

XIONGNU ARCHAEOLOGY

Bonn Contributions to Asian Archaeology

Volume 5

Edited by
Jan Bemann

XIONGNU ARCHAEOLOGY

Multidisciplinary Perspectives of the
First Steppe Empire in Inner Asia

Edited by
Ursula Brosseder, Bryan K. Miller

2011
Vor- und Frühgeschichtliche Archäologie
Rheinische Friedrich-Wilhelms-Universität Bonn

656 pages, 285 figures, 16 tables

The conference and the publication were generously financed by
Silkroad Foundation
Gerda Henkel Stiftung

Ein Titelsatz ist bei der Deutschen Bibliothek erhältlich
(<http://www.ddb.de>)

Desktop Publishing and Design: Matthias Weis
Translations: Authors, Emily Schalk, Daniel C. Waugh, Munkh-Ochir Dorjjugder,
Iulia Gavrilova, Ursula Brosseder, Bryan K. Miller
English language editors: Bryan K. Miller, Susanne Reichert, Daniel C. Waugh,
Image editing: Gisela Höhn
Final editing: Ursula Brosseder
Printing and binding:
Freiburger Graphische Betriebe – Freiburg
Printed in Germany

Cover illustration: Nicole Schmitt, idea Jan Bemann

ISBN 978-3-936490-14-7
Copyright 2011 by vfgarch.press.uni-bonn

Dedicated to our Mongolian Friends on the
2,220th Anniversary of the Founding of the
First Empire on Mongol Territory by the Xiongnu

ADDRESS OF THE AMBASSADOR OF THE FEDERAL REPUBLIC OF GERMANY TO MONGOLIA

Germany is one of the most important partners of Mongolia within the European Union, and this strong relationship is reflected in the impressive vibrant exchanges and cooperation in various fields.

German scholarship is one of the leading forces in Eurasian Archaeology. With the four-day “International Conference on Archaeological Research in Mongolia”, initiated and organized by the University of Bonn and the German Archaeological Institute in 2007, for the first time research teams from various countries met and discussed the state of archaeological research in Mongolia. Germany thus demonstrated its prime position of international leadership for promoting scholarly dialogues on archaeological research in Mongolia, and simultaneously furthered understanding of Central Asian history and its pan-continental influence on both East Asian and European history. By 2009, the proceedings of this conference were published in a monumental volume produced by Bonn University and funded by Gerda Henkel Foundation.

The subsequent “International Conference on Xiongnu Archaeology” held in 2008, organized by the University of Bonn and the University of Pennsylvania, focused on the culture and empire of the Xiongnu (or Asian Huns) who are thought by some scholars to be the predecessors of the European Huns. The publication associated with this conference, comprises the latest research in this field, presents directions for future studies, and demonstrates the necessity to revise existing perceptions in favor of more multi-faceted and interdisciplinary views which can relate to investigations in other parts of the world. A substantial portion of this book deals with the interaction of the Xiongnu in a broader Eurasian setting, and aims to bring this region into world-wide discussions of large political entities.

The German Embassy in Mongolia participated in the Xiongnu conference by hosting a reception and a talk by the American political analyst Claudio Cioffi-Revilla from George Mason University, USA. His research, which combines modern political modeling systems and the studies of ancient states, demonstrates a powerful connection between social dynamics of ancient and modern times. These ties between ancient states and modernity have become ever more prominent in present-day politics, as the President of Mongolia, Tsakhia Elbegdorj, has announced the year 2011 as the 2,220 year anniversary of the founding of the first Empire in Eurasia, established by the Xiongnu in the territory of present-day Mongolia in 209 BC. In accordance with prime attention to this anniversary, the Mongolian government has allocated funding to permanent establishments, such as new institutions for cultural studies and heritage preservation, and even the creation of a new, expanded exhibition hall at the National Museum especially for national treasures of the Xiongnu period.

In honor of this anniversary we are proud to present this volume to Mongolia combined with best wishes for the future.

CONTENTS

FOREWORD OF THE SERIES' EDITOR.....	13
PREFACE	15
INTRODUCTION	
URSULA BROSEDER, BRYAN K. MILLER State of Research and Future Directions of Xiongnu Studies	19
CONCEPTS OF THE POLITY	
NICOLA DI COSMO Ethnogenesis, Coevolution and Political Morphology of the Earliest Steppe Empire: the Xiongnu Question Revisited.....	35
ENNO GIELE Evidence for the Xiongnu in Chinese Wooden Documents from the Han Period	49
NIKOLAI N. KRADIN Stateless Empire: The Structure of the Xiongnu Nomadic Super-Complex Chiefdom	77
CLAUDIO CIOFFI-REVILLA, J. DANIEL ROGERS, STEVEN P. WILCOX, JAI ALTERMAN Computing the Steppes: Data Analysis for Agent-Based Models of Polities in Inner Asia	97
WALTER SCHEIDEL The Xiongnu and the Comparative Study of Empire.....	111
ZAGD BATSAIKHAN The Xiongnu – Progenitors of the Classical Nomad Civilization.....	121
PEOPLE AND LIFE WAYS	
SERGEI V. DANILOV Typology of Ancient Settlement Complexes of the Xiongnu in Mongolia and Transbaikalia...	129
JEAN-LUC HOULE, LEE G. BRODERICK Settlement Patterns and Domestic Economy of the Xiongnu in Khanui Valley, Mongolia ...	137
DENIS RAMSEYER, MARQUITA VOLKEN The Staking Tools from the Xiongnu Settlement of Boroo Gol, Selenge Aimag, Mongolia...	153
JOSHUA WRIGHT Xiongnu Ceramic Chronology and Typology in the Egiin Gol Valley, Mongolia	161

SARAN SOLONGO, TSAGAAN TÖRBAT The Chronology at the Boroo Settlement, Mongolia – OSL Dating of Xiongnu Pottery	169
MICHELLE L. MACHICEK Reconstructing Life Histories of the Xiongnu. An Overview of Bioarchaeological Applications	173
CHERYL A. MAKAREWICZ Xiongnu Pastoral Systems – Integrating Economies of Subsistence and Scale.	181
CHRISTINE LEE, ZHANG LINHU Xiongnu Population History in Relation to China, Manchuria, and the Western Regions . . .	193

MORTUARY EVIDENCE OF SOCIAL DYNAMICS

ERIK G. JOHANNESSON Grave Matters: Reconstructing a Xiongnu Identity from Mortuary Stone Monuments	201
ALBERT RUSSELL NELSON, WILLIAM HONEYCHURCH, CHUNAG AMARTÜVSHIN Caught in the Act: Understanding Xiongnu Site Formation Processes at Baga Gazaryn Chuluu, Mongolia	213
HÉLÈNE MARTIN The Animal in the Xiongnu Funeral Universe: Companion of the Living, Escort of the Dead	229
YANG JIANHUA Gender Relationships among the “Xiongnu” as reflected in Burial Patterns	243
YUN HYEUNG-WON, CHANG EUN-JEONG Excavations of Xiongnu Tombs at Duurlig Nars Cemetery in Eastern Mongolia	261
GELEGDORZH EREGZEN A Comparative Analysis of Xiongnu Noble Tombs and Burials in Adjacent Regions.	275
GRIGORII L. IVANOV The Early History of the Study of the Mounded Tombs at the Noyon Uul Necropolis – The Collection of Andrei Ballod at the Irkutsk Museum of Regional Studies	285
ALEXEI A. KOVALEV, DIIMAAZHAV ERDENEBAATAR, TÖMÖR-OCHIR IDERKHANGAI An Unlooted Elite Xiongnu Barrow at Khökh Üzüüriin Dugui-II, Bulgan sum, Khovd aimag, Mongolia: Relative Chronological Dating and its Significance for the Study of Xiongnu Burial Rites. Preliminary Report.	291
DIIMAAZHAV ERDENEBAATAR, TÖMÖR-OCHIR IDERKHANGAI, BAATAR GALBADRAKH, ENKHBAIAR MINZHIDDORZH, SAMDANZHAMTS ORGILBAIAR Excavations of Satellite Burial 30, Tomb 1 Complex, Gol Mod 2 Necropolis	303

INTERREGIONAL INTERACTION

TSAGAAN TÖRBAT A Study on Bronze Mirrors in Xiongnu Graves of Mongolia.	315
--	-----

NATAL'IA V. POLOS'MAK, EVGENII S. BOGDANOV, AGNIA N. CHISTIAKOVA, LIUDMILLA P. KUNDO Lacquer Ear-Cups from Burial Mound 20 in Noyon Uul	327
CHIMIDDORZH ERÖÖL-ERDENE Animal Style Silver Ornaments of the Xiongnu Period	333
SERGEI V. DANILOV, NATAL'IA V. TSYDENOVA Ceramic Roof Tiles from Terelzhiin Dörvölzhin	341
URSULA BROSEDER Belt Plaques as an Indicator of East-West Relations in the Eurasian Steppe at the Turn of the Millennia	349
 REGIONAL APPROACHES AND DELINEATING THE POLITY	
JULIANA HOLOTOVÁ-SZINEK Preliminary Research on the Spatial Organization of the Xiongnu Territories in Mongolia	425
JAN BEMMANN Was the Center of the Xiongnu Empire in the Orkhon Valley?	441
PAN LING A Summary of Xiongnu Sites within the Northern Periphery of China	463
ALEXEI A. KOVALEV, DIIMAAZHAY ERDENEBAATAR, SERGEI S. MATRENIN, IVAN IU. GREBENNIKOV The Shouxiangcheng Fortress of the Western Han Period – Excavations at Baian Bulag, Nomgon sum, Ömnögov' aimag, Mongolia	475
CHUNAG AMARTÜVSHIN, ZHAM'IAN-OMBO GANTULGA, DONDOG GARAMZHAY On the Walled Site of Mangasyn Khuree in Galbyn Gobi.	509
PAVEL M. LEUS New Finds from the Xiongnu Period in Central Tuva. Preliminary Communication	515
SERGEI V. KHAVRIN Metal of the Xiongnu Period from the Terezin Cemetery, Tuva	537
ALEXEI A. TISHKIN Characteristic Burials of the Xiongnu Period at Ialoman-II in the Altai	539
BRYAN K. MILLER Permutations of Peripheries in the Xiongnu Empire	559
REFERENCES	579
GLOSSARY	645
INDEX OF AUTHORS	649

FOREWORD OF THE SERIES' EDITOR

The Xiongnu, who established “the first and most stable nomadic empire the world has ever seen” (Barfield 2001, 23), are not only the focus of the present tome, but, even more so, are held in great esteem in the self-awareness of modern Mongolia. All of the contributors are very pleased to present this book in the year 2011 in commemoration of the foundation of the first steppe empire in Inner Asia by the Xiongnu 2,220 years ago – a celebration announced by the President of Mongolia, Tsakhia Elbegdorj. It is an honor for us that the German Embassy in Ulaanbaatar has chosen this volume as the German cultural contribution to this anniversary celebration.

Like many larger endeavors, this book, too, has its own history. In the beginning, it was the idea of two younger determined scientists to assemble the leading researchers and heads of excavations involved in the field of Xiongnu archaeology at a conference in order to exchange ideas and opinions on this subject. Ursula Brosseder and Bryan K. Miller were able to gain the Silkroad Foundation (California USA) as financial supporters of their plans and the American Center for Mongolian Studies (ACMS) as local organizers of the conference in Ulaanbaatar. Thanks to the exceedingly professional and experienced work of Brian White and Enkhbaatar Demchig of ACMS, the conference on “Xiongnu Archaeology”, held on October 16–18, 2008, in Ulaanbaatar, still remains a pleasant memory among the participants. The conference was planned in close and customary friendly cooperation between four institutions: the Institute of Archaeology of the Mongolian Academy of Sciences, the National Museum of Mongolia, the University of Pennsylvania and the University of Bonn. The evening receptions given by the embassies of the Federal Republic of Germany and the United States of America in Mongolia formed a distinguished backdrop, exemplifying the constant support shown by both countries to activities of archaeological researchers in Mongolia.

In general, the entire scope of research activities in a single field usually cannot be circumscribed within one conference alone, and the papers presented at the conference alone clearly would not suffice for a comprehensive work worthy of publication. Therefore, the two organizers of the conference, who are also the editors of this volume, developed the concept for a publication of the conference proceedings which would encourage previous participants to expand their respective contributions and to bring them up to date and which would acquire contributions from additional renowned researchers in this field. The result of this concept is an imposing and weighty (in the two-fold sense of the word) compendium on the archaeology and history of the Xiongnu. Represented in this tome are not only the traditional approaches, but also the most recent results of on-going field research projects and of modern scientific analyses, whose potential for future research should not be underestimated and which now enable initial insights into the spheres of herd management and nutrition.

The fact that hitherto a volume such as this had not appeared led me to include it in our series of publications at Bonn University. Research in this area certainly profits from the fact, that no other epoch in the history of Mongolia been studied archaeologically so well and has been

explored by so many international expeditions and specialists. To demonstrate simply the great international interest in the Xiongnu, let it be noted here that dissertations on the first steppe empire are either on-going or being completed at many universities in the USA, France, Switzerland, Korea, China, Russia, and of course Mongolia.

The publication of this volume was made possible by an additional contribution from the Silkroad Foundation as well as the Gerda Henkel Foundation, both of which have already provided funding for numerous projects on the archaeology of Mongolia. The two editors were responsible for editing and redaction of the volume, assisted by Cornelia Majehrke, Bonn, while Susanne Reichert, Bonn, supported the English language corrections. Image editing was in the experienced hands of Gisela Höhn, Bonn, and Matthias Weis, Bollschweil, managed the typesetting, layout and printing in his usual great competence. The volume was published by the Freiburger Graphische Betriebe.

In conclusion, I extend my sincere thanks to all participants in this endeavor for their industrious work and commitment.

Jan Bemmann

April 2011

PREFACE

It is a pleasure to provide some introductory remarks for this pathbreaking volume, just as it was a great honor to have contributed concluding thoughts to the conference on which it was based. As a member of the Silkroad Foundation's Board of Advisers and editor of the Foundation's journal, I am particularly pleased to highlight the role the Foundation has played in supporting excavation of Xiongnu sites in Mongolia and in the publication of their results. The Foundation was a major sponsor of the conference in 2008 in Ulaanbaatar whose papers are being published here along with other solicited contributions on Xiongnu archaeology. Other sponsors of that conference and the current volume are credited elsewhere here; to them I express deep gratitude. Without them, this significant landmark in the advancement of Xiongnu studies could not have been passed.

The following remarks combine ones I made at the conference with my impressions from reading the pre-publication versions of most of the articles in this volume. As with any good scholarly contribution, this volume both looks back and projects ahead. That is, we find here on the one hand engagement with some of the earliest attempts to study the Xiongnu and summaries of excavations, and on the other hand theoretical and methodological perspectives which should help broaden and deepen our understanding of the Xiongnu in the years ahead.

It is clear that one of the challenges of this field of study, as with any involving a broad spectrum of international specialists, is effective communication of results and engagement with the work of others whose languages – both in the sense of the vernacular and in the broader sense of conception and methodology – may not be ones we command. While fields of study evolve and methodologies change, it often takes some time for those changes to be reflected in current practice and analysis. One may not always agree with new approaches, but surely one must actively engage them. It is precisely for this reason that events such as the First International Conference on Xiongnu Archaeology are held and their papers then published. To hold such a conference is a logical outcome of the significant fact that there are so many joint projects in Mongolia involving scholars from the host country working alongside those from many other countries. This process of collaboration has not only resulted in the production of significant new factual knowledge, but perhaps more importantly has served as the means for the sharing of ideas in ways that strengthen the foundations for further advancements in our understanding of the remarkable past of the peoples of Mongolia.

In my remarks at the closing session of the conference in 2008, I offered a few thoughts about what the future of Xiongnu studies might involve. I began with a question:

If we were to meet for a similar conference of Xiongnu specialists in ten or twenty years, what might we hope to see which has changed in Xiongnu archaeology compared to what we know in 2008?

First, what might we hope would have been accomplished in field work? I think one of our priorities should be to extend considerably the good work in field survey and mapping which

is already underway in some of the vast territories once occupied by the Xiongnu. It is clear even from low-resolution surveys that there is a huge number of sites waiting to be identified. Arguably some of them are the ones where we are more likely to find undisturbed remains. There is much we have yet to learn to contextualize individual burials both spatially and chronologically and to learn about a broad cross-section of Xiongnu society, not just those connected with the ruling elite in the central places of the Xiongnu polity.

While this may seem like a heretical thought, one might even argue that prioritizing intensive survey (such as that done in the Khanui valley) over excavation for a time would make sense, especially if it may still be difficult to ensure that excavations are carried out with necessary employment of the most advanced archaeological methods. While we are not in danger of soon exhausting the number of Xiongnu burials that might be excavated, it would be unfortunate if we did not maximize the amount of information which can be obtained from them. As several of the papers below emphasize, one of our highest desiderata is to learn more about the realities of daily life of the Xiongnu – how they interacted with their local environment, exploited resources, etc. Intensive survey has begun to provide interesting insights for the eventual answering of such questions, as now increasingly do some of the new analytical techniques for studying such artifacts as faunal remains.

In the field, we certainly might hope in ten or twenty years to have learned a lot more about Xiongnu settlement sites (for a broad, if not deep survey of settlement archaeology in Mongolia, see Waugh 2010). To date, few are known, and few have been systematically investigated. One of the most promising new developments has been to develop methodologies for identifying small “open-air campsites” (see Houle/Broderick, this volume), in contrast to the arguably much rarer walled enclosures such as Ivolga or the yet-to-be-studied Khermen (Tamir 2) – if indeed it is a Xiongnu site. The latter is huge, and to begin to learn from it would require a major commitment of resources (see Purcell/Spurr 2006). I think if I had to make the choice between excavating yet another square-ramped tomb, with the virtual guarantee of finding interesting artifacts, or undertaking a multi-year project (assuming it could be funded) at a settlement site where there is greater uncertainty as to what might be discovered, I would opt for the latter project.

The second thing I would hope we might see in the next decades is the training of additional cadres of highly skilled archaeologists and the provision of the means for their employment in the field. In particular, it seems to me that it is essential to focus on such training here in Mongolia and in the other areas where the Xiongnu material is to be found. Obviously a lot has been accomplished, where successful international collaborations have had as one very important result the sharing of ideas and new methodologies. Yet, as we know, funding for such ventures is always uncertain, and none of us would suggest it is by any means sufficient to support all that we would wish to see done. I have to wonder whether there might not be greater coordination across the range of expeditions undertaken every year in order to achieve the greatest result from limited resources.

One important contribution to the process of ensuring the highest quality of the work would be to try to enhance the technical capacity of the laboratories in which the analysis of finds should best take place. To date, as I understand it, material has often been sent out of Mongolia or Buriatia for analysis in Novosibirsk, St. Petersburg, Paris, Seoul, or Bonn. A concerted effort to obtain funding for new equipment and the training of those to operate it might obviate the necessity of doing the analysis elsewhere. To have the resources available locally might ensure that certain kinds of analysis be done routinely, rather than be abandoned for want of the capacity to carry them out.

Another desideratum worth mentioning here concerns conservation. As recent experience has shown, e.g., in the Mongolian-American Khovd Project, having a highly trained conservator in the field, properly equipped, can make a huge difference. I have to imagine that such individuals are not only relatively few, but that obtaining their services to work at Xiongnu sites may be difficult. Presumably there is a great deal that might be done to train conservators and to improve the techniques which might be specific to the preservation of Xiongnu material. We should want to arrive at a point where the conservators would be from the host country, and not have to be lured from the outside.

The third area I would emphasize is cooperation and the sharing of information. One of the goals of our conference has been to lay the basis for greater cooperation and sharing for the future. I should note that, despite the numerous felicitous examples to the contrary, not only in Xiongnu archaeology but also in many other fields of scholarly endeavor, what is sometimes noteworthy, alas, is not the degree of cooperation amongst the experts, but rather rivalry and lack of cooperation.

We badly need a clearing house for sharing our results and making them readily available as quickly as possible. There are various projects underway for at least certain areas of Eurasian archaeology which might provide the framework for a Xiongnu-specific clearing house (see the reports published in *The Silk Road* 2,2, 2004). Whether this will have been realized in a decade or two is a good question, but eventually there probably will be an electronic database that will connect much of Eurasian archaeology (both past and ongoing work) through the Internet. While we should want to coordinate with such undertakings in order to adopt compatible standards, there is no reason why a Xiongnu database should not be undertaken sooner. This would require though agreement on common standards for recording and processing information and then trying to ensure that individual projects conformed to those standards.

Once that has been done, it would be possible to post excavation reports in some kind of standard format. We are well aware of the substantial delays which historically have plagued the publication of archaeological reports – indeed some of the most interesting results from excavations long ago in Mongolia have never been published, and there are numerous unanswered questions about what exactly was discovered and what the archaeological context was. The digital age now provides us with the means to get the information out in timely fashion, without incurring the kind of financial outlays which publication of archaeological reports in hard copy tends to involve. In addition, the clearing house would involve retrospective digitizing of earlier work in the field, the translation of reports so that they would be available in at least two or three major scholarly languages, the creation of a forum for ongoing discussion, a Xiongnu blog, if you wish, and presumably much more. There really needs to be an ongoing bibliography of Xiongnu studies. Since so often relevant material is published in editions that are almost impossible to obtain or are in languages not all of us read, something needs to be done to facilitate access.

What we might be aiming for here is a project that perhaps could be christened the IXP, the International Xiongnu Project, analogous to the International Dunhuang Project, based at the British Library (<http://idp.bl.uk>), which has already achieved so much for Dunhuang studies. Now, such an undertaking requires commitment, personnel and money. I do not have a magic solution for obtaining any of those, but Xiongnu specialists surely could start engaging in conversations about how to meet these challenges.

In conclusion, I must reiterate my optimism that the Xiongnu conference in 2008 and this volume of its papers will have a significant impact on Xiongnu studies in the future and not

result merely in a one-time exchange of ideas. I would hope that, were I around to see it in a decade or two, the field of Xiongnu archaeology would have been so transformed that it might, from my perspective of 2008 to 2010, almost seem like a foreign country.

Daniel C. Waugh

December 2010