

BOOK OF ABSTRACTS







Institute of Archaeology Belgrade, Serbia

24. LIMES CONGRESS
Serbia 02–09 September 2018
Belgrade – Viminacium

BOOK OF ABSTRACTS

PUBLISHER Institute of Archaeology

Kneza Mihaila 35/IV 11000 Belgrade http://www.ai.ac.rs institut@ai.ac.rs Tel. +381 11 2637-191

EDITOR IN CHIEF

Miomir Korać

Institute of Archaeology, Belgrade

EDITORS

Snežana Golubović

Institute of Archaeology, Belgrade

Nemanja Mrđić

Institute of Archaeology, Belgrade

GRAPHIC DESIGN Nemanja Mrđić

PRINTED BY

DigitalArt Beograd

PRINTED IN

500 copies

ISBN 979-86-6439-039-2

CONGRESS COMMITTEES

Scientific committee

Miomir Korać, Institute of Archaeology (director) Snežana Golubović, Institute of Archaeology Miroslav Vujović, Faculty of Philosophy, Department of Archaeology Stefan Pop-Lazić, Institute of Archaeology Gordana Jeremić, Institute of Archaeology Nemanja Mrđić, Institute of Archaeology

International Advisory Committee

David Breeze, Durham University, Historic Scotland

Rebecca Jones, Historic Environment Scotland

Andreas Thiel, Regierungspräsidium Stuttgart, Landesamt für Denkmalpflege, Esslingen Nigel Mills, Heritage Consultant, Interpretation, Strategic Planning, Sustainable Development Sebastian Sommer, Bayerisches Landesamt für Denkmalpflege

Lydmil Vagalinski, National Archaeological Institute with Museum - Bulgarian Academy of Sciences

Mirjana Sanader, Odsjek za arheologiju Filozofskog fakulteta Sveučilišta u Zagrebu

Organization committee

Miomir Korać, Institute of Archaeology (director)
Snežana Golubović, Institute of Archaeology
Miroslav Vujović, Faculty of Philosophy, Department of Archaeology
Stefan Pop-Lazić, Institute of Archaeology
Gordana Jeremić, Institute of Archaeology
Nemanja Mrđić, Institute of Archaeology
Ivana Kosanović, Institute of Archaeology
Milica Marjanović, Institute of Archaeology

CONTENTS

1.	Fortifying our frontiers	23
•	Andreas A. Schaflitzl: Crumbled stones and burnt wood – results of the excavation on Raetian Limes in Laimerstadt (Bavaria)	
•	Daniel Burger, Peter Henrich, Markus Scholz: A new Roman early imperial military can at the lower Lahn	
•	Sirma Alexandrova: Early Roman temporary military camp near the village of Poleni	
	Sandanski municipality, SW Bulgaria	
•	Rebecca H Jones: Our ditches are missing! Camps without defences	
•	Birgitta Hoffmann: The Roman Gask Project	
•	David Woolliscroft: How long was the Roman Gask Frontier (and when)?	
•	W.S. Hanson: Understanding the design of the Antonine Wall: some problems and sues	
•	Matthew Symonds: Thinking small: the role of fortlets in building frontiers	
•	Horațiu Cociș: Burgus-type structures from the frontier of Dacia Porolissensis	26
•	Felix Marcu, George Cupcea, Aleksandra Jankowska and Jacek Rakoczy: New LiE data on the NW limes of Dacia	26
•	Alexandru Popa: Geomagnetische Prospektionen an römischen Militäranlagen im Sie-benbürgen / Geomagnetic prospections in the Roman Military sites in south-east T sylvania	ran-
•	Cristina Mitar, Adriana Rusu Pescaru, Eugen Pescaru: Cigmău – an unusual fort near imperial border	the
•	Florian Matei-Popescu, Ovidiu Țentea: Moesia Superior and Dacia during Trajan: A and Frontiers	rmy
•	Perica Špehar: Non-invasive prospection of the site Egeta	27
•	Snežana Nikolić, Ivan Bogdanović, Goran Stojić, Ljubomir Jevtović: Exploring Viminaci	
	New excavations on the legionary fortress	
•	Daniel Burger: New researches of the roman fortress of Mogontiacum/Mainz	
•	Uwe Xaver Müller: The internal structure of the legionary fortress of Mogontiacum/ Ma (Germany) – First insights	29
•	Lisa Berger, Steve Bödecker, Friedrich Lüth: Large scale geomagnetic survey: the leg ary fortresses of Vetera I (Xanten/Germany)	29
•	Steve Bödecker, Friedrich Lüth, Lisa Berger: Large scale geomagnetic survey: the rounding area of the legionary fortresses of Vetera I (Xanten/Germany)	
•	Friderika Horváth, Mate Szabó, Istvan Viczián: Mud Max - Revealing Roman landsc	ape
•	in the modern industrial environment on the Brigetio – Azaum limes section, Hungary István Gergő Farkas: New finds from the auxiliary fort Lugio/Florentia (Dunaszeko H)	cső,
•	CG. Alexandrescu, C. Gugl, G. Grabherr, B. Kainrath: Military and civilian sites in the terland of Troesmis.	hin-
•	Mihail Zahariade: Limes Scythicus qui latius diffusiusque porrigitur (CTh. VII 17.1). A c mentary on a 4th and 5th century segment of a Danube river frontier	om-
•	Stefan Traxler, Gerald Grabherr, Barbara Kainrath, Wolfgang Klimesch: Burgus	
	Quadriburgium. Two Late Antique fortifications in Northwestern Noricum	
•	Gerald Grabherr, Stefan Groh, Barbara Kainrath and Stefan Traxler: Before the Leg	gion
	arrives – The presence of the Roman army on the western ripa Norica	
•	Julian Bennett: The fort at Çitköy-Sabus reconsidered	
•	Maciej Czapski: On the edge of the Roman Empire – a defensive system of the soregion of Mauretania Tingitana	33
•	Zbigniew T. Fiema: The Roman Fort in Hegra	
•	John Peter Oleson: Tradition and Innovation in the Trajanic Auxiliary Fort at Hauarra (Hu-

	mayma), Jordan	34
•	Mark Driessen: Power Over or Power With? Monumentality in the Desert: the Roman	n le-
	gionary fortress of Udhruh (Jordan)	34
2	The Burness of Roman Frontiers: A Debate	25
۷.	The Purpose of Roman Frontiers: A Debate	33
•	Christof Fluegel: Military Architecture as a Symbol and Object of Intimidation	35
•	Alan Rushworth: To protect communications and movement in the frontier zone	
•	Eberhard Sauer: The defensive purpose of Roman frontiers	
•	Markus Gschwind: To control transhumance	
2	Land Marcha Transl	27
3.	Long Way to Travel	31
•	Francis Tassaux: The road and rivers network within the Illyricum Digital Atlas (Illy las)	•
•	Vladimir Petrović, Mihai Popescu: De l'Adriatique aux Carpates : voies parallèles, cher alternatifs, déviations routières	
	Chaim Ben David: Back to the Via Militaris east of the Via Nova Triana in Arabia	
•	Florin-Gheorghe Fodorean: The roads of Roman Dacia. New research, new perspe	
	es	
•	Željko Miletić, Silvia Bekavac: Octavian's Footprints: Hillforts, camps and roads betw	
	Burnum and Synodium	
•	IvoGlavaš:BeneficiariiconsularisstationesalongtheRomanroadAquielia-Dyrrachium.S	
	of research	
•	IgorVukmanić:TheLimesroadinCroatia-Knowndata,newinterpretation	
•	Gerda Sommer v. Bülow: Die Bedeutung des Siedlungsplatzes Gamzigrad für das Siche	
	itssystem der Provinz Dacia ripensis	
•	Ioana Oltean, João Fonte: The road to be taken: a GIS-based analysis of the spatial	
	networking patterns pertaining to the Roman conquest of Sarmizegetusa Regia, Dacia	
•	Sara Zanni, Biljana Lučić, Alessandro De Rosa: Seek and ye shall find. A spatial appro	
	to mapping Roman roads and buried archaeological sites in the Srem region. The o	
	study of Tapavice site	
4	Hold the Line!!!	42
4.	Hold the Line!!!	42
•	Andrew Poulter: Roman Tactics and Frontier Defence in the Early Empire (1st to 3rd	
	turies AD)	
•	Janka Istenič: Traces of Octavian's military campaigns in the north-easternmost pa	
	Roman Italy and western Illyricum	
•	Ze'ev Safrai, Ran Ortner: My Home is My Fortress - Combat in built-up areas in the Ro	
	Army	
•	Jaume Noguera: Traces of Sertorian's military campaigns in the north-east of Hispania	
•	Emzar Kakhidze, Lasha Aslanishvili: Roman garrisons on the edge of the eastern f tier	
•	Hans-Peter Schletter: Tropaea in Gelduba? Neue Befunde zur Bataverschlacht in Kre	
	- Gellep	
•	Viktor Humennyi: Garrisons of Syria and Rome's military strategy during the late second-	
	third centuries CE Parthian campaigns: the case of Dura-Europos	
•	Renate Lafer: Has Septimius Severus ever been in North Africa fighting aginst the G	
	mantes? A reconsideration of the campaigns of the emperor	
•	Kai Juntunen: The Myth of a Legion Lost – The Incident at Elegeia in Xiphilinus' Epitom	
	Cassius Dio	
•	Lorenzo Boragno: The Frontiers and the Mirror.	

•	Krzysztof Narloch: The Cavalry of the Roman Army in the IV and V century49 Andrzej B. Biernacki, Elena Klenina Armamentarium of the I Italian Legion in Novae (Moesia
	Inferior)49
•	Andreas Schwarcz: The frontier defence in Noricum before and after the Marcomannic was s50
•	José Manuel Costa-García, David González Álvarez, João Fonte, Andrés Menéndez Blanco Manuel Gago Mariño, Rebeca Blanco-Rotea, Valentín Álvarez Martínez: Not all the enclosures look the same! New archaeological data for the study of the conquest and occupation of NW Iberia in Early Imperial times
•	Ioan Piso: Some Significant Permutations in the Auxiliary Camps of Dacia51
•	Karl Strobel: The Lower Danube and the Balkans: Strategy and Tactics from Hellenistic Republican Warfare to the Flavian Defence-System51
•	Zsolt Viszy: Recent research activities along the Pannonian Limes in Hungary
•	Christoph Rummel: Fleeting Fleets – Who did control the Rivers and Seas?
5.	A Farewell to Arms54
•	Liviu Petculescu: The swords in Roman Dacia54
•	Boris Rankov: Roman 'cavalry sports' face-mask helmets and the spectacle of panto- mime
•	Boris Alexander Burandt: Marble soldiers on Marcus' column: a comparison of its depictions
	of Roman military equipment and the archaeological finds
•	Martijn A. Wijnhoven: On the origin of mail and the evidence of its early use in the Roman Republic55
•	Radu Iustinian Zăgreanu: Weaponry and military equipment from the auxiliary fort of Arcobara55
•	Miroslav Vujović: Weapons and Military Equipment from the Roman camp Novae at Čezava (Serbia)56
•	Frederik-Sebastian Kirch: Weapons in the vicus and the fall of Weißenburg A Comparisor between three points of excavations with roman and germanic Weapons at Weißenburg in Bayern (Bavaria)
•	Monica Gui: 3rd century cavalry (equites legionis?) equipment illustrated on a few monuments from Dacia Superior
•	Ildar Kayumov: Some thoughts on the construction of the Roman scorpio of the Principate period
•	Maria Novichenkova: Roman military cingulum details of Early Principate from a sanctuary Gurzufskoe Sedlo at Mountain Taurica
•	Fazekas Ferenc: Militaria Lussoniensia. Römische Ausrüstungsgegenstände und Schutz-
	waffen aus Paks-Dunakömlőd / Roman military equipment and defensive weapons from
•	Paks-Dunakömlőd
	itary equipment from the Serbian part of Limes
6.	Production, Industry and Trade60
•	Erik Timmerman: The impact of Rome on socio-economic life along the Lower Germanic Limes: blessing or curse?60
•	Ella Magdalena Hetzel: Craftwork in Roman Cologne
•	Martin Lemke: Supplying Novae. The logistic network for provisioning the legio I Italica61
•	Merab Khalvashi: On the relationships between Romans and locals in eastern Black Sea littoral: brown clay amphoras discovered in the fort of Apsarus
•	Damjan Donev: Patterns of urban settlement on and behind the Danube Limes - a geographica

•	Slavtcho Kirov: Patrimonium caesaris in the Danubian provinces I-III century p.C62 Felix Marcu, George Cupcea: Supplying the Roman Army on the limes of Dacia Porolissensis
•	Mateusz Żmudziński: Comments on the trade in the Late Roman Period
•	lonuţ Bocan, Catalina Mihaela Neagu, Mihaela Simion, Decebal Vleja: The Entry Gate of Luxuries in the Province of Dacia; Imports from Lezoux to Micia (Veţel, Hunedoara County, Romania)
•	Tatiana Ivleva, Matt Phelps: Frontier glass: a recipe and production technology for Romano-British glass bangles in the northern British frontier zone
•	Lucretiu Birliba: Les bénéficiaires des gouverneurs et les stations douanières en Mésie Inférieure
•	Saša Redžić, Ivana Kosanović, Mladen Jovičić, Ljubomir Jevtović: New evidence of brick production at Viminacium64
•	Mirjana Vojvoda, Adam Crnobrnja: Circulation of Provincial Coins »Provincia Dacia« at the Territory of Present-Day Serbia
•	Silke Lange: Some thoughts about the spread and origin of Wooden artifacts found in Roman contexts in the Netherlands and elsewhere
•	Ivana Ožanić Roguljić, Angelina Raičković: Evidence of cheesemaking in lower Pannonia and upper Moesia65
	What about us? Exploring the lives of women and children on the ontiers66
•	Andrew Birley, Elizabeth Greene: Women and War: The composition of the Vindolanda
•	Severan-period military community
•	commanders and equestrian legionary tribunes on western frontiers
•	Kaja Stemberger: Do expressions of identity draw borders? Case study of female identity in Roman-period Slovenia
•	Ilija Danković, Ilija Mikić: Recent discovery of a sarcophagus in Viminacium. Evidence of mors immatura?69
•	Milica Marjanović: Commemoration of children in the province of Upper Moesia – evidence from limes and its hinterland69
•	Decebal Vleja, Mihaela Simion, Catalina Mihaela Neagu, Ionuţ Bocan: Woman at the Edge of the Empire. Case Study: Domitia from Micia (Dacia)70
•	Jelena Anđelković Grašar: Women in the visual culture of Late Antiquity in the Central Balkans: The inferior sex got a new exterior?70
•	Olga Špehar, Branka Vranešević: Mater Castrorum: representation of an ideal Empress or the rebirth of a Republican ideal woman?70
•	Anne Chen: Digital Technologies and the Possibilities for Gender and Family Research Along the Limes71
10	. Going wild! The roles of wild animals in life and death on the frontier.72
•	Sue Stallibrass: Wild animals in the frontier zone: food, fun or fantasy?72 Sonja Vuković – Bogdanović: Venison, spectacles and furs: Remains of wild beasts from
•	Viminacium (Upper Moesia, Serbia)73 Monika Mraz: Taking the bear by the tooth!73
•	Ivan Radman-Livaja, Ozren Domiter: Roman fishing implements from Siscia74 Miroslav Vujović: Elephant in the Room74
	Dimitrije Marković. Milan Savić: Case of the wounded beast: Red deer tibia with projectile

	trauma from Viminacium (Serbia)7	
	Teodora Radišić: Hunting on the other side of the Roman frontier: case of the Late La Tér site Židovar	75
	Mirjana Sanader, Joško Zaninović, Mirna Vukov: A new attempt at interpreting arrowhead from the Roman legionary fortresses Burnum and Tilurium in Dalmatia	
1	. Religion and beliefs on the frontiers7	'7
	Nadežda Gavrilović Vitas: The Cult of God Mithras on Roman Danube Limes in Lower Pannonia and Upper Moesia	
	Ozren Domiter: Understanding the Cult of the Danube Horseman: New Approaches7	
	Ljubica Perinić: What are we missing? On the invisibility of Silvanus Orientalis	
	Dan Augustin Deac: The Materiality of Religion in the Civilian Settlement of Porolissum (Re	
	man Dacia)	
	Ljubiša Vasiljević: Archaeological monuments of Silvanus and his cult community (Mar	
	Diana, "woodland deities") in part of Danube limes in Serbia	
	Tatiana Ivleva: Embodied religion: Norico-Pannonian gestural language on funerary mon	
	ments	
	ana Plestrensis	
	Tomasz Dziurdzik: Expressing regional and professional religious identities in Roma	
	army: the case of female cavalry "sports" helmets	
	Carsten Wenzel: Votum solvit! – Sanctifications of military personal and a new sacred are in Roman Nida (Frankfurt am Main-Heddernheim)	
	Csaba Szabó: Religion in the making in Roman Dacia: space sacralisation and religious a	
	propriation on the frontiers of the Empire	32
	Catherine Leisser: Ritual Artefacts: Right or Wrong?	
	Dănuţ Aparaschivei: Pilgrims from the province of Scythia in Ephessus	
	Erin Darby: Christians in the Late Roman army of Palestine: New evidence from 'Ayn Gha	
	randal (Arieldela), Jordan	34
	Vinka Matijević: Classical heroes and biblical characters. About the Roman belt found	
	Zmajevac (Ad Novas) Reinhardt Harreither: Christian soldiers as martyrs at the Danubian frontier	
	· ·	
4	. From East to West my Legions are the Best!!!	6
	Juergen Trumm: Trajan, legio XI and Caius Iulius Quadratus Bassus - the last legatus legion	
	of Vindonissa (Windisch/Switzerland)	
	Domagoj Tončinić: Die Denkmäler der Legio XI in der Provinz Dalmatien	
	A.D. and its historical-strategic consequence	
	Louisa Campbell: Barbarians on the Edge of Empire - Colouring in the Antonine Wa	all
	Distance Stones	38
6	. Stand your Ground!	9
	Locat Zánajdo: The African Limos during the Duzantine Deriod: a Naturaliza Straticzenhu.	20
	Lecat Zénaïde: The African Limes during the Byzantine Period: a Networks Stratigraphy8 John Steinhoff: The Numidian Limes from Mesarfelta to Thubunae: An Interdisciplina	
	Approach	39
	Michal Dyčka: Modus Operandi of the Odenwald Limes	
	Elisabeth Krieger: Watch out for Watchtowers! Fakten und Fiktion zu deren Rekonstruktio)n

•	MaciejMarciniak:ReasonsforadaptationatropaiontotheRomanworld
	Limes in fine? Continuity and Discontinuity of Life in the Forts of the oman Frontiers
•	Simone Mayer: Who lies there? Late antique inhumation graves at Augusta Raurica94 Anna Flückiger: Coins, Chronology, Continuity, and the Castrum Rauracense: New research on the Castrum and its 'suburbium' during Late Antiquity
18	. Transformation of Limes in Late Antiquity98
•	Vujadin Ivanišević, Ivan Bugarski: Spatial, Military and Economic aspects of Roman Defence on the Upper Moesian Limes
•	Sebastian Schmid: The Roman fort at Arelape/Pöchlarn and its development in Late Antiquity

19). Who Were the Limitanei?105
•	S. Thomas Parker: New Evidence about the limitanei on Rome's Arabian frontier105 Alan Rushworth: Limitanei: the African perspective105
21	. Life and health on the Roman Limes107
•	Nataša Miladinović-Radmilović, Ilija Mikić, Dragana Vulović, Ksenija Đukić: The appearance of ulcer on one skeleton from Viminacium and the possibility of its' treatment in Antiquity
•	Dragana Vulović, Ilija Mikić, Ksenija Đukić, Nataša Miladinović-Radmilović: Case of myositis ossificans traumatica on one skeleton from Viminacium
•	nations for mass skull burials at Viminacium
•	Moesian Limes in Serbia – Archaeological Evidences
•	C. Scott Speal: Settlement Size, History, and Mortality at Roman Viminacium: Testing the Urban Graveyard Hypothesis
24	l. Arts and Crafts along Limes111
•	Ivana Popović: Roman Cameos With Female Busts from the Limes Region: Their Meaning and Role in the Political Propaganda
•	Iva Kaić: Roman engraved gems from Burgenae in the Archaeological Museum in Zagreb111
•	Bojan Đurić: The Sirmium sarcophagus production on the Danube Limes and the Titel sarcophagus in Timişoara112
•	Boris Alexander Burandt: Entertaining the Empire – Rome's frontiers and the arena industry112
•	Mihaela Simion, Decebal Vleja, Ionuţ Bocan, Catalina Mihaela Neagu: The Entry Gate of Luxuries in the Province of Dacia; Roman Engraved gems from Micia (Veţel, Hunedoara County, Romania)
•	Ana Cristina Hamat, Georgescu Ștefan Viorel: Roman Jewellery from South-West of Dacia
•	Ortolf Harl: Military virtue as depicted on official and personal monuments from the Danubian provinces
•	Biljana Lučić, Miroslav B. Vujović, Jasmina Davidović: The Tomb With Paleochristian Wall Paintings From Sirmium
25	5. First Contacts between the Roman Military and the local people115
•	Nick Hodgson, James Bruhn: Roman frontiers create new societies in the lands beyond: a shift to pastoral farming and social re-structuring caused by the building of Hadrian's Wall
•	Pete Wilson: Allies, Enemies, Partners or Protagonists? Rome and the Brigantes in the First Century AD
•	Karl Oberhofer: At the back of beyond? Actual perspectives on the lower Alpine Rhine valley regarding the first Roman contacts
•	Balázs Komoróczy, Marek Vlach, Ján Rajtár, Claus-Michael Hüssen: The latest discoveries and research results of the Roman military presence in Middle Danube barbaricum117
•	Andrew Lawrence: Roman Contact und Impact in the Swiss Plateau (100 BC – 20 AD)117 Fraser Hunter: First contacts in Scotland: a review of old and new evidence117

12 13

•	Thomas Grane: Roman bronzes as a medium of diplomacy	
	military history or telling another story?	
•	José Manuel Costa-García: But Gaius, those locals seemed friendlier! The rationale	
	hind the military deployment during the early stages of the Roman military presence in	
	Iberia	11
•	Milica Tapavički Ilić: Limes in Serbia - the early days	
•	Dragana Nikolić: Roman Conquest of the Western and Central Balkans in the Light o cent Research	
26	. Re-evaluating old excavations: are they worth it?	.12
•	Orsolya Láng: Old excavation – new results: examples from the Aquincum Civil Town" – a	-
	note paper	
•	Simon James: The Roman military base at Dura-Europos: from archive and field to synthesis	12
•	Simone Mayer Digging in the archives – The 19th c. excavations of J. J. Schmid in Aug Raurica	
•	Malcolm Lyne: A pharos-headed pin from Richborough and its implications	12
•	Veronika Fischer: The barracks of "Ostkastell IIIb" in Straubing/Sorviodurum (Bavaria	,
	new knowledge about the cohors I Flavia Canathenorum milliaria sagittariorum	
•	Eduard Nemeth: Different methods, different terms: understanding old excavations	
•	Eva Steigberger: Hidden treasures? What you ask is not always what you get	
•	Limes	12
•	Nora Lombardini, Elena Fioretto: Archaeological remains along the Danubian Li	
	through centuries of travelers to a new instrument for intercultural dialogue	
•	Philip Smither: Revisiting Richborough: A reassessment of the excavations of J.P. Bu Fox (1922-1938)	
•	Martin Wieland: Bridge over troubled water: The roman bridge in Cologne between	
	research and new questions	
27	. Saxon Shore	.12
•	Sofie Vanhoutte: Cross-Channel Connections. The fort at Oudenburg (Belgium) with	
	wider context: new insights into the Litus Saxonicum	
•	Tony Wilmott: Recent excavations on the seaward side of the Saxon shore fort of Richard Saxon shore for the Saxon shore fo	12
•	Nathaniel Durant: A Tale of Two Frontiers?: Hadrian's Wall and the Saxon Shore Fo	
	the 3rd to 5th centuries A.D	
•	Philip Smither: 'I'm not so (Saxon) shore': Richborough in the 3rd - 5th centuries AD	
•	Michael Fulford: A Roman coastal fortlet or signal station at Reedham, Norfolk, England	
•	Mark Tucker: A Revaluation of the Western Shore forts	
•	Lloyd Bosworth: Recent Geophysical Survey at Portus Lemanis	
•	Raymond Brulet: The opposite coastline: problems to be solved about continental	
	Saxonicum	
29	. Mapping the Edge of Empire	.131
•	Eugen S. Teodor: Hiding in Woods. Gaps in delineating the Boundary along Limes	Trar
	salutanus	13
•	Hannsjörg Ubl: Zur Toponomastik der römischen Limeslager an der österreichis	
	Donau nach den Listen der Limitantruppen von Noricum ripensis und Pannonia prir	na i

	der Notitia Dignitatum
•	Alexandru Flutur, Adrian-Cristian Ardelean: "Limes Sarmatiae" - Ancient maps, new in-
	terpretations
•	Carolyn Snively: The Border or its Zone? The Situation in Southeastern Dardania133
•	Brian Turner: A Soldier's Map: Velleius Paterculus on the Limits of Empire133
30	. [Continuation of] Building materials: Elements of construction, ele-
me	ents of expression?135
•	Craig A. Harvey, M. Barbara Reeves: Ceramic Building Materials from the Roman Fort at
	Hauarra (modern Humayma, Jordan): An Examination of the Manufacturing Processes.135
•	Piotr Dyczek, Janusz Recław: "House with a peristyle" from Novae. Centurion house of
	the first cohort of legio I Italica?
•	Balázs Komoróczy, Marek Vlach, Lenka Lisá, Claus-Michael Hüssen, Ján Rajtár: On the
	trail of ephemeral building materials of the Roman military campaigns to the Middle Dan-
	ube barbarian territories
•	Kathleen O'Donnell: The Quarry Inscriptions of Hadrian's Wall
•	Tanja Romankiewicz, Benjamin Russell: Earthen Empire: earth and turf building in the
•	northwest provinces
•	building ceramics
•	Martin Mosser, Michaela Kronberger: Stone extraction for Vindobona – regional infrastruc-
	ture and economic relationship by the example of a legionary garrison in Pannonia138
•	Erik Hrnčiarik, Milan Horňák: Newly discovered Germanic farmyard with Roman-style
	buildings in Slovakia
24	Dath buildings
JI	. Bath buildings140
	Pohert Darby, Thihaud Fournet: Military Baths and Local Adaptation: A Case Study of the
•	Robert Darby, Thibaud Fournet: Military Baths and Local Adaptation: A Case Study of the Auxiliary Baths of the Cohors II Galatarum at 'Avn Gharandal (Arieldela), Jordan 140
	Auxiliary Baths of the Cohors II Galatarum at 'Ayn Gharandal (Arieldela), Jordan140
	Auxiliary Baths of the Cohors II Galatarum at 'Ayn Gharandal (Arieldela), Jordan140 Britta Burkhardt: Baths on the Frontiers of Roman Dacia141
•	Auxiliary Baths of the Cohors II Galatarum at 'Ayn Gharandal (Arieldela), Jordan140 Britta Burkhardt: Baths on the Frontiers of Roman Dacia
•	Auxiliary Baths of the Cohors II Galatarum at 'Ayn Gharandal (Arieldela), Jordan140 Britta Burkhardt: Baths on the Frontiers of Roman Dacia
•	Auxiliary Baths of the Cohors II Galatarum at 'Ayn Gharandal (Arieldela), Jordan140 Britta Burkhardt: Baths on the Frontiers of Roman Dacia
•	Auxiliary Baths of the Cohors II Galatarum at 'Ayn Gharandal (Arieldela), Jordan
•	Auxiliary Baths of the Cohors II Galatarum at 'Ayn Gharandal (Arieldela), Jordan140 Britta Burkhardt: Baths on the Frontiers of Roman Dacia
•	Auxiliary Baths of the Cohors II Galatarum at 'Ayn Gharandal (Arieldela), Jordan140 Britta Burkhardt: Baths on the Frontiers of Roman Dacia
•	Auxiliary Baths of the Cohors II Galatarum at 'Ayn Gharandal (Arieldela), Jordan140 Britta Burkhardt: Baths on the Frontiers of Roman Dacia
	Auxiliary Baths of the Cohors II Galatarum at 'Ayn Gharandal (Arieldela), Jordan140 Britta Burkhardt: Baths on the Frontiers of Roman Dacia
	Auxiliary Baths of the Cohors II Galatarum at 'Ayn Gharandal (Arieldela), Jordan
	Auxiliary Baths of the Cohors II Galatarum at 'Ayn Gharandal (Arieldela), Jordan
	Auxiliary Baths of the Cohors II Galatarum at 'Ayn Gharandal (Arieldela), Jordan
	Auxiliary Baths of the Cohors II Galatarum at 'Ayn Gharandal (Arieldela), Jordan
	Auxiliary Baths of the Cohors II Galatarum at 'Ayn Gharandal (Arieldela), Jordan
333	Auxiliary Baths of the Cohors II Galatarum at 'Ayn Gharandal (Arieldela), Jordan140 Britta Burkhardt: Baths on the Frontiers of Roman Dacia
33	Auxiliary Baths of the Cohors II Galatarum at 'Ayn Gharandal (Arieldela), Jordan
33	Auxiliary Baths of the Cohors II Galatarum at 'Ayn Gharandal (Arieldela), Jordan
33	Auxiliary Baths of the Cohors II Galatarum at 'Ayn Gharandal (Arieldela), Jordan
33	Auxiliary Baths of the Cohors II Galatarum at 'Ayn Gharandal (Arieldela), Jordan

•	Mike Bishop: Turma! Hadrian's Cavalry Charge in Carlisle	
•	Tom Hazenberg: Cement for the limes. Interpretation Framework and Curatorship for	
	Dutch limes	
•	Balázs Komoróczy, Pavla Růžičková, Marek Vlach: The Romans deep in barbaricum. Co	
	ception, current state and perspectives of the Roman military monuments presentation the Czech Republic	ı in
•	Andrea Chiricescu: Working with the local community on the Roman Limes. First stein developing a sustainable site management framework	eps
•	Thomas Becker Limes-App Hessen "Explore" – moderner Weg der Denkmalvermittlur Limes-App Hesse "Explore" – a modern way of heritage transfer	ng /
•	Dániel Kővágó: Visitors in bowler hats and baseball caps – Aquincum then and now1	
3/	. Roman Egypt1	52
34	. Koman Egypt	3 2
•	Steven E. Sidebotham: Results of Fieldwork at Berenike (a Ptolemaic-Roman Port	
	Egypt's Red Sea Shore): 2013-2018	
•	Rodney Ast: New Greek Inscriptions from the Temple of Isis at Berenike	
•	Joan Oller Guzmán: Controlling the Mons Smaragdus: The Presence (or Absence) of Roman Army in a Productive Frontier Region	
•	Steven E. Sidebotham: Survey of the Berenike-Nile Roads 1987-2015: The Highways, Milit	
	Installations, Mines and Quarries1	153
•	Julia Lougovaya-Ast: Pleasure and Entertainment on the Roman Frontier1	
•	Iwona Zych: The Blemmyan record in Berenike of the late period (4th–6th centuries AD).1	
•	Julien Cooper: Trade routes, raiding, and mining: thoughts on the Blemmyean desert st in Late Antiquity	
•	Peter Sheehan, Dmitry Karelin, Maria Karelina, Tatiana Zhitpeleva: Babylon of Egypt: the F	
	•	
	construction of the Diocletianic Fortress1	54
		54
	S. Small finds assemblages as a means to understanding social and	
	5. Small finds assemblages as a means to understanding social and conomic patterns within the settlements close to Roman camps1	55
	S. Small finds assemblages as a means to understanding social and conomic patterns within the settlements close to Roman camps19 Paul Franzen: What can small finds do for you?	55 155
	S. Small finds assemblages as a means to understanding social and conomic patterns within the settlements close to Roman camps1 Paul Franzen: What can small finds do for you?	55 155 her 155
	S. Small finds assemblages as a means to understanding social and conomic patterns within the settlements close to Roman camps1 Paul Franzen: What can small finds do for you?	55 155 her 155 s of
	Paul Franzen: What can small finds do for you?	55 155 her 155 s of
	Small finds assemblages as a means to understanding social and conomic patterns within the settlements close to Roman camps18 Paul Franzen: What can small finds do for you?	55 155 her 155 s of 156 ury
	Paul Franzen: What can small finds do for you?	55 155 her 155 s of 156 ury 56
• c	Paul Franzen: What can small finds do for you?	155 her 155 of 156 ury 56 c at 156
• c	Paul Franzen: What can small finds do for you?	155 her 155 5 of 156 ury 56 4 at 156 ster 57
• c	Paul Franzen: What can small finds do for you? Weights as an indication for trade and commerce and as a means to determine whether the context is military or civilian. Hannes Flück: Bling for the fling – a fibulae assemblage from the canabae legionis Vindonissa and its interpretation. Birgitta Hoffmann: Glass in the military settlements: between local production and lux acquisitions. Anna Walas: Finds distribution analysis and the relationships between fort and annex Flavian Elginhaugh, Scotland. Tony Wilmott: Small finds and environmental evidence from the seating ban of the Ches amphitheatre. Stefanie Hoss, Julia Chorus, Julie Van Kerckhove and Carlijn van Maaren: Vicus on the seating ban of the Ches amphitheatre.	155 her 155 of 156 ury 56 c at 156 ster 157 the
• • • • • • • • • • • • • • • • • • • •	Paul Franzen: What can small finds do for you? Weights as an indication for trade and commerce and as a means to determine whether the context is military or civilian. Hannes Flück: Bling for the fling – a fibulae assemblage from the canabae legionis Vindonissa and its interpretation. Birgitta Hoffmann: Glass in the military settlements: between local production and lux acquisitions. Anna Walas: Finds distribution analysis and the relationships between fort and annex Flavian Elginhaugh, Scotland. Tony Wilmott: Small finds and environmental evidence from the seating ban of the Ches amphitheatre. Stefanie Hoss, Julia Chorus, Julie Van Kerckhove and Carlijn van Maaren: Vicus on Rhine: the mini-vici of the Lower Rhine between Utrecht and the sea.	155 her 155 of 156 ury 56 at 156 ster 157 the
• c	Paul Franzen: What can small finds do for you? Weights as an indication for trade and commerce and as a means to determine whether the context is military or civilian. Hannes Flück: Bling for the fling – a fibulae assemblage from the canabae legionis Vindonissa and its interpretation. Birgitta Hoffmann: Glass in the military settlements: between local production and lux acquisitions. Anna Walas: Finds distribution analysis and the relationships between fort and annex Flavian Elginhaugh, Scotland. Tony Wilmott: Small finds and environmental evidence from the seating ban of the Ches amphitheatre. Stefanie Hoss, Julia Chorus, Julie Van Kerckhove and Carlijn van Maaren: Vicus on the seating ban of the Ches amphitheatre.	155 her 155 5 of 156 ury 56 4 at 156 ster 57 the 157 re-
• • • • • • • • • • • • • • • • • • • •	Paul Franzen: What can small finds do for you? Weights as an indication for trade and commerce and as a means to determine whether the context is military or civilian. Hannes Flück: Bling for the fling – a fibulae assemblage from the canabae legionis Vindonissa and its interpretation. Birgitta Hoffmann: Glass in the military settlements: between local production and lux acquisitions. Anna Walas: Finds distribution analysis and the relationships between fort and annex Flavian Elginhaugh, Scotland. Tony Wilmott: Small finds and environmental evidence from the seating ban of the Ches amphitheatre. Stefanie Hoss, Julia Chorus, Julie Van Kerckhove and Carlijn van Maaren: Vicus on Rhine: the mini-vici of the Lower Rhine between Utrecht and the sea. Orsolya Láng, Andrew Wilson: First steps on a long journey: preliminary results of the	155 her 155 of 156 ury 56 c at 156 ster 57 the 157 re- 158
• • • • • • • • • • • • • • • • • • • •	Paul Franzen: What can small finds do for you? Weights as an indication for trade and commerce and as a means to determine wheth the context is military or civilian. Hannes Flück: Bling for the fling – a fibulae assemblage from the canabae legionis Vindonissa and its interpretation. Birgitta Hoffmann: Glass in the military settlements: between local production and lux acquisitions. Anna Walas: Finds distribution analysis and the relationships between fort and annex Flavian Elginhaugh, Scotland. Tony Wilmott: Small finds and environmental evidence from the seating ban of the Ches amphitheatre. Stefanie Hoss, Julia Chorus, Julie Van Kerckhove and Carlijn van Maaren: Vicus on Rhine: the mini-vici of the Lower Rhine between Utrecht and the sea. Orsolya Láng, Andrew Wilson: First steps on a long journey: preliminary results of the search on millstones from the settlement complex of Aquincum.	155 her 155 of 156 ury 56 at 156 ster 157 the 157 re-158
• • • • • • • • • • • • • • • • • • • •	Paul Franzen: What can small finds do for you? Weights as an indication for trade and commerce and as a means to determine wheth the context is military or civilian. Hannes Flück: Bling for the fling – a fibulae assemblage from the canabae legionis Vindonissa and its interpretation. Birgitta Hoffmann: Glass in the military settlements: between local production and lux acquisitions. Anna Walas: Finds distribution analysis and the relationships between fort and annex Flavian Elginhaugh, Scotland. Tony Wilmott: Small finds and environmental evidence from the seating ban of the Chesamphitheatre. Stefanie Hoss, Julia Chorus, Julie Van Kerckhove and Carlijn van Maaren: Vicus on Rhine: the mini-vici of the Lower Rhine between Utrecht and the sea. Orsolya Láng, Andrew Wilson: First steps on a long journey: preliminary results of the search on millstones from the settlement complex of Aquincum.	155 her 155 of 156 ury 56 c at 156 ster 57 the 157 re-158

37	7. Rome and Barbarians	160
•	Catalina Mihaela Neagu, Mihaela Simion, Decebal Vleja, Ionuţ Bocan: Searc	•
	death. A specific community in Roman Dacia - Alburnus Maior	
•	Marko Jelusić: In the service of Rome? - Mobility and ethnic interpretation of	f the shield
	bosses with a star-shaped flange and faceted / fluted bowls	160
•	Fraser Hunter What makes a barbarian? Studying barbarian material culture	on Roman
	monuments	160
•	Jonathan Quiery: The Place-Making Effects of Roman Military Tropaea in the	Provinces:
	Roman and Barbarian Identities	

PC	OSTERS162
•	Sven Conrad, Lyudmil Vagalinski: The Mouth of Yantra River at the Lower Danube. Forti-
	fications and Settlements from the 1st to the 6th c162
•	Sophie Hüdepohl: The late Roman fort of Guntia / Günzburg (Raetia secunda) – 4th cen-
	tury grave inventories reflecting evidence of migration and cultural exchange162
•	Dávid Bartus: Where did Valentinian die? New excavations in the legionary fortress of
	Brigetio
•	Dorel Bondoc: The Roman fortress and the detachment of Legio VII Claudia from Cioroiu Nou, Dolj County, Romania
	Silva Sabkova: The lower Danube Limes in Bulgaria between the rivers Iskar (Oescus)
	and Yantra (latrus) during the first century of Roman occupation (1st c. AD): Relationships
	between the fortified system and the landscape
•	Sabine Deschler-Erb/Regine Fellmann/Andrew Lawrence/Michael Nick/Jürgen Trumm:
	Offering to the Gods – A Ritual Deposition and Other Forms of Religious Communication in
	Vindonissa
•	Nina Gostinski: Slaves in Teutoburgium?164
•	Ivana Živaljević, Sonja Vuković – Bogdanović, Ivan Bogdanović: Fishing at the Upper Moe-
	sian frontier: Remains of freshwater and migratory fish from Viminacium (Upper Moesia,
	Serbia)
•	Hinterland: New Fieldwork on the Fortifications of Zaldapa, Bulgaria165
•	Adam Pažout: How to trace and date the Roman roads? A case study from the territorium
	of Antiochia Hippos
•	Simona Regep: Stone made projectiles found in the Roman fort of Mehadia (Caraş-Sev-
	erin County, Romania)166
•	Kira Lappé: The Roman Army in the Lower Danube and Balkan Region167
•	Kira Lappé, M. Meszar, K. Hornek, M. Wagreich: Layers of Vindobona167
•	Monica Gui: Scrawl, scribble, doodle – killing time in military tileries of Roman Dacia167
•	Réka Neményi: "Borderland Christianity" – Small finds and their significance on the Hun-
•	garian section of the Danube Limes (4th –5th centuries)"
•	Alik Gabeliya: Fortifications of the Inner-Caucasian Limes in Abkhazia
•	Stephen Matthews: Moving Supplies in the Roman Dobrogea
•	Joanneke van den Engel-Hees, Herwin van den Engel: Hidden gems: Roman finds in the
	PUG-collection in Utrecht
•	Martin Mosser: Stone extraction for Vindobona – regional infrastructure and economic re-
	lationship by the example of a legionary garrison in Pannonia170
•	Xue Cheng: This is the first time to study the construction technology of the beacon tower
	in the Han dynasty in xinjiang of China. It is of great significance to understand the con-
•	struction technology of rammed earth in xinjiang171 Tong Yangyang: Using the objective and plenary data to analyze and demonstrate the re-
•	lationship between the construction of Ming's Great Wall, the climate changes and wars of
	the agricultural and nomadic peoples
•	Michael Speidel: Aspects of Roman imperial power in Transcaucasia171
•	Gordana Jeremić, Selena Vitezović: Exploitation of wild animal resources on the Limes in
	Upper Moesia172
•	Dragana Nikolić: Digitizing Ancient Epigraphic Heritage: Project EpiDoc XML Encoding of
	Roman Inscriptions from Serbia
•	Marius Streinu, Aurel Stănică, Alina Streinu: The last frontier. The extra muros civil settle-
	ment from Noviodunum. The beginning of a new research
•	Mátyás Bajusz: Roman quarries on the Northwestern border of Dacia. The sandstone and volcanic stone quarries of Porolissum
•	Călin Timoc: The Danube limes fort from Pojejena in a new light of non-invasive prospec-

•	Jana Kopáčková: Production of Olive Oil and Wine in the Vicinity of Limes Delmaticus173 Mariana Balaci Crînguş: La situation des femmes sur le limes danubien de la Dacie entre religion et implication sociale174
•	Lajos Juhász: Perforated coins from the Aquincum-Graphisoft cemetery174
•	C. Scott Speal: Sex, Risk Allocation, and Roman Patriarchy: Excess Male Mortality on the Danube Frontier
•	C. Scott Speal: Establishing the Health Correlates of Social Status on the Danube Frontier using Grave Construction: The Viminacium Mortuary Complex175
•	Stanko Trifunović: Archaeological Characteristics of Sarmatians Limigantes Culture176
•	Judit Pásztókai-Szeőke: A small secret of the sea-silk from Szemlőhegy (HU)176
•	Agnieszka Tomas: A face padlock from Novae (Lower Moesia). On the distribution and
	function of Roman puzzle locks
•	Tomasz Dziurdzik: Demystifying the Roman fort at Gračine (Bosnia and Herzegovina)177
List of Participants	



31. BATH BUILDINGS

Session organisers / Chairpersons:

Stefanie Hoss, Archäologisches Institut, Universität zu Köln (E-mail: Stefanie.Hoss@uni-koeln. de)

Bebina Milovanović, Institute of Archaeology Belgrade Serbia

Emilija Nikolić, Institute of Archaeology Belgrade Serbia

Together with amphitheatres, military bath buildings were erected near forts and in legionary camps to enable the soldiers to enjoy their favourite leisure activities. Indeed, bath buildings are vastly more common than amphitheatres in connection with military installations, regardless of whether these are situated on windy and wet Hadrian's Wall or in the hot and dry deserts of Africa. It seems that the pleasures of a visit to the bathhouse - including the nicely decorated and warm rooms, abundance of clean and warm water plus the pleasure of meeting friends for a chat - seem to have been judged to have such an overriding importance that even the smallest forts aspired to them.

Whereas amphitheatres were also used for military parades and show fights of units against each other, bath buildings had no direct military use beyond ensuring the health and happiness of the soldiers. We can thus conclude that the regular occurrence of bath buildings near forts and in legionary camps is a sign of the central position the bathing habit had in Roman society and an indication of the importance of the soldiers as a class within that society. Both were on the rise during the 1st century AD and gained their full importance in the early 2nd century, retaining it for at least two hundred years.

But a number of issues on the social habit of bathing and the resulting buildings are still unanswered in the military sphere and this session will invite contributors to ask questions such as:

- were military baths restricted to soldiers or could all inhabitants of the legionary camp or the fort and vicus bathe there?
- was the bathhouse of a given fort or camp of a size that allowed all the soldiers of the unit to take a bath there every day or every two days? Or was the bathhouse only for a few of them?
- as these buildings are technically challenging to construct, were they built by specialists within the Roman army, a travelling 'bath building corps' or perhaps by civilian contractors?
- can we determine differences between military and civilian bathhouses of the same region either in the architecture or the decoration?
- which of the countless activities recorded for non-military bath buildings in towns and cities such as eating and drinking, exercising, getting a haircut, consulting a doctor, listening to lectures or poetry readings and satisfying one's sexual desires may have been available in military bathhouses?
- how was the location of the bathhouse determined when it was built outside a fort or inside a legionary camp were positions chosen for easy access to water or other location advantages specific to bathhouses or were military considerations of a higher importance?

Military Baths and Local Adaptation: A Case Study of the Auxiliary Baths of the Cohors II Galatarum at 'Ayn Gharandal (Arieldela), Jordan

Robert Darby, Thibaud Fournet

Since 2010, archaeological investigations of an exceptionally well-preserved military bath-house belonging to the Cohors II Galatarum have been underway at the site of 'Ayn Gharandal in southern Jordan under the auspices of the 'Ayn Gharandal Archaeological Project (AGAP). Built as new construction in ca. 300 AD near the mouth of the Wadi Gharandal to serve the nearby castellum, the builders of the bathhouse were forced to consider not only the topographical challenges posed by the surrounding landscape but the broader environmental conditions and extreme aridity in the desert environs of the Wadi Arabah. This paper examines the architecture of the auxiliary bathhouse at 'Ayn Gharandal within its broader regional contexts

and the influence that both local building and bathing traditions had on its design. Further, it seeks to answer who was responsible for constructing the baths and what their association with the Roman army may have been in the hopes of providing new avenues of research regarding military baths in other frontier zones.

Baths on the Frontiers of Roman Dacia

Britta Burkhardt

This paper is a synthesis of the most relevant data regarding the archaeological research of small Roman bathhouses (balnea) situated along the military frontiers of the Roman province of Dacia. In the Roman world, the latin term limes was understood as the summation of a linear fortification system, forts of information about imperial public baths, which represent an institution with an important role both in private and public sectors. Considering that provincial Roman architecture in a military environment is largely based on defensive structures, the topic of baths situated in this environment raises new questions and possibilities. Who used these baths? Soldiers, civilians, soldiers and civilians, in what order? To what extent did women have access to these facilities? Our paper whishes to discuss these question and more.

Roman military baths from Capidava (2nd – 3rd c. A.D.)

Ioan Carol Opriș, Alexandru Rațiu and Tiberiu Potârniche

Recent research on Capidava military thermae (2017) was carried out as part of a restoration and tourist development project for the fort precinct and the extra muros space, in the area where a site/tourist information center was constructed. This area is located eastward from the fort, about 100-200 m from the Main Gate. As early as 2015, preventive research on an area of about 1,800 sqm identified 375 archaeological complexes: 186 inhumation tombs, 133 pits of various forms and functions, 28 parts of stone walls, 5 dwelling structures, 2 combustion structures, 7 outside vents and 11 drainage sistems.

The research was resumed in 2017, with the clear aim of gathering all the available information on the ground and exhausting the contexts throughout the area occupied by the baths used by the auxiliary troops stationed here in the 1st and 2nd c. A.D. (about 800 sqm). The unequal information resulted from previous unpublished research (1988-1993) has added to it several categories of archaeological contextes: Medio-Byzantine dwelling elements (6 dwellings or huts, eqipped with hearths) and 7 medieval tombs.

By re-escavating and cleaning the debries from all the rooms and installations related to the thermal ediffice two construction phases of the baths could be clearly identified. They correspond to two channels of water evacuation, documented with the stamps of Leg(io) XI C(laudia) p(ia) f(idelis) and Leg(io) XI Ant(oniniana). Other stamps were discovered also: Leg(ionis) V Mac(edonicae) and Leg(ionis) XI CL(audiae), which suggests repairs or extensions of the edifice during the 2nd c. A.D., after the initial construction moment. Several cocciopesto floors and praefurnia, pools and rooms with unclear functionality are unevenly preserved, being affected by late Roman and Romano-Byzantine dwellings and tombs dating from the 10th – 11th centuries.

Noteworthy is the fact that the military bats from Capidava are among the very few military balnea known in the final section of the Danube limes in Moesia Inferior.

Body Function and Life Process of a Roman Building: Viminacium Baths Bebina Milovanović, Emilija Nikolić, Dragana Rogić

Viminacium baths, excavated from 1973 to 1974 and from 2004 to 2007, were in use from the second half of the 1st century AD until the end of the 4th century AD. Periods of the building life are confirmed by changes in masonry techniques and the existence of wall paintings with

multiple layers, as well as by dating of pottery and numismatic finds. The aim of this paper is to analyze all these pieces of evidence, trying to find common causes for their occurrence.

During excavations, five apses (pools), a central hypocaust space and peripheral facilities of the building were found. Although the building has not been fully excavated yet, periods of construction can be distinguished, where every subsequent building was built on the previous one. The focus of this paper will be given to specific rooms that were probably in use only until the end of the 3rd century when the life of the baths was interrupted for a while (while other parts of the building were renewed and used until the end of the 4th century). According to the direction of the partially excavated walls of the rooms and geophysical research conducted around them, it can be presumed that the baths were included in the bigger city complex. Excavations in the nearby area conducted in 1902 and 1973 showed the existence of residential quarter where life lasted from the 2nd to the 6th (or 7th) century, but where also the 1st-century layer was found.

Viminacium baths are the oldest Roman baths to have been excavated in Serbia thus far and they are very important for the research of bath culture during Roman times in this territory. They are also, along with the nearby amphitheatre, the only large public building having been excavated to the great extent in Viminacium so far. Considering that the amphitheatre was presumed to be founded as a military one, but later incorporated into the city getting also civic function, we can argue about the function of the 1st-century layer of the baths and its possible use by soldiers of Viminacium legionary fortress. They also offer unique information on the everyday life of Viminacium inhabitants which formed a unique multicultural society. Future excavations will provide us with more information important for the research of its life which was inextricably bound to historical events that caused development and splendor, but also destructions and renewals of Viminacium.

Thermae Maiores – The military bath of the legio II Adiutrix in Aquincum Gabriella Fényes

In the area of today's Budapest twenty-five Roman baths have been excavated in the explorations of the past 240 years. The monumental bath building of the Aquincum based legio II Adiutrix, according to an inscription the Thermae Maiores, was the largest of them. The bath was erected at the intersection of the two main roads of the legionary fortress. Stretching over an area of more than 16,800 square meters the floor plan of these baths is bilaterally symmetrical. According to the ar-chaeological excavations we know about 48 rooms of this bath. It consisted of a porticus, a palaestra, a big natatio, changing rooms, frigidarium with basin, two nympheums, an-other frigidarium with cold water basins, a round sudatorium and another sweat bath with an apse, four tepidaria, and an oblong caldarium with two niches for rectangular basins sur-rounded with praefurnia.

This bath was built under the reign of Trajan or Hadrian, when the legionary fort was built in stone. It was rebuilt several times in the Roman period. One inscription proved a big re-construction in 268 A.D. (CIL III 10492). It was rebuilt also in the second half of the fourth century and became the resi-dence of the military leader of the province. In this period a new little private bath was constructed near the former mili-tary bath.

Running water was supplied from springs 3.5 km north of the bath. The water was conducted by an aqueduct, which was built by the legio II Adiutrix in the same time as the military fortress and the bath. The sewage of the large pool was led in the drains of a huge latrina. Waste water was drained into the Danube.

The ruins of the bath give information not only about the wa-ter supply and the heating system but also the daily life there. The archaeological finds, for example a strigilis, inform us about the Roman bathing habits. The Thermae Maiores was not only a hygienic bath, but with the military hospital nearby provided facilities for healing and recreation, which is proved by inscriptions and reliefs.

Dishing the dirt on the textile tools found in Roman (military) baths Judit Pásztókai-Szeőke

In her publications about the small finds from Roman bathhouses, both public and military, A.M. Whitmore (2013. and 2016.) called our attention to the occurence of textile tools among them (e.g. whorls, weights, needles and weaving tablets). She also outlined several plausible possibilities for the interpretation of their presence. First, they were not used as cloth working tools at all, but as medical or hairdresser instruments, door-weights etc; according to her other explanation they were used for producing textiles or rather mending garments as a pass-time activity either by the bathers themselves or some slaves or attendants, but she also offered the possibility that this kind of activity could have been part of a commercial service in the baths. A somewhat different approach and interpretation of these textile tools would be offered by this present paper, based on the recent research on the textile tools found in connection to the textile refurbishing workshops of Pannonia (in Savaria and Siscia), and emphasizing both the rather overlooked importance of corporeal and sartorial hygiene in densely populated e.g. military as well as urban contexts and the tragic consequences of their lack for e.g. ancient armies.

My bath is in my fort? Bath buildings in military context in Noricum and Western Pannonia

René Ployer & Eva Steigberger

In this contribution, bath buildings within or close to military installations at the Norican and Western Pannonian Limes will be examined more closely. The question is raised as to whether there are differences in location, size, design and interior fittings of the bath buildings in fortlets, forts and legionary fortresses. We follow the question when were baths built inside and outside the military facilities. Was the size of the baths proportional to the number of soldiers that used them? And who was allowed to use the bathing facilities? Can small finds give information about this? Baths within forts have been built by the soldiers themselves, but who built the baths outside the military installations in the surrounding vici? Furthermore, the question of modifications and changes to the bath buildings during their useful life should be investigated.

42 143

CIP - Каталогизација у публикацији Народна библиотека Србије, Београд

94(37)(048) 904"652"(37)(048)

LIMES Congress (24 ; 2018)

Book of abstracts / 24. Limes Congress Serbia, 02-09 September 2018 ;
[editors Snežana Golubović, Nemanja Mrđić]. - Belgrade : Institute of Archaeology, 2018 (Beograd : DigitalArt). - 197 str. ; 30 cm

Apstrakti na engl., franc. i nem. jeziku. - Tiraž 500.

ISBN 978-86-6439-039-2

а) Археолошка налазишта, римска - Апстракти b) Римска држава - Лимес - Апстракти COBISS.SR-ID 267299084

