Atene nella seconda metà del V secolo a.C.; I grandi bronzi di Riace, Fidia e la sua officina; Un quarto rilievo della serie Grimani; *Germania capta*; L'identificazione del discobolo di Mirone; *Augustus-Constantinus*; Ritratti di Onorio; Bernini e Policleto; *Signum Cereris*; Un palinsesto su marmo; Vitruvio e l'acanto; Assimilazione a Dionysos ed Herakles su gemme e monete dall'età tardo ellenistica al IV secolo d.C.; Porticello; Un eroe per una villa.

Si tratta di una selezione di alcuni scritti minori di Giuliano; altri ugualmente interessanti non hanno trovato posto. Ma anche così l'opera costituisce uno strumento utile agli studiosi della cultura greco-romana; e l'utilità del volume viene accresciuta dal fatto che non tutti i contributi in esso contenuti sono usciti in pubblicazioni facilmente accessibili, almeno alle nostre latitudini. – Una sola quisquilia: a p. 33 n. 6: non *D*., bensì *d(ecurio)*; e nella stessa pagina , sotto n. 3: in *CIL* VI 4009 da leggere *Synor[is]*.

Heikki Solin

CHRYSTINA HÄUBER – FRANZ XAVER SCHÜTZ: *Einführung in archäologische Informationssysteme (AIS)*. Ein Methodenspektrum für Schule, Studium und Beruf mit Beispielen auf CD-rom. Philipp von Zabern, Mainz am Rhein 2004. ISBN 3-8053-3002-2. 160 pp., 88 fig., CD-rom, EUR 37,50.

Modern archaeology involves working with vast amounts of different kinds of data. There are maps, plans, sections, detailed drawings, old and new photographs, artifacts of all kinds, paleoenvironmental data, survey data, etc. The list is endless. Managing all this data is a difficult task and requires plenty of thought and effort to be efficient and successful. Digital systems for data storage and management have been embraced by many archaeologists and have become more and more common in recent years. This book by two German archaeologists, Chrystina Häuber and Franz Xaver Schütz, is a brief introduction to the world of archaeological data bases or, as they wish to call them, archaeological information systems. It boasts being the first in German language and is aimed mostly at beginners and students.

The book is divided into two parts: the first is a general introduction to the development and current state of computing and data bases and the second offers examples of using data bases created by the authors. The examples come from the field of classical archaeology, mostly questions concerning the topography of ancient Rome, which is the specialty of the authors. The field was also chosen because, in their (and also in my) minds, classical archaeology is lagging behind in the adoption of digital data management.

Despite the target audience of beginners, the first part of the book by Schütz could be considered useful even for a fairly knowledgeable reader as it offers an interesting historical viewpoint on the subject going through the current state of affairs fairly briefly. What the section emphasizes is that the current stage of affairs is only one stage of a rapid technological development – what is new today is old tomorrow. The section also offers advice on how to create and develop a database, but unfortunately not with very concrete examples. Considering the content of the second part of the book, it

might have been worthwhile using one of those systems as a real example and explaining the process in more detail with the inevitable problems and their solutions.

What I missed in the discussion are reflections on the question of maintenance and updating a data base. This is a fact that few of those setting up systems think about at length. Who maintains the system? Who solves the technical problems that appear only during use? Who updates the old technical solutions? Who updates the archaeological data put into the system? Like any paper archive, a digital archive also requires care, and, unlike most paper archives, the digital systems may prove illegible when the old systems are changed into new. The data tapes and floppy discs of the 1970's and 1980's are today almost obsolete and if the data has not been transferred to new systems, then it is very possibly lost for ever. The authors embrace the digital systems with enthusiasm, but do not seem to remember the possible problems.

The second part of the book contains the examples of using databases written by Häuber and the CD-ROM included in the book contains some of the images used in the examples. The first set of examples is about placing ancient ruins into the Roman topography and reconstructing ancient Rome on a map. The second set is more about artifacts and how databases and digital systems can be used in research. I have to say that I did not find the examples very enlightening considering the main topic of the book, i.e., the databases and their use and usefulness. The reason for this is that the databases are not described at all and so one cannot determine what information they contain, how these are linked, how the data is really used in research, and what are the benefits of the digital systems compared to "paper supported" (to use one of the authors' terms) systems.

The first set of examples is a very interesting description of how to study ancient topography with the help of old plans, drawings and photographs, but it says very little about the use and usefulness of a database. The work is done with the help of AIS ROMA, which is a system set up by the authors. It is not described in any way and so it remains unknown what kind of information it contains and what kind of functions it has. Based on what can be deduced from the text and images, the AIS ROMA seems to consist of a modern photogrammetrical plan of Rome where many ancient ruins are placed accurately. The second part is a map from 1748 by Giovanni Battista Nolli, which has proved very accurate and could easily be georeferenced and compared with the new plan. Nolli's map includes many known, unknown and often vanished ancient ruins which could be now placed on the modern plan and combined to the vast knowledge of Roman topography. The combined plans probably exist in two different layers. The photogrammetrical plan is probably in vector format and the Nolli plan in raster format, which would allow for superimposing the former on the latter and comparing the data. It also seems to include a layer of probable vector objects in lines and polygons, which form the known and reconstructed ancient buildings. There are also texts which give the known or hypothetical names of the buildings, roads, etc. What we do not know is whether there are any other kinds of information connected to the objects. The old photographs and drawings used seem to exist only outside the database and the same applies to the written data, e.g., the vast amount of references to research literature.

To me, it seems that most of the advantages for the research come from the fact that Nolli's map is very accurate and reliable, not so much from the use of the digital system. Häuber mentions Rodolfo Lanciani's famous map of the ruins of ancient Rome

and how this could really not be used as it was noticed that the sites were regularly 30 or so meters off from their actual locations. Häuber has a long history in the research of Roman topography with the "paper supported" systems and now that she has started to use the digital systems, hearing of her experiences would, to my mind, have benefited the researchers of classical archaeology more than this text, which is mostly just a good description of how difficult the study of ancient topography can be.

The section also raises questions on the accuracy of the content of the database. How can we evaluate the data that we are supposed to use for further research? Can we find out who has collected the data and how the collection has been made? Are the sources listed somewhere? Has anyone checked the data and its accuracy before or after it was included in the database? Is the information inserted correctly? The list of questions is long. The documentation of the data and its creation is almost as important as the data itself. If the user can evaluate the methods of compiling the data base, he/she can use the data with confidence in its veracity. This is perhaps one of the old problems of classical archaeology: what is published are the results of the research and little is said of how they were achieved. Yet, the methods used, however simple or commonplace, are of greatest importance when the results are evaluated. This applies particularly to the digital systems where simple mistakes in the process of data manipulation can lead to great errors which might go unnoticed.

I opened the book with great expectations as I am involved in the process of creating and developing a database for one current fieldwork project. I hoped for ideas and examples of how to do such a work and how at least some of the most common problems have been solved. In the end, I felt frustrated and unhappy with the book. I feel that it told me only a little bit about databases, very little about specifically archaeological databases and almost nothing of the use of archaeological databases.

Eeva-Maria Viitanen

STEPHAN STEINGRÄBER: *Arpi – Apulien – Makedonien. Studien zum unteritalischen Grabwesen in hellenistischer Zeit.* Verlag Philipp von Zabern, Mainz am Rhein 2000. ISBN 3-8053-2564-9. XVII, 221 S., 30 Kart., 61 Taf. + CD-ROM (mit 106 Abb.). EUR 65,50.

Stephan Steingräber gives both an overview of the monumental tombs in Hellenistic Apulia and takes the Tomba della Medusa in the Daunian Arpi into special consideration. The hypogeion, built ca. 300-270 BC and probably used by five generations, is one of the most monumental, remarkable and enlightening of all the tombs in Southern Italy and Apulia. It was discovered in 1980, but only examined in depth in the latter half of the 1980s after an unfortunate visit by grave robbers. The finds were recovered, however, to a great extent. The tomb consists of an open dromos, three parallel chambers with barrel vaults, with a floor mosaic in the main chamber. The name comes from the gorgoneion in the pediment of the vestibule. The clearly Macedonian features bring about a general discussion of the welcoming of Eastern monumentality into South Italy, probably as an influence of the, at times, forced interaction between the prominent Lucanian and