PH. VON RUMMEL, Leben im Vandalenstaat. Kontinuität und Wandel. Badisches Landesmus. Karlsruhe (Hrsg.), Erben des Imperiums in Nordafrika. Das Königreich der Vandalen [Karlsruhe 2009] 221–236). Das Nebeneinander von mediterranen und mitteleuropäischen Fundtypen kann demnach auch vor diesem Hintergrund verstanden werden: die Ersteren als Beleg für das lokale Weiterleben römischer Traditionen, die Letzteren als Zeichen für das Fortbestehen imperialer Kontakt- und Handelswege (auch in Form von Personenmobilität). Beide sind aber zunächst unabhängig von der Frage nach dem Träger (= Ethnos). Wie wichtig die Problematik der Kontinuität für das Verständnis spätantiker Verhältnisse in den afrikanischen Provinzen einzustufen ist, wird nur im Zusammenhang der Rolle der vandalischen Ansiedlung für die ländlichen Siedlungen kurz angerissen (S. 331–334). Der Verf. stellt dort fest, dass man "keine Anzeichen einer schwerwiegenden Zäsur in den Besiedlungs- und Produktionsverhältnissen am Übergang von der spätrömischen in die vandalische Zeit erkennen" (S. 334) kann. Im Gegensatz dazu ist es bemerkenswert, dass sämtliche durch Eger als "gesicherte vandalische Grabfunde" (S. 338) interpretierten Befunde im städtischen Kontext zutage kamen, wenngleich Nekropolen in der Nachbarschaft von reichen Villenwirtschaften noch zu erforschen sind (S. 338–342).

Es ist davon auszugehen, dass die vorliegende Studie aufgrund ihres Katalogteils, der Fundlisten und des Literaturverzeichnisses ein wichtiges Nachschlagwerk für all diejenigen wird, die sich mit der Spätantike beschäftigen, unabhängig von der Position, die man bei der Diskussion um die ethnische Deutung des Materials bezieht. Um dem Gesamtkonzept des Autors gerecht zu werden, erscheint es allerdings von unerlässlicher Wichtigkeit, dass auch der zweite Teil der Arbeit zeitnah vorgelegt wird. Die Bearbeitung und Bewertung des frühbyzantinischen Materials dürfte nämlich weitere wichtige Impulse für die Frühgeschichtsforschung liefern.

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NICOLE REIFARTH, Zur Ausstattung spätantiker Elitegräber aus St. Maximin in Trier. Purpur, Seide, Gold und Harze. Internationale Archäologie, volume 124. Verlag Marie Leidorf, Rahden / Westf. 2013. € 74.80. ISBN 978-3-89646-499-6, ISSN 0939-0561X. 524 pages, 724 illustrations and 7 tables.

Nicole Reifarth's doctoral dissertation describes the archaeological investigation and conservation of 21 late antique sarcophagi from the grounds of St. Maximin in Trier. During the 4th century A. D. more than 1000 sarcophagi were placed in a *coemeteria*, a basilica built specifically as burial place for the early Christian population, including the nobility surrounding the imperial residence in Trier. It served for this purpose until the middle of the 6th century; at this time inhabitants began using the building as a church, although burials of important persons inside the building continued. Excavations resulting in the recovery of 30 sarcophagi took place during the 1980s.

The book is organised in 13 chapters including an English version (Chapter 11) of the concluding Chapter 10, a bibliography (Chapter 12) and a list of abbreviations (Chapter 13). This is followed by an extensive catalogue of the 21 sarcophagi and three appendices, listing (1) plaster burials, (2) finds of gold threads and (3) examples of burials prepared with resins or honey in antiquity.

Chapter 1 is a brief presentation of the site and early Christian Trier. Chapter 2 deals with methodology, such as documentation *in situ* through digital photography, 3-D scanning and what

the author terms phenomenological investigation, i. e. the charting of the contents of each sarcophagus and establishing of micro-stratigraphy. This was carried out mainly by the help of digital microscopy. Invasive and preventive measures such as sampling for various analyses, health measures for investigators, and the stabilization of temperature, air humidity etc. to preserve the fragile organic remains are also described.

Chapter 3 discusses taphonomic processes in the sarcophagi. Their long stay in the *coemeteria* meant dry, stable conditions with little climatic variation. The excellent conditions for studying how the decomposition of the deceased bodies had influenced textiles and other furnishings in the burials are described in detail. In each sarcophagus, the deceased was either embedded in gypsum or calcium carbonate, or placed on a padding of cloth and wood shavings and covered by further shavings. Furnishings mostly consisted of textiles in the form of clothing and shrouds. Preservation conditions for textiles of various fibre types are described, and to what degree this was influenced by deposition in connection with materials such as iron, calcium or resins. Most of the textile remains were much degraded. "Textile shadows" is a concept minted by Reifarth, designating textile remains only recognisable as coloured dust. A variety of these are described, along with sediments of textile structures and indirect suggestions of textiles. Further aspects discussed are botanical remains and changes following the excavation.

Chapter 4 deals with burial customs, presenting varieties in the sarcophagi from St. Maximin and describing how the deceased were laid to rest. In nine of the sarcophagi, the body was covered in wood shavings, either as the top layer or in two cases in between the shroud. The shavings are of fir (abies), in some cases identifiable as silver fir (abies alba). Other remains of plants, including charcoal, are described, and the use of shavings in burial rites in antiquity surveyed. Another nine sarcophagi were plaster burials, embedded in gypsum. In almost all the latter, impressions of textiles were preserved on the inside of the gypsum. The deceased appear to have been wrapped in shrouds made of rather coarse fabrics; in some, this covered the whole body, in others the head was wrapped separately. In a few burials, gypsum as well as wood shavings had been employed. The habit of embedding the body in plaster in the Roman world is surveyed, including chemical compositions of the plaster, how it was prepared, how gypsum layers in sarcophagi were constructed and how the bodies of the deceased were arranged. Two female burials from St. Maximin contained remains of myrtle twigs; the deceased were laid to rest in resin-soaked shrouds and other costly textile furnishings, but without traces of plaster or shavings. This, too, is known from other sites in the Mediterranean world and an overview is supplied.

Chapter 5 presents the human remains. The 21 sarcophagi contained 24 individuals. In her section on age at death, however, Reifarth lists twelve as *Adult* (between 20 and 40 years old), nine as *Infans I* (0–6 years), three as *Infans II* (7–12 years), three *Juvenil* (13–20 years) and two possibly *Matur* (40–59 years). This, however, makes 29 individuals! The explanation is to be found in Table 2a. It shows that several individuals fall between categories and these are obviously counted twice. Seven individuals could be identified as female, six as male. Several showed signs of growth deficiency; one had changes in a leg bone. Reifarth further describes the hairstyles and beards of the deceased. Eleven had remains of hair, five of beard. This made it possible to distinguish between male and female hairstyles: males had short hair (and beards) of 4–6 cm, while females had long hair (30–40 cm), usually braided and arranged in different styles.

Chapter 6 focuses on describing the remains of textiles in the burials. They are presented and discussed according to fibre: bast (probably flax), silk and wool. Fabrics worked with gold threads, the making of gold threads, and dyestuffs are dealt with in separate sections. The textiles made of bast fibres are described as mainly simple tabbies; their fineness vary between 10 / 15 and 50 / 60 threads / cm. Almost all were found in connection with resins. About half appear to have been

made from z-twisted, half from s-twisted yarns. Little evidence of patterning was found, except for the occasional doubling or tripling of threads (self-bands). Finely pleated fabrics from two burials are described and evidence of pleated fabrics reviewed, followed by a discussion of how the pleating was made. Reifarth considers most textiles of bast fibres to be shrouds but she suggests that remains of a tunic and / or an undergarment may be represented in burial 169.

Silk fabrics are described as appearing in two different weaves: tabby and block damask (in the English summary termed "plain check damask"). Both are in very fine qualities; the block damasks and two of the tabbies are made of z-twisted yarns, while no twist is discernible in the majority of tabbies. Several proved to be dyed. Reifarth argues that in some burials silk strips were used to wrap the body of the deceased; in three burials the silks are identified as remains of tunics.

According to Reifarth, most fabrics listed as wool are mixed fabrics, as only the weft is made of wool. Their warps are described as likely to have been bast or silk. Most are weft-faced tabbies, in several cases decorative elements in tapestry (*clavi*, *orbiculi*). Most were dyed with murex purple that in some cases was mixed with madder and / or indigo or woad. Reifarth suggests that several are remains of tunics; some were found underneath silk tunics and are likely to be undergarments. In two burials wool textiles were used to cover the head of the deceased.

Textiles with gold thread were found in 13 burials. The threads are narrow gold strips (*Lahn*) twisted z around a core – the latter apparently of silk. The gold threads are always used as weft. Reifarth describes their measurements, chemical composition and various technological peculiarities observed by SEM microscopy and other analyses. The fabrics with gold threads are sorted into five categories, and each of these is described in detail and their function discussed in comparison with other finds of gold-worked textiles from the ancient world. Extant knowledge on the production of gold threads is reviewed and discussed in the light of the finds from St. Maximin.

The section on dyestuffs reviews the origins and distribution of the dyestuffs found in the textiles from St. Maximin: purple, madder and chrysophanol. The latter derives e. g. from plants of the rhubarb family. Purple, silk, gold and resin-prepared textiles are then discussed as attributes of the Roman elites, reviewing historical and archaeological sources, their dating and provenance, and discussing possible centres of production.

Chapter 7 focuses on preparation with resins, oils and various forms of earth pigments. Five types are established and described in detail. Aromatic resins and oils from pistachio, cypress, pine, balsam, or rubber-resins like myrrh and incense were identified. Earth pigments were used in three burials. Reifarth proceeds to survey various forms of embalming in the ancient world in order to assess the context of the burials from St. Maximin. She finds that no embalming of the bodies was carried out but that resins were applied to the textiles during deposition in the sarcophagi. In some cases, the textiles appear to have been prepared individually with resins in beforehand; in others the resins seem to have been applied to the clothed and shrouded body. Only in a few cases the body appears to have been prepared with resins before clothing and shrouding: those are the burials where earth pigments were used. Only two burials show no signs of such preparation. A survey of burials with evidence of resin or oil preparation in other parts of the Roman Empire and a discussion of the origins, production and distribution of the substances concludes the chapter.

Chapter 8 presents the non-textile grave goods, i. e. nails and shoes. Five sarcophagi contained a total of 15 nails, mostly quite short and fragmented. Several nails had contributed to the preservation of textile remains by mineralisation. Their function could not be ascertained, but as several were found near the head of the deceased, Reifarth suggests that they may be intentional grave goods. A survey of nails in burial contexts is used to suggest that the nails were supposed to have a magical function.

Remains of shoes were found in a single burial at St. Maximin, that of a child. The shoes were of leather, and appear to be of a closed type, probably with laces. Shoes or sandals have been found in another child's burial in Trier, and in two plaster burials in York in the UK. Reifarth argues that the shoes represent grave goods rather than part of the clothing.

Chapter 9, Discussion, deals first with problems regarding analysis of the dyes, gold and resins such as sample size, methods of analysis, interpretation and data weaknesses. In a second section, a series of open questions are raised, on the origins and production of the sarcophagi, i. e. the procurement of the stone, the situation of workshops and how the heavy sarcophagi were transported into the funeral site. Similar questions are raised as regards the lead sarcophagi, on plaster burials, and the potential of molecular biological investigations, aDNA and isotope analysis.

Chapter 10 contains a summary and interpretation; chapter 11 an English version of this. The findings described in the preceding nine chapters are summarised, followed by comments on the challenges of investigation presented by the 21 sarcophagi, and on how new scientific methods like infrared microspectroscopy (FT-IR), gas chromatography-mass spectrometry (GC-MS) and high-performance liquid chromatography (HPLC) may contribute to further research. Reifarth discusses the advantages of *in situ* conservation and reflects on the ethical aspects of the archaeology of burials.

The catalogue describes in detail the investigation of each of the 21 sarcophagi and is richly illustrated. In fact, 687 of the volume's 724 figures are to be found here, numbered independently for each burial. Each entry in the catalogue contains general information on find place, dating, orientation and time of investigation and a short description of the burial. The main section is detailed descriptions of the burials' textile remains, their condition, technical description, position and micro-stratigraphy. Analyses of fibres, dyes and gold threads are further important sections. This also applies to preparation with resins and earth pigments, how these have been examined, their chemical composition and interpretation. Hair, burial fauna and flora, micro bacteria, analysis of gypsum plaster and documentation of iron nails are also described. Each entry ends with a summary of findings.

Reifarth's work has brought forth important new data and insights into the burial customs of the Christian elite in the Imperial Roman city of Trier. It is a classic study in the German empiricist tradition of meticulous description and documentation, using comparisons to establish patterns that are then interpreted. The aim is to examine a series of new scientific methods and advanced equipment and use them to investigate a category of archaeological finds – organic materials – that are difficult to access in other ways. It is thus primarily a study of conservation and archaeological science rather than archaeology as part of the humanities. Social status and cultural context of the people interred in the sarcophagi of St. Maximin are premises for Reifarth's work instead of questions to be explored.

Like most works of this school, this book is not an easy read, as the logic of the study does not follow the logic of the book as represented in the list of contents. The basic scholarly work is to be found in the extensive catalogue – this is where the investigation begins. It continues in chapters 1–9 that offer presentations and overviews of the methods employed, results, comparative material and discussion. The concluding chapters (10 in German, 11 in English) summarise the findings and ask questions for future research. This kind of book is best tackled by reading the conclusion first, and then deciding what parts to consult for closer study. For readers with a general interest, chapter 10 or 11 will suffice. For conservators and specialists in archaeological science or textiles, and for scholars of early Christianity in the Roman world, Reifarth's work is a treasure trove of information on new methods and equipment, their strengths and weaknesses, and of exciting new

data that may be used to inform on a wide variety of research questions regarding early Christianity, burial rites and textiles and clothing in Trier as well as other parts of the Roman world. It is a valuable and necessary work that hopefully will find a place in libraries of museums, universities and other research institutions.

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Pedro Barceló, Das Römische Reich im religiösen Wandel der Spätantike. Kaiser und Bischöfe im Widerstreit. Verlag Friedrich Pustet, Regensburg 2013. € 26,95. ISBN 978-3-7917-2529-1. 220 Seiten und 54 Abbildungen.

Im Jahr 2013 wurde vielerorts des 1700. Jahrestages des Edikts von Mailand gedacht, in dem Konstantin der Große und sein Mitkaiser Licinius den Christen die Ausübung ihrer Religion im Römischen Reich gestatteten. Bereits im Jahr 2006 hatte es in Trier eine große Ausstellung zum 1700-jährigen Jubiläum des Regierungsantritts von Kaiser Konstantin dem Großen, dem "christlichen Kaiser" par excellence, gegeben. Als ein weiteres Gedenkjahr ist in diesem Zusammenhang 2011 zu nennen, als 1700 Jahre seit dem Erlass durch Kaiser Galerius vergangen waren, mit dem die Verfolgung der Christen im Römischen Reich offiziell beendet wurde. In Sofia, dem antiken Serdica, wurde aus diesem Anlass eine Tafel mit dem Text dieses kaiserlichen Gesetzes vor der spätantiken Kirche der Heiligen Sophia aufgestellt.

Durch diese Konzentration von Anlässen wurde auch die Diskussion um die Beziehung zwischen dem Christentum und der Machtpolitik der römischen Kaiser neu belebt, die gleichermaßen von Theologen wie von Althistorikern geführt wird. Pedro Barceló ist Professor für Geschichte des Altertums an der Universität Potsdam und legt in der hier vorzustellenden Monographie den Schwerpunkt seiner Untersuchungen auf die Unterschiede im Verhältnis zwischen kaiserlicher Macht und Religion in der mittleren Kaiserzeit und der Spätantike.

In der Einleitung (S. 13–16) legt er dar, dass die Diskussion um die Aktualität des Christentums und um die Frage nach der gegenseitigen Einflussnahme von staatlicher und klerikaler Macht "spätestens seit der Verklammerung der christlichen Kirche mit dem antiken Staat" (S. 13) geführt wird und dass jede Zeit ihre Antworten findet, aber bislang keine generelle Lösung erreicht wurde. Er versucht, den Ursprung dieses Phänomens zu ergründen, und konzentriert sich auf die entscheidenden Akteure, den Kaiser und die Bischöfe. Allerdings nicht in Form einer prosopographischen Abhandlung, sondern vielmehr will er die Bedingungen des religiösen Wandels und dessen Entwicklungslinien im historischen, sozialen, theologischen und politischen Kontext darstellen. Die Komplexität des Themas erfordert einerseits eine Beschränkung auf repräsentative Aspekte und andererseits die Verbindung von "religionswissenschaftliche(n), theologische(n), kunsthistorische(n), archäologische(n), rechtswissenschaftliche(n) und althistorische(n) Betrachtungsweisen" (S. 16).

In Kapitel I "Vorgeschichte: Bündnisse der Kaiser Valerian und Diocletian mit der traditionellen Religion" (S. 19–37) behandelt der Verf. die bereits seit augusteischer Zeit bestehende staatstragende Wechselwirkung zwischen der *religio Romana* und der Funktion des Kaisers als *pontifex maximus*. Vor dem Hintergrund der politischen, ökonomischen und militärischen Probleme des 3. Jahrhunderts n. Chr. entwickelte sich daraus ein wachsendes Interesse der Mächtigen, das religiöse Verhalten der Bevölkerung stärker zu kontrollieren, und religiöse Minderheiten, wie z. B. die