Palatino. Prof. Filippo Coarelli (Klassischer Archäologe,Università degli Studi di Perugia, Italien).

9.45-10.30 Uhr: Vortrag (20 Minuten) und Diskussion (25 Minuten)
La necropoli lungo la via Triumphalis: storia dei rinvenimenti, della tutela e della ricostruzione di un tratto del paesaggio suburbano di Roma. Prof. Francesco Buranelli (Archäologe, Segretario della Pontificia Commissione per i Beni Culturali della Chiesa, Città del Vaticano).

Kaffeepause 10.30-11.00 Uhr

V. Themenblock: Vermittlungsprozesse

11.00-11.45 Uhr: Vortrag (20 Minuten) und Diskussion (25 Minuten)
Tripheion – Atripe. Reconstructing the changes of sacred space in a late antique Upper Egyptian town. Dr. Rafed El-Sayed und Dr. des. Konstantin Lakomy (beide sind Ägyptologen, beide Seminar für Ägyptologie und Koptologie, Universität Göttingen).

11.45-12.30 Uhr: Vortrag (20 Minuten) und Diskussion (25 Minuten)
The Environment & Society Portal: Connecting environmental events geographically, chronologically and conceptually. Dr. Wilko von Hardenberg (Historiker, Rachel Carson Center for Environment and Society, Universität München (LMU)).

12.30-13.15 Uhr: Vortrag (20 Minuten) und Diskussion (25 Minuten)
Reconstruction and Narrative: Re-imagining Auckland's Heritage in Walking Tour Guides. Prof. Dr. Gordon Winder (Geograph, Department für Geographie, Universität München (LMU)).

Zusammenfassung und Schlußwort durch das Organisationskomitee des Symposiums.

13.30 Uhr Abschiedsimbiß.

Diskussionsleiter

Der Klassische Archäologe Prof. Dr. Rolf Michael Schneider (Institut für Klassische Archäologie, Universität München (LMU)).

Der Geograph Prof. Dr. Gordon Winder (Department für Geographie, Universität München (LMU)).

Der Althistoriker Prof. Richard Gordon (Universität Erfurt).

T.P. Wiseman (Exeter):   How do we know?

The Symposium is organised jointly by the Department of Geography and the Chair for Classical Archaeology of the Universität München (LMU); its title is "Reconstruction and the Historic City". I am not a geographer; I am not an archaeologist; but I am a classicist and a historian, and my opening contribution to the proceedings must be to explain what "historic" and "classical" mean.

Reconstructing an unknown city is one thing: all one can do is map the remains and imagine what they may be remains of.   Reconstructing a city whose history is known (at least partly) is quite another thing: in this case we want to give names to the remains, and map features for which no remains survive.   And so, whether we like it or not, we have to ask the historian's question: how do we know?

It is a philosophical paradox.   On the one hand, we *cannot* have knowledge of the past, because the past is gone for ever and we can't go back there to see what happened.   On the other hand, we *do* have knowledge of the past, and our lives would be impossible without it. We know what happened yesterday; we know what happened last week; we know what happened on 11 September 2001; we even know what happened on 15 March 44 BC.   But it is knowledge that cannot be absolutely confirmed.

Every statement we make about the past is necessarily a hypothesis, and in principle capable of disproof.   When we say we *know* some event took place, or describe it as a historical *fact*, what we mean is that the evidence for it is so strong that we cannot imagine it ever being falsified.   But there is always the logical possibility of falsification.   It is not a "fact" in the same sense as the demonstrable and repeatable fact that water will boil at 100 degrees Celsius.

For knowledge of the past, everything depends on the quality of the evidence, and for the city of Rome the evidence is comparatively rich.   An enormous number of texts survive from the ancient world, the work of poets, playwrights, statesmen, scholars, historians, satirists, novelists, theologians.   Many of these texts were written in the city of Rome or about the city of Rome, and what we think we know about the city is what these texts tell us, or what we can infer from them.   The information they provide is enormously valuable, but it is not something we can simply take for granted.

For instance, how reliable are these "classical" texts?   They are the result of centuries of manuscript copying and recopying, and evident errors, omissions and interpolations are not at all uncommon.   We can only ask what an author meant when we are sure we know what he wrote.

Then we have to ask which Rome he is talking about.   From the first evidence of continuous habitation down to the desolation of the city at the time of the Lombard invasions, the history of "ancient Rome" is a period of about 1800 years (the same as from Septimius Severus to our own time). The earliest of our literary texts, the comedies of Plautus, were written when Rome as a recognisable city-state had already seen five centuries of urban development (the same as from Martin Luther to our own time).

Cities change. Fire and earthquake can destroy them, power and ambition can transform them. Listen to Timagenes of Alexandria in the early years of Augustus (quoted in Seneca *Epistulae* 91.13): "The only reason I'm sorry about fires in Rome is that I know what has been destroyed will be replaced by something better."   Not only

is our evidence uncertain, but our subject is in constant flux.   How can we hope to be able to map it?

To give you an idea of the reality of "historical evidence", I have chosen five examples to discuss.   They all refer to the area between the Campidoglio and the Arch of Titus, where the remains of the ancient city have for the most part *not* been built over; they all date from the best-attested period of Roman history, where our literary sources are numerous and well-informed; and they are all taken from the work of a historian who was carefully explaining to his contemporary readers where in the city particular historical events took place.   If *these* cases are problematic, what can we do with other areas, at other times, where the texts are not explicit?

T.P. Wiseman is Emeritus Professor of Classics and Ancient History at the University of Exeter, and a Fellow of the British Academy.   His most recent books are *The Myths of Rome* (2004), which won the American Philological Association's Goodwin Award of Merit, *Unwritten Rome* (2008), *Remembering the Roman People* (2009), and – with Anne Wiseman – *Ovid: Times and Reasons* (2011), a translation of Ovid's *Fasti*.

Eugenio La Rocca (Roma): The perception of space in ancient Rome

The image of late Republican Rome, as seen by a viewer walking through its streets and its porches, had to offer the idea of a jumble, a build-up without formal quality, where every monument was not perceived as a whole, often only from below upwards, in an incredible mixture of partial views, not in its unity. Then, within this curious disorder, through a maze of streets and houses unevenly distributed, and only after passing high walls or porches that prevented a vision beyond the limit of files of uniform columns, you finally came in large areas, but made according to the same criteria and repetitive patterns: large courtyards surrounded by colonnades containing works of art and public buildings. Whether it be the *porticus Octaviae* (and previously the *porticus Metelli*), or *porticus Liviae*, or the fora of Caesar, Augustus and Trajan, the urban solutions are the same. There is nothing further removed from the squares of European cities of the Renaissance and Baroque periods. Only the diversification in the morphology of porches and architectural decorations, but, even more, the increasing use of sparkling stones and coloured marbles, broke in some way, and then only partially, with the monotonous regularity of the simplified spatial scanning. As mostly happens when you go to the bottom of the problems of Greek and Roman culture, it appears evident that there is a profound difference between the way we read city planning today compared to the old one. The old habit with a reading based on the linear perspective system, such as the Piazza del Duomo in Pienza, supreme work of Bernardo Rossellino, or in Michelangelo's Piazza del Campidoglio, we have accustomed ourselves to the perception of open squares in an urban landscape that is not amorphous and indistinct, but constructed according to an optical relationship between monuments and roads, with spatial effects carefully studied. Well, this is largely non-existent in the Greek and Roman world in which the squares, mainly quadrangular, seem to reject a relationship of continuity with the surrounding environment, closing themselves within their own porches and walls, according to the same principle adopted for the peristyles in private houses.

Eugenio La Rocca (born in 1946) has been professor of Classical Archaeology at the Universities of Siena (1986-1988) and Pisa (1989-1992). Currently (since 2000) he is professor of Classical Archaeology at the University of Rome "La Sapienza".

From 1993 to 2008 he was General Director of Cultural Heritage of the City of Rome. From 1997 he was director of the excavations of the Imperial Fora, and since 2004 of the excavations in the Palace of the Province of Rome (Roman houses and the Temple of Divus Trajanus). Since 2010 he is director of a campaign of archaeological survey in the area of Crotone. His main scientific interests concern the figurative culture of Greek and Roman times, the relationship between art and political ideology, the topography and monuments of Rome, urbanism and ancient perception of the landscape. He planned and coordinated several major exhibitions in Rome and abroad (Aurea Roma. Dalla città pagana alla città cristiana, 2000; Trionfi Romani, 2008; Roma. La pittura di un impero, 2009; I giorni di Roma. L'età della conquista, 2010; I giorni di Roma. I ritratti. Le tante facce del potere, 2011). He also coordinated the new exhibition of sculptures of the Palace of the Conservatori in the Centrale Montemartini, the reorganization of the Capitoline Museums with the new exhibition hall (Sala del Marco Aurelio) in the Palace of the Conservatori, designed by Carlo Aymonino, the new Ara Pacis Museum, designed by Richard Meier, and the new Museum of the Imperial Fora in Trajan's Markets. He is Ordinary Member of the "Accademia dei Lincei", Ordinary Member of the "Istituto di Studi Romani", Corresponding Member of the "Spanish Academy of Sciences, Letters and Arts", Corresponding Member of the "Archaeological Institute of America", and Corresponding Member of the "Deutsches Archäologisches Institut".

Jürgen Schmude (München): Disciplinary, interdisciplinary or transdisciplinary research: imperatives and constraints

In this presentation I discuss the shift from disciplinary via interdisciplinary to transdisciplinary research. I will thus juxtapose the trend that has lasted for many years and led to increasing specialization and fragmentation within singular disciplines with more recent approaches that propose integrative approaches in research. This discussion considers two different perspectives. On the one side I will deal with discipline-specific aspects, and on the other side it is also necessary to integrate methodology. These considerations will be illustrated by concrete examples from my own empirical research in different contexts. Finally, these different approaches to research will be discussed in terms of strengths, weaknesses, opportunities and threats, that is, a SWOT analysis. Consequently, this means that the presentation does not claim to develop a „Königsweg der Forschung" (royal way of research) but the aim is rather to critically discuss the sense or rather the absurdity of different research designs for specific contexts.

Curriculum Vitae
Career History

Nov 2008 up to now	University Professor (C-4) at the University of Munich, Department of Geography
Nov. 1998 to Oct 2008	University Professor (C-4) at the University of Regensburg, Department of Geography
Nov. 1998 to May 1994	University Professor (C-3) at the University of Munich, Department of Economic Geography
Apr. 1994	Assistant Professor (C-2) at the University of Heidelberg, Department of Geography
Oct. 1989 to Mar. 1994	Assistant Lecturer (C-1) at the University of Heidelberg, Department of Geography
May 1985 to Sept. 1989	Scientific Assistant (BAT II) at the University of Heidelberg, Department of Geography
May 1985 to Apr. 1987	Scientific Assistant at the University of Heidelberg, Department of Geography Member of the project "Qualifikationsniveau" of the "Deutsche Forschungsgesellschaft", (DFG, German Research Foundation)

Education

Jul. 1993	Graduation of the Habilitation/postdoctoral lecture qualification at the University of Heidelberg,
Jun. 1987	Graduation of the Doctorate at the University of Heidelberg, Geography (major subject) included mathematics and sociology as second subjects
1977 - 1983	Studies at the University of Heidelberg, Geography and mathematics

Professional Affiliations

Nov. 1996 to present	Correspondent member of the „Deutsche Akademie für Landeskunde", the central scientific German academy for applied geography in Germany and Central Europe
Sept. 1998 to Oct. 2004	Co-ordinator of the priority program "Interdisziplinäre Gründungsforschung" (entrepreneur research) of the DFG
Sept. 1994 to Oct. 1998	Member of the (medium-sized business/middle class) advisory council of the Federal Minister of Economics of Germany
Feb. 1995 to Jul. 1998	Speaker of the geographical working group Bildungsgeographie" (education geography) of the German Association of Geography

Award	Willy-Scharnow-Preis 2006

Chrystina Häuber (München): Rome: the city of memories. Or, why and how reconstruct and visualize ancient and post-antique Rome using digital technologies? The "AIS ROMA", diachronic and phase maps of (ancient) Rome in the WWW

It is necessary to discuss reconstructions of ancient Rome not only because the buildings of this period have only survived in part but also because there are so many different perspectives on reconstruction. With this as my starting point, my presentation is divided into two parts. Part I deals with a distinct scholarly perspective,

and part II with a perspective that scholars and tourists share. Part I is dedicated to a special kind of `memory´: the more than 1,000 years of international scholarship on Rome that creates pitfalls for anyone who tries to reconstruct the ancient city today. I discuss the problems involved using first an example from the Palatine, the so-called House of Augustus, which shows that reconstruction begins with ground plans: even by drawing maps of ancient Rome the process of reconstruction is already begun. I intentionally incorporate controversial opinions on my maps, for example the five different locations suggested for the temple of *Iuppiter Stator*. In my third example I discuss the architectural fragments on display below the `Tabularium´ at the foot of the Capitoline Hill, which have been attributed to five different ancient buildings. Finally, I address the controversy concerning the locations of the *Mons Oppius* and of the *Fagutal*.

Tourists and academics share a further perspective on reconstructions of the city. What do the following people, born between the 1st and the 20th century AD, have in common: Roman emperors like the Spaniard Hadrian, the `African´ Septimius Severus, or the Arabian sheik Marcus Iulius Philippus; the (abdicated) Queen Christina of Sweden; the (future) King Ludwig I of Bavaria; the (future) German Reformer Martin Luther; the Popes Alessandro VI, Sixtus V and Urban VIII; the Danish sculptor Bertel Thorvaldsen; the Florentine sculptor Michelangelo Buonarroti; the Florentine goldsmith Benvenuto Cellini; the American artist Hendrik Christian Andersen; the initiator of *Photo Parker*, the Englishman John Henry Parker; the French writer Stendhal; the English poet Lord Byron; the German poet and scientist Johann Wolfgang von Goethe; the Italian film directors Federico Fellini and Pier Paolo Pasolini; and the character Floria Tosca from the opera *Tosca*? Yes, you are right, they lived or worked in Rome, visited the `Eternal City´, or are otherwise connected with it. In addition to the famous sights in Rome, it is people like these who attract visitors to Rome. They want to see the buildings these famous people erected, or stayed and worked in, and the artworks they commissioned or made. Visitors want to experience the cityscape `through their eyes´, or by `following their paths´, or to shoot a movie, create other artworks, organize an exhibition or a catalogue of their works, write a book, or simply want to compare their own feelings about the Rome of today with those of former famous residents and visitors. In my talk, I shall not try to explore the complex reasons for all of these interactions that make Rome so attractive, but will instead focus on the Mausoleum of the emperor Hadrian/ Castel S. Angelo, to which facts and stories about some of the above mentioned people are attached. Stories and facts like these are the reasons for me to draw digital maps of Rome. These maps show both the ancient and the current topography, as well as the buildings of the post-antique phases of the city that have either been renamed, adapted to different uses, or completely disappeared.

These maps, together with texts and a database, are also published free-access in the internet because I aim to provide quick and reliable information for enquiries like those related to the people mentioned above. These maps are based on the photogrammetric data of the Comune di Roma (now: Roma Capitale), that have been generously provided by the Sovraintendenza ai Beni Culturali of the Comune di Roma (now: Roma Capitale). Printouts of these maps can be used on site, or interactively researched on computer. The maps are drawn with the information system "AIS ROMA". This Franz Xaver Schütz and I developed for the purpose ourselves, supported by the many

cooperation partners in the project, who come from different disciplines and will present their own related research at this Symposium.

Chrystina Häuber was born on November 26th, 1949 in Lebbin, Mecklenburg. Beginning in 1965 she attended drawing courses at the Werkkunstschule Krefeld, where she studied full-time from 1968-1969. She studied art, theology and geography at the Universität Duisburg (passed State exam in 1972), and classical archaeology, art history and ancient history at the Universität zu Köln (*Promotion*/ D. Phil. Universität zu Köln 1986). Her research interests are ancient sculpture, the topography of ancient Rome and "Archaeological Information Systems (AIS)". Among her research projects are "FORTVNA" (1994-2001), "The Eastern Part of the Mons Oppius in Rome" (2001-2003) and "The AIS ROMA" (since 2003). She is the author of more than seventy publications, mostly on ancient Rome and on "Archaeological Information Systems (AIS)", including three monographs. Since December 2010, she is a researcher and Project Director at the Department of Geography, Ludwig-Maximilians-Universität (LMU) München. From 1987-1991 she was a research scholar at the Museum Ludwig, Köln (Department of photography and video). In 1992 she was the Director of the Museum für Holographie und Neue Medien in Pulheim. In 1993-1994 she directed excavations in Rostock and Greifswald, and in 1995-1996 she was assistant to the Director of the Römisch-Germanisches Museum, Köln. From 1997-2010 she was a researcher at the Universities of Bonn (Geographische Institute), Regensburg (Lehrstuhl für Alte Geschichte), and Tübingen (Archäologisches Institut). Since 2001 she has taught at the Universities of Bonn, Marburg, Regensburg, Eichstätt, Tübingen and München (in classical archaology, ancient history, EDV Zusatzausbildung and geography).

Honours

1980-81 Research Grant for the Ph.D. of the German Academic Exchange Service (DAAD) in Rome; 1981-82 Research Grant for the Ph.D. of the Graduiertenförderung in Rome; 1982-85 Research Grant for the Ph.D. of the Evangelisches Studienwerk e. V. in Rome (conducted research from 1980-85 in the libraries of the Deutsches Archäologisches Institut, Abteilung Rom and of the British School at Rome, and at the Musei Capitolini); 1985-86 Junior Fellow in Studies in Landscape Architecture at Harvard University, Cambridge, MA, USA, in Dumbarton Oaks Research Library and Collection, Washington, D.C., USA; 1985-86 Fulbright Travel Grant (Fulbright Visiting Scholar) for the academic year in the USA; 2001 Innovationspreis der Volksbank Bonn Rhein-Sieg (together with F. X. Schütz) for the development of "Archaeological Information Systems (AIS)"; Personal Website: www.rom.geographie.uni-muenchen.de

Publications most relevant to this Symposium

R. C. Häuber, *Horti Romani. Die Horti Maecenatis und die Horti Lamiani auf dem Esquilin. Geschichte, Topographie, Statuenfunde* (Diss. Köln 1986; Köln 1991).
online at: http://www.rom.geographie.uni-muenchen.de/publications/haeuber-1991.html
C. Häuber and F. X. Schütz, *Einführung in Archäologische Informationssysteme (AIS). Ein Methoden-spektrum für Schule, Studium und Beruf mit Beispielen auf CD* (Mainz am Rhein 2004).
C. Häuber, "Das Archäologische Informationssystem >AIS ROMA<: Esquilin, *Caelius*, *Capitolium*, *Velabrum*, *Porta Triumphalis*", *BullCom* 106, 2005, 9-59.

C. Häuber, "Il luogo del ritrovamento del gruppo del Laocoonte e la *domus Titi imperatoris* (Plin. *Nat. Hist.* 36,37-38)", in: F. Buranelli, P. Liverani and A. Nesselrath (eds.), Exhibition-cat. *Laocoonte. Alle origini dei Musei Vaticani, quinto centenario dei Musei Vaticani 1506-2006* (Città del Vaticano, Musei Vaticani, 2006-2007) Roma 2006, 41-47; cf. 201-217 (bibliography).

C. Häuber, "Gli *horti* in età flavia", in: F. Coarelli (ed.), Exhibition-cat. *Divus Vespasianus. Il bimillenario dei Flavi* (Roma, Colosseo, Curia, Criptoportico "neroniano", 2009 - 2010), Roma 2009, 312-319; cf. 517-538 (bibliography).

C. Häuber, *The Eastern Part of the Mons Oppius in Rome: the Sanctuary of Isis et Serapis in Regio III, the Temples of Minerva Medica, Fortuna Virgo and Dea Syria, and the Horti of Maecenas. With Contributions by Edoardo Gautier di Confiengo and Daniela Velestino*, accepted for Suppl. Series of *BullCom*.

Susanna Le Pera (Roma): *De Roma instaurata (1446) – Nuova Forma Urbis Romae (2012): ricostruzione in quattro dimensioni di un paesaggio urbano complesso*
From *De Roma instaurata* (1446) to *Nuova Forma Urbis Romae* (2012): 4D reconstruction of a complex urban landscape

At the beginning of the Italian Renaissance one of the great research areas that intellectuals and artists were chiefly interested in was the image of the ancient city of Rome. Abandoning the Medieval tradition of *"mirabilia"* (wonders), the Italian poet Petrarca began to circulate around 1350 the book *"De architectura"* by Vitruvius, which was already known in France. But it is the circle of the Florentine humanists (Poggio Bracciolini, Biondo Flavio, Leon Battista Alberti, etc.) to whom we owe the beginning of studies of the topography of Rome as a discipline that combined the analysis of ancient ruins (that at this time must have been overwhelming within the still modest settlement within the city of Rome that was about to leave the middle ages), with passionate research of documents and literary sources (the bad example of Poggio Bracciolini is famous, who, enthusiastic about the discovery of the *Silloge epigrafica* of the *Anonymus Einsiedlense* stole the codex, as he himself admitted in a letter). Since then, in the following centuries, the study of the urban changes of Rome has inspired the interest of great archaeologists all over the world with the effect that a discipline called the "Topography of Ancient Rome" was created, which, now, after more than 200 years, is not any more simply an intellectual exercise, but the basis for knowledge about the City of Rome essential for its protection.

The Sovraintendenza ai Beni Culturali of the Municipality of Rome is responsible for the preservation and protection of the cultural heritage of Rome, including its museums, collections, monuments, territory, etc. The Municipality of Rome, traditionally interested in the conservation of the historical patrimony and in the protection of the archaeological structures still extant in the city, has decided to develop an adequate computer-based methodology that records precisely the location of the ancient, medieval and modern buildings already documented in the past. This methodology should, in addition, be able to provide easy insertion of accidental finds in the course of current building works. The Municipality of Rome has, therefore, promoted the development of a territorial information system which allows the creation of digital maps and plans, that can be linked to all the data concerning occasional archaeological discoveries and the great number of old drawings and maps

already available in the archives of the main public institutions in the City. Named *Nuova Forma Urbis Romae* (F.U.R.), the goal of the project is to remake the archaeological map of the City as published by Rodolfo Lanciani 100 years ago. The main aim for developing this information system, which consists of a data base and a GIS, is to provide support for urban planning and development. Therefore, it will also become a very important instrument for all the other departments of the Municipality which are involved in planning technological networks and public services. The project F.U.R. will contain all available data related to the City inside the Aurelian city wall. It will be complemented by the information system *"Carta dell'Agro Romano"* which covers the *suburbium.* When the information system F.U.R. (comprising both the area inside the Aurelian city wall and the *suburbium*) is complete, it will form the basis for the new Master Plan of the Municipality of Rome. From 2000 until today the great urban projects that have been conducted at the City of Rome (the activities concerning the *"Tridente Mediceo,"* on the Esquiline, the Metro line C, etc.) have been supported by the data contained in the information system *"Nuova Forma Urbis Romae"*.

Susanna Le Pera was born on 18 December 1955, in Rome, Italy. She attended the Liceo Classico Augusto in Rome and in 1973 she received the diploma. She studied classical archaeology, art history and ancient history at the Università di Roma "La Sapienza," which in 1980 bestowed on her the Laureate for her dissertation on the topography of Ancient Roman with the title "La via Sacra al Foro Romano". Her research interests are the topography of Ancient Rome and Archaeological Information Systems and, in general, the history of the city of Rome during the centuries. Since May 1988 she is "Curatore Archeologo" of the Municipality of Rome, and she is responsible for the Project "Forma Urbis Romae". She is one of those responsible for the *"Carta Archeologica Monumentale e Paesistica del Suburbio e dell'Agro Romano"*. She also participated in the scientific committee for the exhibitions *"Velàsquez"* and *"Cristina di Svezia, le collezioni reali"* at the Palazzo Ruspoli. Among her research projects are the *"Tridente Mediceo"*, *"la via Sacra al Foro Romano"*, *"il Pincio"*.

Publications most relevant to this Symposium

S. Le Pera, "*Forma Urbis Romae*", in: A. Cantile (ed.), *Eventi e documenti diacronici delle principali attività geotopocartografiche in Roma*, 6. Suppl. *L'Universo*, Firenze 2000, 14-21.

S. Le Pera Buranelli, "`Excavations´ in the Corso Vittorio Emanuele, 1885-1904: Analysis of the pre-existing medieval remains under the Palazzo Le Roy", in: I. Bignamini, *Archives & Excavations: Essays on the History of Archaeological Excavations in Rome and Southern Italy from the Renaissance to the Nineteenth Century* (The British School at Rome, London, Archaeological Monographs 14, 2004) 187-202.

S. Le Pera and L. Sasso D'Elia, "Via Triumphalis", *ArchLaz* XII, 1995, 67-70.

S. Le Pera Buranelli and R. Turchetti, *Sulla Via Appia da Roma a Brindisi. Le fotografie di Thomas Ashby 1891-1925* (*Monografie della Carta dell'Agro Romano,* 1) Roma 2003.

S. Le Pera and R. Turchetti, *I giganti dell' acqua. Acquedotti romani del Lazio nelle fotografie di Thomas Ashby (1892-1925)* (Roma 2007).

Paolo Buonora, Susanna Le Pera, Paolo Micalizzi, Luca Sasso D'Elia (Roma):
Descriptio Urbis - Un webgis per ricostruire i paesaggi urbani di Roma.
Descriptio Urbis – A WebGIS to reconstruct urban landscapes of Rome

In many different disciplines, ancient and modern Rome is one of the most relevant research subjects in the world. At the same time, this role of the Eternal City combines with the extraordinary extent of her cultural heritage and the dispersal of related document sources to make the knowledge of the city of Rome – and this is the paradox – more difficult. This is the reason why dealing with Rome means to face a really big challenge, and in this context our free-access WebGIS aims to contribute to a multi-professional network for international research.

For more than ten years our research has focused on an instrument capable of relating different documentary sources concerning urban architecture, archeology and any other possible field in urban studies, to each other. Following previous IT and GIS projects carried out by the partners, mostly based on the Nolli map of Rome (1748), the ongoing project is based on the detailed cadastral source of the Gregoriano cadastre (1824), and has been funded by CARIPLO bank foundation and MIUR (Ministero dell'Istruzione, dell'Università e della Ricerca) since 2006. The last phase of the project, "Portrait of towns", deals with other Italian cities: Milano and Bologna, with the objective of developing methodologies to manage the historical cartographic information for Italian towns.

Project partners for the team working on Rome come from several fields: historical archive studies, history of architecture, and archaeology. Archivists have been working together with archaeologists and architectural historians to choose the historical cartography to create a GIS framework, and to analyze the typology of archival documents to implement it. Cataloguing maps and documents is not a trivial task in such a multi-purpose context as an historical GIS can be, and several interoperability issues have to be defined. A short survey of the available cartography for the city of Rome between the eighteenth and twentieth century will be presented, together with a description of the archival sources for the history of the selected buildings. In Rome architecture and archaeology often mix: ancient maps provide crucial archaeological information because the "ruins" were part of the urban landscape. The cartographic details of historic maps integrate descriptive information allowing researchers to identify the preservation status of the ancient buildings within the city before the great urban changes in the twentieth century.

The technical side of constructing the WebGIS has been a very complex task. A smart strategy has been applied in the progressive morphing of the original cartography to a vector/raster version, to improve the GIS functionalities without losing the value of any particular archival document. Simultaneously, time-consuming work was carried out to analyze the owners' registers (*brogliardi*), to disambiguate data and to fit any information into a coherent database.

The team working on Rome is now enhancing the WebGIS, which has been online since 2009, and adopting content manager tools to add any kind of documents to the GIS structure. The GIS structure itself is developing in a temporal dimension, with the addition of other maps and registers dating through to 1870.

In the meanwhile, other institutional partners are joining the initiative, and widening the multi-disciplinary context. This network is not necessarily limited to the

CARIPLO project partners, or to Italian institutions, and the aim is to open it to any institution (university, foundation) devoted to the study of Rome in Italy or abroad.

See above page 8 for the CV of Susanna Le Pera

Paolo Buonora was born in Rome in 1952; has a degree in Philosophy from the University of Rome "La Sapienza" (1976), and a Doctoral Research degree (1991) from the Perugia University in "Urban and Rural History". He has worked in the Italian State Archive Administration since 1978. In the State Archive of Rome he was in charge of Photographic Service and Information System Management. Since 1997 he has planned and directed the Imago II project for the digitization of archival materials. Since 2003 he created and directed the Digital Laboratory in the Centre for Preservation of the State Archives applying digital image technology digital libraries. From 2000 to 2004 he was a member of the ICA Committee on Information Technology, and also of the Steering Committee of Digicult, an IST Support Measure of the European Commission to establish a regular technology watch: http://www.digicult.info/pages/index.php .

Bibliography

IT Technology:

P. Buonora, *Digitization, online utilization and preservation of cadastral very large format carthography*, Fourth International Workshop Digital Approaches to Cartographic Heritage, Venice, Italy 6 – 7 April 2009, in e-Perimetron, Vol. 4, No. 3, 2009 [192-198]:
http://www.e-perimetron.org/Vol_4_3/Buonora.pdf
P. Buonora, F. Liberati, *File formats for very large maps and digital preservation*, in *Libraries create futures: Building on cultural heritage*, World Library and Information Congress: 75th IFLA General Conference and Council, 23-27 August 2009, Milan, Italy:
http://www.ifla.org/files/hq/papers/ifla75/121-buonora-en.pdf

Urban History of Rome:

P. Buonora, *Water management: the central Italy model and its dissemination*, in *The Basis of Civilization – Water Science?* (Proceedings of the UNESCO/IAHS/IWHA symposium held in Rome, December 2003), edited by John C. Rodda e Lucio Ubertini, Wallingford (UK) 2004 (http://smd.src.cnr.it/Irpi/WaterScience/index.html)

P. Buonora, M. Vaquero Piñeiro, *Il sistema idraulico di Roma in età moderna: assetti di potere e dinamiche produttive*, in *La città e il fiume* (secc. XIII – XIX), edited by C. M. Travaglini (Atti del Convegno AISU, Roma, Castel Sant'Angelo, 24 -26 maggio 2001), Roma, Ècole Française de Rome 2008.

P. Buonora, *I mulini da grano del Granicolo e il network produttivo dell'Acqua Paol*a, in "*In presentia mei notarii*". *Gli allegati iconografici nei protocolli dei notai capitolini*, edited by O. Verdi, Pubblicazioni degli Archivi di Stato, Strumenti CLXXXXVII, Roma 2009.

P. Buonora, *Gli acquedotti del Papa: restituito o innovazione?*, in «Roma Moderna e Contemporanea» Anno XVI, n. 2 / luglio-dicembre 2008, pp. 323-334.

Paolo Micalizzi holds the position of Professor at the Faculty of Architecture (course of "Storia della Città") of the University Roma Tre. He is the author of 35 publications mostly about the history of town planning and architecture. Thirty-one of these are essays and four are monographs. He took part as a spokesman in many congresses about architecture and town planning. He is one of the editorial staff of the periodical *Storia dell'Urbanistica* founded by Enrico Guidoni and actually directed by U. Soragni.

Following completion of his degree he participated in various courses as Lecturer, among them: "Corso di perfezionamento in Restauro Architettonico e Recupero Edilizio, Urbano, Ambientale", directed by Prof. Paolo Marconi (University "Roma tre", 1998-99); "New Media e Comunicazione" (University "Tor Vergata", 1999-2000); "Storia della Città", directed by Enrico Guidoni (University of Rome "La Sapienza", 2001-2005); "Conservazione e tutela dei beni archeologici" (University "Roma Tre", 2003); "Economia e valorizzazione delle Istituzioni Culturali", directed by Prof. Geatana Trupiano (University "Roma Tre", 2001 - 2010).

During the period 1998-2003 he directed, on behalf of the "Soprintendenza Comunale di Roma", the compiling of the "Pianta di Roma per il Giubileo del 2000", an historic map of the city, conceived as a GIS, in which information about town buildings, mostly obtained from archival documents were incorporated. Currently, utilizing "Cariplo" Foundation's funds, he is devoting himself to a similar research project ("Descriptio Romae webgis") being carried out with the participation of other partners and various public institutions ("Università Roma3", "Soprintendenza Comunale di Roma", "Archivio di Stato di Roma", "Archivio Capitolino di Roma").

Selection of most recent publications

Roma nel XVIII secolo, in "Atlante storico delle città italiane - Roma 3", Roma 2003.

Le mura medievali di Alghero nella misurazione del 1364, in *Il tesoro delle città*, "Strenna della Associazione Storia della Città", Anno I (2003), pp. 318-333.

Gubbio – La platea Comunis, in *Piazze storiche italiane dal Medioevo al Novecento*, Roma 2006, pp. 61-69, 124.

Roma – Scalinata di Trinità dei Monti in piazza di Spagna, in *Piazze storiche italiane dal Medioevo al Novecento*, Roma 2006, pp. 133, 215-224.

Un progetto di Ferdinando Fuga per la sistemazione di piazza Santa Maria Maggiore a Roma , in *L'Urbanistica di Roma dal Medioevo all'Ottocento*, a cura di E. Guidoni, "Storia dell'Urbanistica", 2000-2002 [pubblicato nel 2007], pp. 105-115.

Il Neoclassicismo e Roma, "Palladio", 40, 2007, pp. 27-58.

La costruzione della città in età medievale e moderna, in *Studi in onore di Enrico Guidoni*, a cura di A. Casamento e M. Vesco, "Storia dell'urbanistica – Sicilia", V, 2008, pp. 19-38.

Sulla Divina Proportione della facciata di Santa Maria Novella a Firenze, in *Architettura nella storia - scritti in onore di Alfonso Gambardella* , a cura di G. Cantone, L. Marcucci , E. Manzo, Milano 2007, vol. I, pp. 130-141, tav. XI.

Costacciaro – Una colonia fondata ai limiti del dominio eugubino, in *Città nuove medievali: S. Giovanni Valdarno, la Toscana, l'Europa*, a cura di E. Guidoni, "Civitates" 14, 2008, pp. 24, 80-88.

Gubbio – storia della architettura e della città, Gubbio 2009.

L'"altra" modernità di Armando Brasini, in *L'architettura dell'"altra" modernità*, a cura di M. Docci, M. G. Turco), Atti del XXVI Congresso di Storia dell'Architettura (Roma, 11-13 aprile 2007), Roma 2010, pp. 414-423.

Piazza di Monte Cavallo e la via Pia in una veduta del XVI secolo, in *I punti di vista e le vedute di città – secoli XIII-XVI*, a cura di Ugo Soragni e teresa Colletta, "Storia dell'Urbanistica", 2.I, 2010, pp. 186-195.

I punti di vista e le vedute di città – secoli XVII-XX, "Storia dell'Urbanistica", 2.II, 2010 (with Antonella Greco).

Sabaudia nei disegni del fondo Cancellotti, Latina 2010 (with Alfredo Passeri).

L'informatizzazione della cartografia storica di Roma – Aspetti urbanistici, archeologici, archivistici e tecnici, in *SITAR – Sistema Informativo Territoriale Archeologico di Roma*, a cura di M. Serlorenzi (Atti del Convegno, Roma 26 ottobre 2010), Roma 2011, pp. 67-75 (with Stefano Maggauda, Paolo Buonora, Luca Sasso D'Elia).

Luca Sasso D'Elia was born in Rome on 23/06/56. He graduated on 5/12/78 at the University of Rome "La Sapienza" Department of Historical Archaeology Antiquity, Ancient Topography Section. He also graduated as a surveyor at the Technical Institute for Surveyors "Leon Battista Alberti" in Rome on 7/28/82. He has been called as an expert of the Tribunal for the Law 1089/39. During the academic year 1988/89 he received his master in "Computer Science for the Humanities" from the University of Rome "La Sapienza".

Between 1979 and 1994 he directed more than 35 excavations in Rome (Palatine, Baths of Caracalla and in the *suburbium*), in Calabria (Crotone, capo vaticano, Locri), and in Campania (Ercolano, Baia). In 1979 he founded the cooperative *Lateres* of which he was the first president and technical director for over 10 years. In this job he has performed and coordinated over 100 topographic surveys, both direct, instrumental and photogrammetric, in Rome (Palatine, Baths of Caracalla, suburbs, via Latina, etc ...) in Calabria (Crotone Locri, Reggio Calabria and Lamezia) and Campania (Ercolano). These projects all relate to the study of the ancient topography and monuments.

He taught many professional training courses for teachers, archaeologists and architects on behalf of the City and the Province of Rome, the Second University of Naples, the Sovraintendenze of Campania, and the Scuola Normale of Pisa. From 1999 to 2005 he was adjunct Professor at the Second University of Naples, with responsibility for the Degree in the Science of Cultural Heritage of Applied Computer Science at Cultural Heritage, and also from 2003 to 2005 in Tourism of Computer Science, and Master of Science in Tourism.

He was a member of the working group of the Superintendency Municipal Cultural Heritage, "Università di Roma Tre" and C.N.R. for the creation of the laboratory of Geoarchaeology; he was responsible of the Laboratory Computerized Mapping of the Superintendent Municipal Cultural Heritage.

He designed and built several GIS systems dedicated to the documentation and study of urban and suburban enviroments, and for cataloguing and creating an inventory of monuments from antiquity to the modern age. In this research he wrote dedicated application software and also designed the hardware, software and network infrastructure.

He is currently Officer Information Systems and Telematics responsible for the information space of the UO Intersectoral Superintendent Capitolina and also Manager appointed to the creation process of the documentation centre of the Park "Appia Antica" Antonio Cederna.

Publications most relevant to this Symposium

La Carta dell'Agro Romano. Roma 1989

Problemi di codifica in un data-base territoriale in Atti del Convegno la cartografia dei beni
    Storici. Archeologici e Paesistici nelle grandi aree urbane dal censimento alla Tutela
    Roma 1993: 99-102

La carta dell' agro Romano in Atti del Convegno Tutela Archeologica e Pianificazione Modena
    1989: 16-18.

Voce domus Augustana del Lexicon Topographicum Urbis Romae II: 40–45 and 393-396.

"Roma: Sistema Direzionale Orientale. Il progetto di indagini archeologiche", in Atti
    dell'Incontro di studi "Carta Archeologica e pianificazione territoriale: un problema
    politico e metodologico", Roma (CNR) 1-12/3/1997: 38-44 and 98.

La Nuova F.U.R. - Il lavoro della Sovraintendenza Comunale in atti del convegno: Il rischio
    Archeologico se lo conosci lo eviti Ferrara 24/3/2000: 369.

Il Sit Territorio, ricerca topografico-archeologica nella valle del Sinni: le scelte metodologiche e
    l'architettura del sistema in atti della terza conferenza di Mondo GIS Roma 23/25 Maggio
    2001: 165 and 95.

Cultural heritage atlas in "Terra di Lavoro": *The information system atti del workshop "the
    reconstruction of the archaeological landscapes through technologies Roma Novembre 2003*, 2004:
    85-93.

L'atlante informativo dei beni culturali 'Cluster': da strumento di ricerca a portale di diffusione
    multimediale della conoscenza In archeologia e calcolatori 2004: 321-350.

La vettorializzazione del Catasto Gregoriano, un GIS dell' 800' in 10° conferenza Utenti ESRI
    Roma 2007: 22-29.

Personal Website: http://www.lucasassodelia.altervista.org

Franz-Xaver Schütz (München): Why work with geographers in reconstructions and visualizations of ancient Rome?

The origins of this paper go back to August 1994, when I was a student of Geography and working in an excavation at Greifswald, directed by Chrystina Häuber. I had just passed my first courses in Geographic Information Systems (GIS) and image analysis at the University of Greifswald using ArcInfo, Erdas and Atlas*GIS software and told her about GIS-methodology. She told me about her archaeological research in the City of Rome and asked me whether it is possible to reconstruct the ancient landscape of the City of Rome with the help of computers. Since that time GIS-technology developed very fast and today it is a science in its own right, called Spatial Information Science (cf. GOODCHILD 1991, 2010). I will show you some examples using GIS-technology with focus on 3D-Geovisualization over time (4th dimension) and a web-based object-oriented prototype of a spatial information system called GIUrbs. Concerning 3/4D-Geovisualization I will also discuss the OGC (Open Geospatial Consortium) CityGML-Standard concerning more technical aspects and the London Charter which gives detailed instructions on how to create scientific (valid) computer-based visualizations of cultural heritage instead of nice visualizations from the land of fantasia.

Of course, working with archaeologists, historians and scholars from many other disciplines can be very fruitful for geographers. Since Habitat II (the UN-conference on human settlements in 1996) the subject sustainability in urban spaces and their hinterlands is an integral part of research in historical, urban and regional geography. Currently about 60% of humans live in such spaces, and the number is increasing.

Until now computer-based methods, models and simulations for the development of such very complex spaces for both growing and shrinking cities do not exist. If it would be possible to simulate the development of a city like Rome - an example par excellence - this could efficiently support the creation of sustainable strategies concerning urban planning and urban development. A central question in that research will be: what can we learn from the past for future developments? Such research needs an interdisciplinary, integrative approach (cf. GOUDIE 2006) with special attention to the human impact on cityscapes and the integration of archaeological and historical evidence. As ZAMAGNI (2003) comments: "without overcoming the limitations of scientific research that is too `sector-oriented´ and too little trans-disciplinary, the `new alliance´ between mankind and nature - to use the ichastic expression of I. Prigogine - will never be able to be achieved".

Curriculum vitae

1999 Diplom-Geograph, Nebenfächer Informatik und Mineralogie, Universität Bonn, Math.-Nat. Fakultät; 2007 Dr. phil., Universität Regensburg, Geographie, Phil. Fakultät III; aktuell: Habilitand, Universität Tübingen, Geographie, Math.-Nat. Fakultät.

Scientific appointments:
1994-1995 Wissenschaftliche Hilfskraft, Universität Greifswald, Geowissenschaften, Fachgebiet Lagerstättenlehre; 1998-1999 Programmierer, Universität Bonn, Geographisches Institut; 2000-2002 Wissenschaftlicher Mitarbeiter, Universität Bonn, Geographisches und Archäologisches Institut, Lehre im Archäologischen Institut; 2003-2006 Wissenschaftlicher Mitarbeiter, Universität Regensburg, Geographisches Institut und Universitätsbibliothek, sowie Lehre im Fachgebiet Alte Geschichte und EDV Zusatzausbildung; since 2012 Wissenschaftlicher Mitarbeiter, Hochschule München, Fakultät für Geoinformation.

Professional experience outside universities:
1988-2001 worked for the following institutions and companies: BRISTOL-MYERS SQUIBB GmbH, Bundesamt für Naturschutz (BfN), EDV-Beratung Schmidt & Husterer, Geospace Satellitenbilddaten GmbH, GiKOM Gesellschaft für Informationstechnik mbH, L&H Mendez GmbH, Landesamt für Umwelt und Natur Mecklenburg-Vorpommern, Messerschmitt-Bölkow-Blohm (today EADS), Microsoft, SERA electronic GmbH, T/S Computer, since 2001 wissenschaftlicher Direktor FORTVNA Research Center GmbH, Regensburg.

Honours

2001 Auszeichnung im Programm PFAU (Programm zur Förderung von Unternehmens-gründern aus Hochschulen), Ministerium für Schule, Wissenschaft und Forschung des Landes Nordrhein-Westfalen; 2001 Innovationspreis der Volksbank Bonn Rhein-Sieg (together with C. Häuber) für die Entwicklung Archäologischer Informationssysteme; 2001 Travel grant U.S.A. (DFG)

Selected publications

SCHÜTZ, F. (2010): Stadtforschung und Geoinformatik. Beispiele Rom und Regensburg. In: Kunstchronik, 63. Jg., Heft 9/10 2010, S. 474-478.

SCHÜTZ, F.X. (2008): Zum Regensburger und Kölner Stadtgrundriss. Eine GIS-gestützte Untersuchung. Regensburg. (= Regensburger Studien, 14; zugl. Univ.-Diss., Phil.-Fak. III, Univ. Regensburg unter dem Titel: "Entwicklung und Erprobung neuer digitaler Methoden zur geographischen Stadtgrundrissanalyse mit Fallbeispielen aus Regensburg und Köln. Eine GIS-gestützte Untersuchung").

HÄUBER, C., SCHÜTZ, F.X. (2004): Einführung in Archäologische Informationssysteme (AIS). Ein Methodenspektrum für Schule, Studium und Beruf mit Beispielen auf CD. Mainz am Rhein.

SCHÜTZ, F.X., HÄUBER, C. (2003): Creating Precise Archaeological Maps for the City of Rome: the Advantage of the Usage of Photogrammetric Data over `Paper based´ Methods. In: The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences (ISPRS). Proceedings of the 4th Symposium Remote Sensing of Urban Areas in Regensburg, 27-29 June, 2003. S. 170-175.

HÄUBER, C., SCHÜTZ, F.X. (1997): FORTVNA. Ein multimediales Geographisch-Archäologisches Informationssystem GIS[A] am Beispiel der Adelspaläste im antiken Rom. In: F. Dollinger, J. Strobl (Hrsg.): Angewandte Geographische Informationsverarbeitung (AGIT) IX. Beiträge zum GIS-Symposium. Salzburg. S. 263-268.

Amanda Claridge (London): Reconstructing the Temple of Apollo on the Palatine Hill in Rome

There are few buildings more resonant of Imperial Rome and potentially more rewarding to reconstruct than the temple of Apollo on the Palatine. Ancient written sources tell us all sorts of things about it (a) that Octavian (soon to be Augustus) dedicated it in October 28 BC, three years after his outright victory over Mark Antony and Cleopatra at the battle of Actium (b) on the site of a house which his agents had bought in 36 BC, the year of his previous great victory over Sextus Pompeius at Naulochos in Sicily, thinking to enlarge his own Palatine residence for public occasions, but the god had sent a thunderbolt to claim the site as his own; (c) that it housed both Apollo and his twin sister Diana and their mother Latona, whose cult statues were antiques by classical Greek sculptors, the head of Diana having been restored by Avianius Evander, a sculptor who had worked in the service of Mark Antony, (d) that archaic Greek statues and a 'chariot of the Sun' decorated the pediment (e) its doors were inlaid with ivory reliefs, (f) it was built of solid Luna (Italian) marble, the column-spacing diastyle; (g) that in 12 BC Augustus entrusted the Sibylline Books to its safekeeping, transferring them from the Temple of Jupiter Optimus Maximus, on the Capitoline hill, and (h) gave it golden offerings in the form of tripods, paid for by melting down 80 silver statues which had been erected in his honour, and precious lamps once owned by Alexander the Great; (i) that in Augustus' old age, to save him the trip down to the Forum, and on later occasions, the Senate held their meetings in it; (j) that it survived until AD 363, when it was destroyed by fire. Two other pieces of useful information are that (k) a statue set up in front of it was within sight of the Curia on the Forum; (l) arriving from the Forum one first passed the front door of the house of Augustus, and then saw the gleaming white marble steps of the temple in the distance.

It is just over a century since a ruinous podium near the SW corner of the hill was first securely identified as that of the Apollo temple and 60 years since the first detailed reconstruction was made (Lugli 1953), proposing a hexastyle, pseudo-peripteral design, which faced out from the hilltop towards the circus Maximus and the Aventine. Excavations in the 1960-70s exposed the lower levels of a large house located immediately to the west, which was identified as that of Augustus, with a direct connection to the temple in the form of a ramp set in the front steps. Enshrined in a

reconstructed ground plan (Carettoni 1983, *Kaiser Augustus* 1988) the integration of temple and house has encouraged far-reaching claims as to the first emperor's monarchical ambitions. The hilltop site has been compared with the terraced sanctuaries of Latium (Coarelli 1987) and the association of house and temple with the palace of the Attalid kings of Pergamon (Zanker 1983/87). Augustus has also been accused of championing Apollo over Jupiter Optimus Maximus, literally turning his back on the Capitoline hill.

Reconstructions of the temple have generally remained faithful to the 1950s idea of a hexastyle pseudo-peripteral plan, only refining some of the details of the elevation on the basis of new analyses of the fragmentary evidence (Bauer 1969; Zink 2008). However, the question of access to the temple - whether from Augustus' house or from the circus Maximus - or indeed the Forum, has rarely been addressed and remains problematic. One recent attempt invents a vast six-storey building rising up from the foot of the hill to provide a forecourt, but no entrance, except from the rear (Carandini/Bruno 2008). This paper proposes that the simpler solution is to revise the traditional reconstruction of the temple, and to turn it on its axis to face inwards to the Palatine hill, in which position it not only corresponds more closely to all the archaeological and literary evidence, but also acquires a dynamic new relationship with the Capitoline Temple of Jupiter and endorses an alternative location for the House of Augustus.

Amanda Claridge is Professor of Roman Archaeology at the University of London (Royal Holloway & Bedford New College), where she has taught since 2000. She has also taught at the University of Oxford (1994-2000) and Princeton University USA (1977-1980). From 1980 until 1994 she served as Assistant Director of the British School at Rome. Her current research projects concern the archaeology of the Laurentine Shore and the Paper Museum of Cassiano dal Pozzo (a seventeenth-century Italian collection of antiquarian drawings), but she also has longstanding and widespread interests in Roman sculpture and architecture, and in the topography of ancient Rome. Among her publications most relevant to this Symposium are *Rome. An Oxford Archaeological Guide* (Oxford University Press, 1st edition 1998, 2nd edition, revised and enlarged 2010), *Architecture and Archaeology. The work of Sheila Gibson* (London 1991); 'Hadrian's lost temple of Trajan' *Journal of Roman Archaeology* 20 (2007) 54-94.

Johannes Lipps (München): Zur Rekonstruktion einer Stuckdecke aus der sog. *Casa di Augusto* auf dem Palatin in Rom.
Methodical problems with the reconstruction of the ceiling in the Casa di Augusto on the Palatine

My presentation deals with some 2000 stucco fragments found in 1973 during Gianfilippo Carettoni's excavation of the Oecus of the so-called House of Augustus. This room stands out amongst the ensemble of its adjoining rooms not only due to its location in the middle of the western peristyle but also due to its size and accessibility. The stucco fragments, probably part of the former ceiling, were transported to the Palazzo Altemps in 1986 together with remains of mural paintings from the Oecus and adjoining rooms, regrettably without a precise documentation of the location of the

finds. Most of the fresco fragments but also stucco remains of the so-called Studiolo were assembled there, replenished and transported back to the Palatine. Close to 2000 stucco fragments from the ceiling of the Oecus were restored by Gianna Musatti, partly pieced together, arranged according to ornament types, and documented in a catalogue. At that time Carettoni believed a reconstruction of the ceiling to be impossible due to the condition of the individual pieces. In the winter of 2008-2009 we were permitted to draw and photograph the stucco fragments found in the Oecus. Contrary to previous suppositions we could identify various compositions and digitally reconstruct parts of the ceiling. But in some aspects this reconstruction is rather hypothetical. As fragments of adjoining rooms could have fallen into the Oecus the documentary source is dubious. Also, we do not know which parts of the ceiling were decorated with stucco and which were not. Some ornamental compositions can be reliably reconstructed by consulting examples that are better preserved but some ornamental motifs remain dubious.

I will therefore start my presentation by presenting the difficulties and technical facts concerning the reconstruction of the stucco ceiling of the Oecus. In order to provide the basis for an accurate reconstruction, I have grouped my finds according to how reliable the attribution is: 1) composition identified and location verified; 2) composition identified, location probably verified; 3) composition and location ambiguous; 4) unique specimen of dubious context. Following this categorization I shall discuss how the various ambiguities can be rendered visible in a digital reconstruction.

Cooperation partners in this research project

Digitale Rekonstruktionen: **Tobias Bitterere** (Institut für Klassische Archäologie der LMU)
Restaurierung: **Gianna Musatti** (Museo Nazionale Romano di Palazzo Altemps)
Zeichnungen: **Francesca Renda** (Deutsches Archäologisches Institut der Abteilung Rom)
Photographie: **Daniela Gauss** (Deutsches Archäologisches Institut der Abteilung Rom)
Mörtelanalyse: **Laura Thiemann** (TU München)
Farbanalyse: **Heinrich Piening** (Bayrische Schlösserverwaltung)
Organisation: **Alessandra Ridolfi** / **Cinzia Conti** (DAI Rom / Palazzo Altemps)

Cooperation partners:
Ministero per I Beni e le Attività Culturali. Soprintendenza Speciale per i Beni Archeologici di Roma (**Anna Maria Moretti** / **Maria Antonietta Tomei** / **Roberto Egidi**)
Deutsches Archäologisches Institut der Abteilung Rom (**Heinz Beste** / **Henner von Hesberg**)

Johannes Lipps, CV

Date of Birth: 24/03/1980
Nationality: German

Areas of Interest
Greek and Roman Archaeology

Educational Qualifications
2006–2008   Albertus-Magnus Universität zu Köln, PhD in Classical Archaeology. Dissertation: „Die Basilika Aemilia am Forum Romanum. Der kaiserzeitliche Bau und seine Ornamentik" supervised by Prof. Dr. H. von Hesberg

2006	Albertus-Magnus Universität zu Köln, M.A. in Classical Archeology (minor in Ancient History, Papyrology, Epigraphy and Numismatics)
2003–2006	Albertus-Magnus Universität zu Köln, M.A.
2002–2003	Student Exchange Program Socrates – Erasmus at the University of Roma Tre
2000–2002	Philippsuniversität Marburg

Fellowships

2012	Researcher in Residence, Center for Advanced Studies, LMU Munich
2009–2010	Travelling Fellow of the German Archaeological Institute
04.2009	Summer-School of the German Archaeological Institute in Albania
2008	Fritz-Thyssen-Stiftung Post-doctoral Fellowship in Rome: „Das Hadrianeum auf dem Marsfeld. Funktion und Bedeutung der Bauornamentik im stadtrömischen Kontext"
2007–2008	Gerda-Henkel-Stiftung: Research Grant for the PhD in Rome
09.2007	Summer-School of the German Archaeological Institute in Northern Italy
2006–2007	Deutscher Akademischer Austauschdienst: Research Grant for the PhD in Rome
06.2006	Deutscher Akademischer Austauschdienst: Summer-School in Stockholm
2002–2003	Erasmus Scholarship in Rome

Employment

since 04.2009	Akademischer Rat ("Assistant Professor") at the Institut of Classical Archaeology of the Ludwig-Maximilians-University, Munich
01.–03.2009	Associate fellow at the German Archaeological Institute in Rome: „Das Haus des Augustus auf dem Palatin. Rekonstruktion und Bedeutung der Stuckdekoration des sogenannten Oecus"
2001–2011	Participated in excavations and surveys in Mannheim (Germany 2001), Megalopolis (Greece 2002; 2003), Pednelissos (Turkey 2004), Cologne (2005), Campania in Italy (2006) and Rome (2006-2011)
2002–2007	Teaching-research assistant in the Department of Ancient History Philippsuniversität Marburg (2002), Forschungsarchiv für Antike Plastik in Cologne „Arachne" (2003-2005); Graduate research assistant of the German Archaeological Institute at Rome (2006; 2007)
1999–2000	„Friedensdienst im Ausland" (Peace Corps) in a cultural center of the Waldenses church in Torre Pellice/Italy

Publications

Sulla decorazione architettonica della Basilica Emilia. Un contributo alla cronologia dell'edificio di età imperiale, ArchCl 58, 2007, 143–153.

Zur Datierung der spätantiken Portikus des Caesarforums. Literarische Quellen und archäologischer Befund, RM 114, 2008, 389–405.

L'architecture romaine, évolution d'un champ d'études depuis les années 1950, Perspective 2010/2011, Nr. 2, 215–239 (with Henner von Hesberg).

Das Hadrianeum auf dem Marsfeld. Einige Beobachtungen zur Architekturdekoration, BJb 210/211, 2010/2011, 95–130.

Die Basilika Aemilia am Forum Romanum. Der kaiserzeitliche Bau und seine Ornamentik, Palilia 24 (Wiesbaden 2011).

Stefan Ritter (München): Changing Interests: The city as topic in Roman Art

When we talk about possibilities for reconstruction and visualization of historic cities, it might be interesting to immerse ourselves in history and to have a look at how these cities were visualized at the time when people used to live in them. In any period, the methods of visualizing are determined by specific interests, by generally accepted standards of representation and, behind all this, by specific ways of visual perception and imagination. In Imperial Roman art, where the city as a topic played an important role in different genres, Roman cities looked very different from any later representation. In my paper, I will deal with the question to which extent and for what reasons they do so.

First, I will demonstrate in which respects Roman representations of cities differ from modern ones in general. Their most striking feature is the fact that the geometrically unified, one-point perspective, universally accepted since the Renaissance, did not exist as a comprehensive formal principle in ancient art. Instead, painters and sculptors of antiquity used different types of perspective that could be combined within the same picture. Accordingly, there was no concept of a consistent, all including image space. The single elements (buildings, landscape motifs etc.) are more important than their arrangement. Each element can be regarded from its own point of view because it has its own, widely autonomous value. These characteristics are based on specific ways of seeing and perceiving, testified in written sources on ancient theories of vision.

Aside from these general rules, the great variety of representations of cities and urban environments in Roman art leaves some questions open. In the second part of my paper, I will outline exemplary cases where I see a need for further research.

Studies on representations of cities in Roman visual art are focused almost exclusively on those examples where cities or parts of them are clearly identified by means of distinctive urban features such as city walls or specific urban buildings. However, there is a vast grey area that comprises representations where the scenery does not lend itself to be identified with any particular location. The second point is that in many cases the arrangement of the image space cannot be understood by considering phenomena like architecture or landscape separately, because the most common characteristic of by far the most compositions is their focus on human activity. As soon as the scenery is animated with mythological, divine or mortal figures, the possibilities in modifying the surroundings increase considerably. The protagonists and their environment are very closely interrelated. In several mythological as well as non-mythological representations the fact that the activities take place in an urban context is not explicitly shown by any specific urban architecture but it is the character of the scene itself that enables the viewer to localize it. In other cases, single elements established in city representations are combined with motifs from other sources so that the scenery intentionally remains indifferent, gaining only some touch of urban atmosphere. Particularities like these deserve a closer look at the details, especially by comparing representations of explicitly identified cities with other ones where the arrangement of the image space can only be explained with the artist's intention to give the figural actions an adequate setting.

The enormous variety in Roman visual art is based on the fact that the construction of spatial contexts is not aimed to show what a viewer can see from a single observation point but to match the needs of the protagonists acting within the

picture. When visualizing Roman cities, we should keep in mind that what we see in Roman cities is not what the Romans saw in them.

Stefan Ritter, CV

Date of Birth: 17.01.1959

Academic Positions:

since 2008:   Full Professor and Chair of Classical Archaeology, Institut für Klassische Archäologie, Ludwig-Maximilians-Universität München

2007–2008   Full Professor, Institut für Klassische Archäologie, University of Erlangen

2005–2006   Professor, Institut für Klassische Archäologie, Ludwig-Maximilians-Universität München

2001–2005   University Lecturer, Archäologisches Institut, University of Freiburg

1994–2001   Assistant Lecturer, Archäologisches Institut, University of Freiburg

Education:

2000   Dr. phil. habil. (University of Freiburg)

1991   Dr. phil. (University of Heidelberg)

1984–1991   Studies of Classical Archaeology, Latin, Byzantine Archaeology (University of Heidelberg and Freie Universität Berlin)

1979–1981   Studies of Classical Philology, German Studies (University of Jena, G.D.R.)

Awards and Fellowships (selection):

2005   Fellow of the Collegium Budapest, Hungary

1998–1999   Research Fellowship of the Deutsche Forschungsgemeinschaft (one-year research stay at the Ashmolean Museum, Oxford, U.K.)

1993   Ruprecht Karls Award 1992 of the University of Heidelberg (for the doctoral thesis)

1991–1992   One-year Post-doctoral Fellowship (Reisestipendium) of the German Archaeological Institute, Berlin (research expedition around the Mediterranean)

1990   Doctoral Fellowship (Graduiertenförderung des Landes) of Baden-Württemberg at the German Archaeological Institute, Rome, Italy

Main Interests:

- Sociological and Anthropological methods in Classical Archaeology
- Greek traditions in Roman art
- Comparative research on Roman art and literature
- Comparative cultural history of Italy and the Western provinces of the Roman Empire (esp. North-western Europe and North Africa)

Relevant Publications

Das Wirtshaus als Lebensraum: ‚Kneipenszenen' aus Pompeji, *Jahrbuch des Deutschen Archäologischen Instituts* 126, 2011, 155–220 (12 plates)

Alle Bilder führen nach Rom. Eine kurze Geschichte des Sehens. Klett-Cotta Verlag,   Stuttgart 2009 (240 pages, 27 figs.)

The German-Tunisian project at Dougga: First results of the excavations south of the Maison du Trifolium (co-authored with Philipp von Rummel), *Antiquités Africaines*   40/41, 2004/2005, 43–66 (11 figs.)

Bildkontakte. Götter und Heroen in der Bildsprache griechischer Münzen des 4. Jhs. v.Chr. Dietrich
   Reimer Verlag, Berlin 2002 (241 pages, 130 figs.)
Hercules in der römischen Kunst von den Anfängen bis Augustus. Verlag Archäologie und
   Geschichte, Heidelberg 1995 (248 pages, 127 figs.)

Jochen Griesbach (Würzburg): Alle Wege führen aus Rom hinaus! Die Wahrnehmung
des Suburbium in Kartographie und Archäologie der Neuzeit
All roads lead out of Rome! The perception of Rome's *'suburbium'* in modern
cartography and archaeology

In our subject cognitive interest is strongly determined by the visibility of cultural
legacies including both archaeological discoveries as well as their documentation. If
archaeological data (artefacts and sites) is not exposed to be seen it will not usually be
taken into consideration. The city of Rome and its surroundings offer a good example
for this epistemological phenomenon. It is due to their long-lasting resistance that the
Aurelian Walls epitomised for centuries the outer boundary of the 'Eternal City'
although they hardly ever matched with the dimensions of the urban settlement. In
antiquity the *'suburbium'*, the typical loose conglomeration of tombs, workshops,
sanctuaries and *villae*, began inside these walls and continued far beyond.
Archaeological research, however, for a long time focussed basically on the ancient
remains within the Late Roman city walls. Likewise the *'viae consulares'* leaving Rome
in a radial pattern still have a strong impact on the perception as well as on the
administration of the archaeological monuments. Yet the underlying image/notion
goes back to age-old maps such as the 'Peutingeriana'. Taking the periphery of ancient
Rome as a case study this paper aims for a methodological reflection of how 'ancient
reality' has been reconstructed within our subject by analysing the various
interdependencies between historical maps and the archaeology of town-/landscapes.

Curriculum Vitae

Professional Experiences:

seit 4/2012	Curator at the Martin von Wagner Museum of the Würzburg University
2007-2012	Assistant Professor at the Institute of Classical Archaeology, Ludwig-Maximilians-University Munich
2003-2004	Assistant Professor (deputizing for Dr. Lutgarde Vandeput), Forschungsarchiv für Antike Plastik, University of Cologne

Education:

2011	Habilitation at the Ludwig Maximilians University Munich
2006	Ph.D. in Classical Archaeology, summa cum laude, University of Cologne
1997	M. A. in Classical Archaeology, University of Cologne
1989-1997	Studies of Classical Archaeology, Classical Philology (Latin), Media Studies & Theatre Sciences, Philosophy at the Universities of Cologne, Bonn and Heidelberg

Habilitation: "Topographical analysis of honorific statues in the Hellenistic Aegean – Configuration and setting of 'political spaces' by official and private portrait statues"

Dissertation: "Villae and tombs. Settlement and burial in the 'suburbium' of Imperial Rome, with special attention to the archaeological investigations at the Tenuta Radicicoli Maffei" [first part published in Internationale Archäologie n. 103, Rahden/Westf. 2007]

Master's Thesis: "Structural analysis of Rome's necropoleis during the Imperial period"

Honors and awards

2010-2011 the	Research grant from the Deutsche Forschungsgemeinschaft (DFG) for studies at the German Archaeological Institute at Athens
2000-01	Doctoral Fellowship grant within the DFG Graduate School "Rising and self-display of urban elites in the Roman Empire", Faculty of Philosophy, Cologne University
1999-00	Visiting grant of the Deutscher Akademischer Austauschdienst (DAAD) for Doctoral Research in Italy, Rome (Soprintendenza Archeologica di Roma/German Archaeological Institute at Rome)

Christopher J. Smith (Rome): Reconstructions of Early Rome

Thirty years or so ago, the available evidence for early Rome was so slight that it was hard to make a consistent picture, yet even so, from Niebuhr, through Pasquali's La Grande Roma dei Tarquini to Momigliano's important work, efforts were made to imagine the city. Subsequently, the pace of archaeological research has given us much more information, and methods of reconstruction through artwork, digitisation and other media have permitted a richer and more intriguing picture to be presented.

However, there are huge dangers in such reconstructions, and in this paper I would like to think about ways in which reconstructions and the presuppositions which underpin them, affect how we look at the evidence which does exist. The most obvious case is with the more optimistic reconstructions, but it is also true that a sceptical or revisionist approach depends on certain assumptions about Rome's size and appearance. This paper will therefore look at the role of reconstruction in relation to the early city of Rome.

CV

1992   DPhil. Oxford University
1992   to present, University of St Andrews (currently Professor of Ancient History)
2009   to present, Director of the British School at Rome

Selected Publications

Early Rome and Latium: Economy and Society c 1000-500 BC 1996 Clarendon Press.
The Roman Clan: The Gens from Ancient Ideology to Modern Anthropology 2006
        Cambridge University Press.

Smith, C. J. & Bispham, E. (eds) Religion in Archaic and Republican Rome: Evidence and Experience 2000 Edinburgh University Press.

Smith, C. J. (ed.) & Powell, A. (ed.) The lost memoirs of Augustus and the development of Roman autobiography 2009 Classical Press of Wales.

Smith, C. J. & Covino, R. Praise and Blame in Roman Republican Rhetoric 2011 Swansea : Classical Press of Wales.

John Bodel (Providence, Rhode Island): The Life and Death of Ancient Roman Cemeteries

Imperial Rome was hemmed around by her dead. By the middle of the first century BCE the local practices of extramural burial and regular familial commemoration of the dead at gravesites had ringed the urban periphery with a network of cemeteries and tombs. As the urban zone spread outward over the following centuries, the *cordon sanitaire* that separated the city of the living from the necropoleis beyond it expanded accordingly, but the barrier between the two regions became increasingly porous with time. While some areas occupied by burials were reclaimed for the living, others were given up to the dead, so that the boundaries, both physical and cultural, that separated the two worlds were constantly being redrawn.

During the early imperial period, luxury villa estates of the wealthy (*horti*) vied for space with actual market gardens (*horti*) and tomb orchards (*cepotaphia*) amidst a web of funerary monuments that fanned out from the city between the spokes of the radial roads. By the middle of the second century, competition for locations near the city was driving the cemeteries underground, and networks of catacombs and subterranean tombs began at first to supplement and then to replace the surface monuments. Following the conversion of Constantine, the fashion of burial 'near the blessed' (*ad sanctos*) led to a proliferation during the fourth century of Christian funerary basilicas at martyrs' shrines around the outskirts of the city. Already by that time, and increasingly throughout the fifth and sixth centuries, intramural burial in residential and commercial structures had begun redefining, once again, the delicate relationship between the living and the dead that had traditionally characterized the suburban zone.

This paper attempts to sketch in broad outline across the first six centuries CE the trajectory of the evolving Roman response to the challenge of accommodating the living and the dead within the always ambivalently defined territory of the Roman *suburbium*. A first section considers the cases of three early imperial burial grounds closed during (or very shortly after) periods of their active use and formulates a tentative hypothesis concerning the average lifespan of suburban cemeteries during the early imperial period. In each of the three cases—the conversion by Maecenas of a large section of the Esquiline burial ground into a suburban estate shortly after the middle of the first century BCE, the burial of a thriving necropolis outside the Porta Salaria during the time of Trajan, and the obliteration by Constantine of a 'pagan' cemetery on the Vatican Hill in order to lay out the Christian basilica he built above the presumed tomb of St. Peter—an exercise of *force majeur* by an imperial power brought an unnatural end to the life of a burial ground that had been actively used for about 150-200 years.

In the centuries following Constantine, the gradual penetration into the city of intramural graves during the fifth and sixth centuries and the integration of tombs into the fabric of villa buildings no longer serving their original functions but now repopulated by agglomerated groups of families living together in the subdivided structures (proto-villages) reflect an evolution of, rather than a departure from, a long-standing tradition of Roman commemorative practices centered on an association of tombs and villas.

John P. Bodel

Department of Classics / Box 1856 /Brown University / Providence, Rhode Island, 02912

phone: 401–863–3815 or 2123 (mess.) / fax: 401–863–7484 / john_bodel@brown.edu

Education

> Ph.D., University of Michigan, 1984
> M.A., University of Michigan, 1979
> B.A., Princeton University, 1978

Employment

> Brown University (2003–)
>> W. Duncan MacMillan II Professor of Classics, 2009–
>> Professor of Classics and Professor of History, 2002–
> Rutgers University (1993–2002)
>> Professor of Classics, 1997–2002; Associate Professor of Classics, 1993–1997
> Harvard University (1984–1992)
>> Associate Professor of the Classics, 1989–1992; Assistant Professor of the Classics, 1984–1989
> *Visiting appointments*
>> University of California, Berkeley, Visiting Professor, Departments of History and Classics, 2000
>> Princeton University, Visiting Professor, Department of Classics, 2002
>> University of Oxford, Center for the Study of Ancient Documents
>>> Co–director (with Graham Oliver) British Epigraphy Society Summer School, 2004

Honors

> Fellow, American Academy in Rome, 1983
> National Endowment for the Humanities Research Fellowship, 1993
> Resident, Bellagio Center, The Rockefeller Foundation, August 2002
> Lucy Shoe Meritt Resident in Ancient Studies, American Academy in Rome, 2006
> Salomon Research Award, Brown University, 2008
> Loeb Classical Library Foundation Fellowship, 2010
> Visiting Fellow, Institute of Advanced Study, University of Warwick, 2012

Publications

> **Books**:
> *Roman Brick Stamps in the Kelsey Museum* (University of Michigan Press: Ann Arbor 1983)

Graveyards and Groves. A Study of the Lex Lucerina (*American Journal of Ancient History* 11)
(Cambridge, Mass. 1994)

Articles and chapters in books:

"Monumental Villas and Villa Monuments", *Journal of Roman Archaeology* 10 (1997) 5–35.

"From *Columbaria* to Catacombs: Communities of the Dead in Pagan and Christian Rome", in L. Brink and D. Greene, eds., *Roman Burial and Commemorative Practices and Earliest Christianity* (Walter De Gruyter: Berlin and New York 2008) 177–242.

"Tombe e immobili: il caso dei *praedia Patulciana* (*CIL* X 3334)", in L. Chioffi, ed., *Epigrafia e archeologia in Campania: letture storiche* (Istituto Italiano di Studi Filosofici: Naples 2011) 249–67.

Other professional activities:

U.S. Epigraphy Project (USEP), Director, 1995–.

Brill Studies in Greek and Latin Epigraphy, Co–editor (with Adele Scafuro), 2008–.

Editorial boards:

American Journal of Archaeology (Advisory Board) 2004–.

Digital Classicist (http://harrier.cch.kcl.ac.uk/digitalclassicist) 2005–.

Synkrisis: Invitations to Early Christianity in Greco–Roman Culture (Yale University Press, edited by Dale B. Martin and Laurence L. Welborn) 2006–.

Societies (http://www.mdpi.com/journal/societies) 2010–.

European Review of History / Revue Européenne d'histoire 2012–.

Filippo Coarelli (Roma): Le domus dell'aristocrazia romana repubblicana sul Palatino
The domus of the Republican Roman aristocracy on the Palatine

Recently Clemens Krause (Eutopia, n.s. 1, pp. 169-201) reconstructed an entire quarter of Republican *domus* in the area later occupied by the *domus Tiberiana*. In a small sanctuary, in the north-west corner of this complex, he was able to identify the sacellum of *Libertas* built by Clodius in 58 BC, in part using the house of Cicero who was still in exile. This discovery (on the basis of the large amount of information provided by the orator and confirmed by data regarding the *domus* of Augustus) has been key to the identification of some of the owners of the neighbouring houses: in particular, Q. Lutatius Catulus (*cos.* 102), his son of the same name (*cos.* 78), Q. Metellus Celer (*cos.* 60) and his wife Clodia, as well as Clodius himself (*tr. pl.* 58). The quarter has a uniform plan, built after the fire of 111 BC (which destroyed the temple of Magna Mater along with *maxima pars urbis*: Obseq. 39) by a group of *nobilitas* senatoria, in the area where previously the residences of some members of the Gracchan faction were situated: that of M. Fulvius Flaccus (*cos.* 125 BC) and probably C. Sempronius Gracchus himself.

Curriculum Vitae

Nato a Roma il 9 Giugno 1936. Laureatosi a Roma nel 1961, dallo stesso anno assistente straordinario presso la cattedra di Archeologia e Storia dell'Arte Greca e Romana, allora tenuta da Ranuccio Bianchi Bandinelli.

Ispettore archeologo presso il Comune di Roma (1968-1973), professore incaricato di Antichità Greche e Romane presso l'Università di Siena (dal 1972 al 1977) e presso l'Università di Perugia

(Insegnamenti: "Antichità Romane" e "Religioni del Mondo Classico"). E' Professore Ordinario dal 1980. Nel 1980-81 ha insegnato presso l'Università della Calabria come professore straordinario di Archeologia della Magna Grecia.

Dal 2009 è Professore Emerito presso l'Università di Perugia (Facoltà di Lettere e Filosofia).
E' autore di oltre 300 pubblicazioni di carattere scientifico e divulgativo.
Centro dei suoi interessi sono la storia e la topografia di Roma e dell'Italia antica; le religioni dell'Italia antica; l'arte ellenistica e repubblicana.

Ha ricevuto la laurea *honoris causa* da:

- *Université "François Rabelais"* di *Tours* (FRANCIA).
- *Université "Blaise Pascal"* di *Clermont-Ferrand* (FRANCIA),
- Università di Oulu (*Oulun Yliopisto*) (FINLANDIA).
- Università "*Paris-Sorbonne*" (FRANCIA), 9 giugno 2011.
- Università di Alicante (SPAGNA), 11 Maggio 2012.

E' membro corrispondente dell'Accademia Nazionale dei Lincei.
E' socio ordinario dell'Istituto di Studi Etruschi.
E' membro dell' *Academia Europaea.*
E' membro de la Société des Antiquaires de France.
E' membro della British Academy.
E' corrispondente straniero dell'Académie des Inscriptions et Belles-Lettres dell'Institut de France.
E' stato insignito dal Presidente della Repubblica Italiana della Medaglia d'oro di Benemerito della Scuola, Cultura ed Arte.
Dal 1978 dirige lo scavo della colonia Latina di Fregellae, in provincia di Frosinone, nei territori dei comuni di Ceprano ed Arce al quale hanno preso parte numerosi studenti e studiosi di Perugia e di numerosi Paesi stranieri.
Attualmente è coordinatore nazionale di una ricerca su Pompei e direttore scientifico degli scavi archeologici condotti con la Soprintendenza Archeologica del Lazio nell'area del santuario di Diana a Nemi e di Falacrinae in Sabina.

Francesco Buranelli (Roma)
Secretary of the Pontifical Commission of the Cultural Patrimony of the Church

La necropoli lungo la via Triumphalis: storia dei rinvenimenti, della tutela e della ricostruzione di un tratto del paesaggio suburbano di Roma
The Necropolis Along *via Triumphalis*: History of the Archaeological Discoveries, of the Conservation and Reconstruction of Part of the Suburban Landscape of Rome.

The history of the archaeological discoveries of the Roman necropoles in the Vatican area, excavated since the Second World War, is one of the most revealing chapters of archaeological conservation of Rome in modern times. Between 1940 and 2012 there have been many archaeological findings associated with a necropolis dating to the Imperial period that lined the ancient roads of *via Cornelia* and *via Triumphalis*. In contrast with the recent misguided practice of conservation which tries to reach a compromise between excavation, gathering information and removing ancient structures to make space for expanding building sites, the excavation in *via Cornelia*

and *via Triumphalis* has preserved the findings in loco. This exceptionally far-sighted "integrated conservation" has allowed the preservation of two wonderful archaeological sites of great historical, archaeological, social and religious interest, making them fully preserved and open to the public. The Vatican Necropolis, which includes the tomb of Peter the Apostle, is located on *via Cornelia* underneath the Basilica of St Peter. The less-known necropolis along *via Trionfale*, which is also called the Necropolis of the Autoparco or of Santa Rosa, contains some 400 tombs mostly belonging to the lower social classes, and is dated between the 1st and the 4th centuries AD. The extraordinary preservation of the findings of this necropolis has allowed not only the reconstruction of its historical and social fabric, which is particularly important in defining little-known aspects of funerary rituals, but also the reconstruction of the original stratification of the landscape morphology on the north-east side of the Vatican Hill. Analysis of the archaeological data and landscape was the basis for a multimedia reconstruction of the diachronic phases of the necropolis, which gradually descends from the top of the hill to the valley, where the ancient *via Trionfale* used to be. It also reveals the nature of human interaction with the physical landscape of the area where landslides conditioned the development of the necropolis, requiring the creation of a minor road system and, at times, transversal ramps at steep slopes to connect the various sectors of the necropolis.

Curriculum vitae

Prof. Francesco Buranelli
Nato a Roma il 26 marzo 1955.

Dirige per tredici anni (dal 1983 al 1996) il Museo Gregoriano Etrusco in Vaticano, incarico che lascia con la nomina da parte di S.S. Giovanni Paolo II a "Direttore Generale dei Monumenti Musei e Gallerie Pontificie", dirige quindi per undici anni (dal 1996 al 2007) i Musei Vaticani.

Nel dicembre del 2007 viene nominato da S.S. Benedetto XVI "Segretario della Pontificia Commissione per i Beni Culturali della Chiesa".

Autore di più di duecento pubblicazioni scientifiche di argomento archeologico e storico artistico, le sue competenze spaziano dall'archeologia, alla storia dell'arte moderna e contemporanea.

Curatore e coordinatore molteplici mostre in Italia e all'estero.

Socio effettivo di numerose Accademie e Istituti di ricerca, ha avuto incarichi universitari e tenuto corsi specialistici presso l' École Normale Supérieure di Parigi, la Notre Dame University negli USA, l'Università Galatasaray di Istanbul, l'Università di Monterrey in Messico e la Pontificia Università Gregoriana a Roma.

In ambito archeologico lega il suo nome alla storia dei primi scavi in Etruria, con una particolare attenzione all'antica città di Vulci. A lui si devono le fondamentali ricerche sulla tomba François di Vulci (1987), sugli scavi della famiglia Campanari e l'acquisizione della Raccolta Giacinto Guglielmi ai Musei Vaticani (1987), nonché la completa ristrutturazione del Museo Gregoriano Etrusco (1992-1996) e la salvaguardia della necropoli romana lungo la Via Trionfale (2003-2006).

Con la nomina a Direttore Generale dei Musei Vaticani i suoi interessi e le sue competenze si aprono alla storia dell'arte moderna e contemporanea, distinguendosi per la versatilità nel dialogo con gli artisti contemporanei.

Coordina i prestigiosissimi restauri degli affreschi quattrocenteschi in Cappella Sistina e dell'Appartamento Borgia, nonché quelli delle Cappelle Niccolina e Paolina in Vaticano.

1. F. BURANELLI, *L'urna Calabresi di Cerveteri*, Roma 1985.
2. F. BURANELLI (a cura di) *La tomba François di Vulci*, catalogo mostra, Roma 1987.
3. G. BARTOLONI - F. BURANELLI – V. D'ATRI-A. DE SANTIS, *Le urne a capanna rinvenute in Italia*; Roma 1987.
4. F. BURANELLI, *La raccolta Giacinto Guglielmi*, Roma 1989.
5. F. BURANELLI, *Gli scavi a Vulci della Societa' V; Campanari Governo Pontificio (1835 - 1837)*, Roma 1992.
6. F. BURANELLI, *Ugo Ferraguti: ultimo "archeologo-mecenate" - Cinque anni di scavi a Vulci (1928-1932) attraverso il fondo fotografico Ugo Ferraguti*, Roma 1994.
7. F. BURANELLI (a cura di), *Cecco Bonanotte e la porta nuova dei Musei Vaticani*, Recanati 2001.
8. F. BURANELLI, (a cura di) *Il Beato Angelico e la Cappella Niccolina; Storia e Restauro*, Novara 2001.
9. F. BURANELLI – A.M. DE STROBEL – G. GENTILI, (a cura di) *La Sistina e Michelangelo – Storia e fortuna di un capolavoro*, catalogo mostra, Milano 2003.
10. F. BURANELLI (a cura di), *Il Perugino del Papa. La pala della Resurrezione: storia di un restauro*, catalogo mostra, Milano 2004.
11. F. BURANELLI, P. LIVERANI, A. NESSELRATH (a cura di), *Laocoonte – Alle origini dei Musei Vaticani*, catalogo mostra, Roma 2006.
12. F. BURANELLI (a cura di), *Habemus Papam. Le elezioni pontificie da San Pietro a Benedetto XVI*, catalogo mostra, Roma 2006.
13. F. BURANELLI (a cura di), P. LIVERANI, G. SPINOLA, *La Necropoli Vaticana lungo la Via Trionfale*, Roma 2006.
14. F. BURANELLI, *Jannis Kounellis, Sipario. La porta dell'orto monastico di Santa Croce in Gerusalemme*, Roma 2007.
15. R. VODRET - F. BURANELLI (mostra a cura di) *Caravaggio*, Roma 2010.
16. F. BURANELLI (a cura di) *Palazzo Farnese. Dalle collezioni rinascimentali ad Ambasciata di Francia*, catalogo mostra, Roma 2010.
17. F. BURANELLI e F. CAPANNI (a cura di), *Ventennale della Pontificia Commissione per i Beni Culturali della Chiesa, atti della giornata di studi del 26 nov. 2009*, Città del Vaticano 2011.

Rafed El-Sayed, Konstantin C. Lakomy (Göttingen): Tripheion-Atripe: Reconstructing the changes of sacred space in a late antique Upper Egyptian town

The presentation deals with the town of Athribis (Greek „Tripheion", Coptic „Atripe") situated in the ninth *nome* of upper Egypt, the *nomos Panopolites* of Greek-Roman times. The settlement was most likely a town in the Egyptian meaning of the term during the Ptolemaic Period and received village status during the Roman era. The great temple dedicated to the Panopolite triad consisting of the deities Min, Repit and Kolanthes was counted among the Egyptian temples of the first order. At the end of the Ptolemaic Period the temple area covered one quarter of the total extension of the town. The epigraphic evidence of the temple decoration assumes an ongoing cultic activity at

least until the reign of the emperor Domitian. From the second century onwards there is only scanty evidence for regular cultic activities although the cults might have persisted until the end of that century. Before the abandoned temple was incorporated into a Christian monastery during the last quarter of the fourth century, there is disputable evidence for its reuse as an imperial way station at the end of the third century as the Papyri from Panopolis, now in the Chester Beatty Library, indicate. These Papyri, being the correspondence of the *strategus* of Panopolis with the local administration of this town concerning the impending visit of the emperor Diocletian and his entourage, allude to the existence of a *palation* located in *"Tripheion"* which either is an imperial residence in the town of Atripe-Tripheion or the temple precinct of that town or even inside the great temple itself. The archaeological evidence known to present does not suffice to answer the question of the exact location of the Diocletian *palation*. For the time being, reconstructions of the changing sacred space of the town must build upon a multi-track approach.

Dr. Rafed El-Sayed studied Egyptology, Islamic and Semitic Studies at the Universität zu Köln (1999 Master of Arts, 2006 PhD in Egyptology). His research interests cover Ancient Egyptian Language and Archaeology with a focus on Greek-Roman and late antique Egypt. From 2000 until 2004 he was Research Associate in the Collaborative Research Centre SFB 389 ACACIA at the Universität zu Köln. From 2005 until 2011 he held the position of Research Associate and Field Director in the archaeological Project „Athribis in Upper Egypt" at Universität Tübingen. In 2012 he was granted a Dilthey-Fellowship (Volkswagenstiftung) and currently he is directing an archaeological research project concerning the "Change of sacred spaces in the Achmim region (Middle Egypt) in Late Antiquity".

Publications

1. Rafed El-Sayed, *Afrikanischstämmiger Lehnwortschatz im älteren Ägyptisch. Untersuchungen zur ägyptisch-afrikanischen lexikalischen Interferenz im dritten und zweiten Jahrtausend v. Chr.*, OLA 211, Leuven u.a. 2011.

2. R. El-Sayed & Y. El-Masry (eds.), *Athribis I. General Site Survey 2003–2007. Archaeological & Conservation Studies. The Gate of Ptolemy IX. Architecture and Inscriptions*, Le Caire 2012.

3. Rafed El-Sayed, *Schenute und die Tempel von Atripe. Zur Umnutzung des Triphisbezirkes in der Spätantike*, in: H. Knuf, C. Leitz, D. von Recklinghausen (eds.), *Honi soit qui mal y pense. Studien zum pharaonischen, griechisch-römischen und spätantiken Ägypten zu Ehren von Heinz-Josef Thissen*, OLA 194, Leuven–Paris–Dudley 2010: 519-538, and plates 93–97.

4. Yahya El-Masry / Rafed El-Sayed et al., *Preliminary Report on the 3rd Season of Fieldwork of the University of Tübingen and SCA Joint Mission to Athribis (Nag' al-Shaykh Hamad - Sohag)*, in: Daoud, Khaled / Sawsan Adb El-Fattah (eds.), The World of Ancient Egypt. Essays in Honor of Ahmed Abd El-Qader El-Sawi, Suppl. *ASAE* 35, Le Caire 2006: 57–74.

5. Rafed El-Sayed, *r' n MD3.iw-lingua blemmyica-tubedawie. Ein Sprachenkontinuum im Areal der nubischen Ostwüste und seine (sprach-) historischen Implikationen*, in: *SAK* 32, 2004: 351–362.

Dr. des. Konstantin Lakomy   studied Egyptology, Coptic Studies and Religious Studies at the Universität Göttingen (2007 Master of Arts, 2012 PhD in Egyptology). His research interests cover Ancient Egyptian Art History and Archaeology with a focus on New Kingdom Egypt. From 2010 until 2011 he was Research Associate in the archaeological Project „Athribis in Upper Egypt" at the Universität Tübingen. Since 2012 he is Lecturer and Researcher at the Universität Göttingen.

Publications

Cairo Ostracon J. 72460: Eine Untersuchung zur königlichen Bestattungstradition im Tal der Könige zu Beginn der Ramessidenzeit, Göttinger Miszellen Beihefte Nr. 4 (2008)

Das Grab des Maiherperi (KV 36) und andere „private Felsgrabanlagen". Eine Untersuchung zur Konzeption und Vergabe der so genannten „nichtköniglichen" Grabanlagen im Tal der Könige von der 18.–20. Dynastie, Dissertation, *forthcoming*

„*Von dem in Arbeit befindlichen Grab der Isisnofret zu dem (Grab) des/ meines Hohepriesters von Heliopolis, Meriatum (sind es) 200 Ellen*": Ein Beitrag zur Konzeption und Anlage 'nichtköniglicher' Grabanlagen im Tal der Könige zu Beginn der Ramessidenzeit, in: Göttinger Miszellen 216, 2008: 33–44

Der Holzsarg eines Königs der späten 18. Dynastie aus der Cachette im Süden von ad-Dayr al-Baḥrī: Bemerkungen zu dem 'Sarg König Ramses' II.', in: Göttinger Miszellen 224, 2010: 71–80

„*Embalming Caches*" im Tal der Könige. Eine Bestandsaufnahme für die XVIII. Dynastie, in: Göttinger Miszellen 228, 2011: 21–32

Wilko Graf von Hardenberg (München): The Environment & Society Portal: Connecting environmental events geographically, chronologically and conceptually

As the Internet delivers ever-more specific search results and personalized content, we increasingly miss out on surprising connections. The Environment & Society Portal offers something different: an exploratory experience that lets users visualize spatial, temporal, and thematic relationships. The project aspires to make resources and information in the environmental humanities accessible both to the academic community and the interested public, while also translating into a digital environment the spirit of exploration and serendipity that characterizes historical research.

The Portal offers a wide variety of digitized documents, media, and images, plus illustrated online "exhibitions" that put these materials into interpretive contexts as well as brief articles about specific places, persons and events. As it is neither possible nor desirable to present a "comprehensive" collection representing such a broad field, we instead envision the project as a dynamic, growing, and interactive

"cabinet of curiosity." To start, we have stocked this cabinet with a mix of new features and previously published materials that we think spark interest in the human-nature relationship or reflect on it as a field of knowledge.

Central to this endeavor has been the creation of a navigation interface with map, viewer, timeline and keyword-based exploration tools to help users locate content of interest. An important goal of the project is to cultivate a strong online community, and to involve both academics and the general public in the shaping of its contents. To achieve this the Portal is experimenting with a variety of features to facilitate and encourage feedback, interaction and dissemination of information.

As the Portal's content grows and tools are improved, users' search possibilities will increase exponentially. It will be possible to use any tool to refine searches made with any of the other tools. The aim is to allow the users to create unique paths through environmental scholarship and materials gathered and, potentially, use these paths in both their research and teaching activities.

What will be presented is an illustration of the Portal's navigation functionalities and of how its contents may be used to represent the impact of the environment on cities over history. Entries in our database relevant to the issues addressed during the Symposium will be highlighted and compared with each other chronologically, geographically and conceptually. In particular, issues related to urbanization and the impact of natural disaster on the historical development of cities in different regions and periods of time will be compared, highlighting the potentialities of the Portal's tools.

The aim is to show how advanced navigation tools may help to spur new ways to look at a specific issue, creating unexpected links, fostering interdisciplinary research and promoting the development of new narratives. Our hope is that giving researchers the possibility to use digital tools to compare and contextualize their histories we may help on the one hand to improve the understanding of similarities and differences beyond the boundaries of time and space and on the other collect new contributions to our database.

Wilko Graf von Hardenberg is an environmental historian focusing on socio-political aspects of nature perception and management in modern Europe, with a keen interest in the use of digital tools in the environmental humanities and in historical scholarship at large. He holds a *Laurea* in history from the University of Torino, Italy and a PhD in geography from the University of Cambridge. He was a postgraduate fellow at the Scuola Normale Superiore in Pisa, Italy and held a postdoctoral position, funded by the Autonomous Province of Trento, at the University of Trento, Italy. He has also been lecturing at various Italian universities about such diverse topics as environmental history, digital humanities, sustainable mobility, geography, and Italian constitutional history. He currently is Digital Humanities Research Specialist and Acting Director of the Environment & Society Portal at the Rachel Carson Center for Environment and Society in Munich.

Gordon M. Winder (München): Reconstruction and Narrative: Re-imagining Auckland's Heritage in Walking Tour Guides

When compared with Rome, Auckland was never an ancient city, even though, as Tamaki, it was a region of Maori settlement for around 600 years before 1871 when the City of Auckland was officially established. But, for anyone attempting a reconstruction of Auckland's heritage, the city's relatively short history is actually unhelpful. Boasting only 69,000 residents in 1890, but almost 1.4 million today, the City of Auckland is in fact ultra dynamic. Built on a narrow isthmus among 50-odd volcanic cones and craters and not one but three harbours, the city is constantly buffeted by breezes, gusts and storms, and these set the tone for the human activities that have dramatically transformed the city's built landscape over the past 140 years. As one poet observed at the Auckland Writers and Readers Festival in 2012 which celebrated books set in the city, even a poem set in Auckland and written no more than 15 years earlier may linger long after the landscape features that it describes have disappeared. Auckland's central districts are already a palimpsest heavily worked over by erasures and inscriptions.

This paper reports on the experience of compiling three walking tour guide books of Auckland's inner city for a geography conference held at the University of Auckland in 2003. The guides are laid out as pocket-sized booklets, and as the bearer walks the routes described in the guides, he or she encounters not only the streetscape of the city, but is also brought into relation with other places and times through narratives, maps and photographs in the guide. The guides sketch in past geographies related to the places where the holder of the guide is directed to stand. Reconstruction work was necessary in the preparation of these guides, but they do not emphasise past urban order. Rather than impose order on the built landscape the guides encourage walkers to discern conflicts, ironies and tensions at work in the city. Rather than trumpeting the heroic efforts of the great men and women who stand behind the great buildings that remain, the guide books use an ironic tone to accentuate the gaps between aspirations and achievements. Even many of the landforms that persist are now encoded with dramatically different ideologies than those of their builders. At the same time, the guides highlight the fantastic long distance networks that made everyday life in historical Auckland. Rather than claiming Auckland as a central place dominating its own much larger territory, the guides highlight the extraordinary ways in which this remote settlement was integrated into transnational networks and commercial systems. In re-imagining the city's past geographies at various scales and in terms of diverse networks, the guides invoke globalisation and its pitfalls in the city's history. In this presentation I will reflect on the achievements and failures of this particular re-imagination of urban heritage.

Gordon Winder is Professor of Economic Geography at the LMU-Munich. His research focus is on sustainability, particularly in business and in regional economies, and his research interests span historical experiences of industrialization, urbanization, environmental transformation, and globalization. Born in New Zealand, he gained his PhD at the University of Toronto, and worked at the University of Auckland before he joined LMU as a visiting research fellow from 2008 to 2010. In 2010 Professor Winder was named an honorary research fellow at the University of Auckland's School of

Environment, and in 2011 he was appointed an LMU Fellow at the Carson Center. Winder is a member of the editorial board of *The Journal of Historical Geography*. Along with Prof. Dr. Andreas Dix, Bamberg University, Winder is co-convener of the conference "Trading Environments: Commercial Knowledge and Environmental Transformations" which was held at the Rachel Carson Center in August 2012.

Selected Publications

Winder, G.M., *The American Reaper: Harvesting Networks and Technology, 1830-1910.* Aldershot: Ashgate Publishing (2012).

Winder, G.M., London's Global Reach? Reuters News and Network 1865, 1881 and 1914. *Journal of World History* 21(2) (2010): 271-296.

Winder, G.M., Imagining Geography and Citizenship in the Networked Newspaper: *La Nacion* Reports the Assassination at Sarajevo, 1914. *Historical Social Research/Historische Sozialforschung,* special issue: Global Communication: Telecommunication and Global Flows of Information in the Late 19th and Early Twentieth Century, 35(1) (2010): 140-166.

Winder, G.M., and Henry, M., Historical Auckland on Foot. *New Zealand Geographer*, 62 (2006): 84-88.

Winder, G.M., Seafarer's Gaze: Queen Street Business and Auckland's Archipelago. *New Zealand Geographer* 62(1) (2006): 50-64.

Winder, G.M., Making Space: Clusters and Districts in Auckland Manufacturing 1889 to 1908, in: Hunter, I., and Morrow, D., (eds.), *City of Enterprise: Perspectives on Auckland Business History*, Auckland: University of Auckland Press (2006): 108-131.

Winder, G.M., Trouble in the North End: The Geography of Social Violence in Saint John, 1840 -1860. *Acadiensis,* XXIX(2), Spring (2000): 27-57.

CVs of the discussants

Rolf Michael Schneider studied Greek and Roman art and archaeology, ancient history and late antique and Byzantine art history in Hamburg, Heidelberg and Rome. He has taught in Heidelberg, Marburg, Harvard, Cambridge, Munich, Cape Town and Stanford. In Cambridge he was also Curator of the Museum of Classical Archaeology and Fellow of Downing College. Currently he is Professor for Classical Archaeology at the Ludwig-Maximilians-Universität, Munich. His research interests revolve around image and (con)text, non-Greeks and non-Romans in ancient Greece and Rome, portrayals of emotions (especially laughter), practices and ideologies of workshops and building sites, the urban fabric of (early) imperial Rome, Classical traditions in Europe and South Africa. He has published extensively in these fields and is editing together with François Lissarrague and Bert Smith the series ICON, Image and Context (Berlin and New York).

Major publications

Bunte Barbaren: Orientalenstatuen aus farbigem Marmor in der römischen Repräsentionskunst. Worms: Wernersche Verlagsgesellschaft 1986.

Epilogue: Plädoyer für eine Geschichte des Lachens, in: Jacques Le Goff, *Das Lachen im Mittelalter*, 3rd edition. Stuttgart: Klett-Cotta 2008, 77-128 (1st edition 2004).

Korai und Kouroi. Neue Menschenbilder aus Marmor im Mittelmeerraum, in: Elke Stein-
Hölkeskamp and Karl-Joachim Hölkeskamp (eds.), *Die griechische Welt: Erinnerungsorte
der Antike*. Munich: C.H. Beck 2010, 221-243.

Räume, Bauten, Bilder: Knotenpunkte der kaiserlichen Weltordnung Roms, in: Hartmut Leppin
and Bernd Schneidmüller and Stefan Weinfurter (eds.), *Kaisertum im ersten Jahrtausend:
Wissenschaftlicher Begleitband zur Landesausstellung „Otto der Große und das Römische Reich,
Kaisertum von der Antike bis zum Mittelalter"*. Regensburg: Schnell & Steiner 2012, 55-93.

The making of Oriental Rome: shaping the Trojan legend, in: Peter Fibiger Bang and Dariusz
Kolodziejczyk (eds.), *Universal empire: a comparative approach to imperial culture and
representation in Eurasian history*. Cambridge: Cambridge University Press 2012, 76-129.

Richard Gordon

Curriculum vitae:

1962-66 Jesus College, Cambridge: Classical Tripos; Ancient History option in Part II

1966-69 Jesus College, Cambridge: PhD supervisor: M.I. Finley. Dissertation title:
Mithraism in the Roman Empire   PhD awarded 1973

1969-70 Downing College, Cambridge: Research Fellow

1970-79 School of Modern Languages and European History, University of East Anglia,
Norwich, UK: Lecturer in interdisciplinary topics (Ancient Civilisation); Senior
Lecturer 1979-88; Senior Fellow 1988-90

1988 - : private scholar in Germany

2007- Universität Erfurt: Honorarprofessor für antike Religionsgeschichte; associate
member of the Kollegforschergruppe "Religiöse Individualisierung in historischer
Perspektive", Max-Weber-Kolleg; associate member of EU research project "Lived
Ancient Religion", Max-Weber-Kolleg.

Selected publications:

Image and Value in the Graeco-Roman World: Studies in Mithraism and religious art. (Aldershot, 1996).

with F. Marco Simón (eds.), *Magical Practice in the Latin West: Papers from the International
Conference held at the University of Zaragoza, 30 Sept. – 1st Oct. 2005*. RGRW 168
(Leyden 2010).

"From Republic to Principate: priesthood, religion and ideology"; "The Veil of Power: emperors,
sacrifice and benefaction"; "Religion in the Roman Empire: the civic compromise and its
limits", in M. Beard & J. North (eds.) *Pagan Priests* (London, 1990) 179-255.

"Interpreting Mithras in the late Renaissance, 1: the 'monument of Ottaviano Zeno' (V.335) in
Antonio Lafreri's *Speculum Romanae Magnificentiae* (1564)", *Electronic Journal of Mithraic
Studies* 4 (2004) (illustrated).

Art. "Mithras", *Reallexikon für Antike u. Christentum* 24 (2012) cols. 964-1009.

"Reporting the Marvellous: Private Divination in the Greek Magical Papyri", in: H. Kippenberg &
P. Schäfer (eds.), *Envisioning Magic: A Princeton Seminar and Symposium* (Leyden, 1997) 65-92.

"Imagining Greek and Roman magic", in: B. Ankarloo & S. Clark (eds.), *The Athlone History of
Witchcraft and Magic in Europe*, 2: *Ancient Greece and Rome* (London, 1999) 159-275.