

Preface

In autumn 1997 the University of Bonn received a request from the Mongolian Academy of Sciences to conduct new excavations in the area of the capital city of the Mongolian empire, Karakorum. This request arose out of the endeavours of the Mongolian colleagues to modernise historical and archaeological research on the old Mongolian capital, in advance of celebrations in 2006 for the 800th anniversary of the instatement of Genghis Khan as Great Khan of all Mongolian people.

Prof. Dr. Klaus Sagaster, the former director of the Seminar of the Study of Languages and Cultures of Central Asia at the University of Bonn, who had cultivated close contact to scientific institutions in Mongolia, was now asked to recruit German archaeologists for such a project. It soon became clear during the initial discussions that one excavation project alone would hardly suffice to cover the comprehensive aims, which would entail foremost the correlation between the history of the building and settlement of the city. Therefore, scientists from the University of Bonn joined up with colleagues from the *Kommission für Allgemeine und Vergleichende Archäologie des Deutschen Archäologischen Institut* (Commission for General and Comparative Archaeology or KAVA; since 2005 Commission for Archaeology of Non-European Cultures, or KAAK, of the German Archaeological Institute) to continue in Mongolia the collaborative work which both institutions had carried out in Nepal and Sri Lanka since the beginning of the 1990s.

With the support of the *Deutscher Akademischer Austauschdienst* (German Academic Exchange Service, or DAAD), in March and April 1998 a group of scientists from Bonn, including Prof. Dr. Klaus Sagaster, Prof. Dr. Hans Mommsen, Prof. Dr. Hans-Georg Hüttel and Dr. Ernst Pohl travelled to Mongolia for preliminary discussions and an initial visit to the terrain of Karakorum. In April 1998, a memorandum with a joint declaration of collaborative work in Karakorum was signed by both sides, and the Mongolian-German Karakorum Expedition (henceforth: MDKE) was formed.

During the state visit to Mongolia by the President of the Federal Republic of Germany, Prof. Dr. Roman Herzog, on September 18, 1998, only five months after the preliminary discussions, the agreement for this cooperative project was officially signed by Prof. Dr. Baatar Chadraa (Mongolian Academy of Sciences), Prof. Dr. Wolfgang W. Wurster (German Archaeological Institute) and Prof. Dr. Helmut Roth (University of Bonn) in the area of the old Mongolian capital of Karakorum (Fig. 1). In a joint declaration on May 30, 2000, the presidents of both countries assumed patronage of the project. Since this date, the political significance of Mongolian and German research in Karakorum has remained evident due to repeated visits of Mongolian statesmen to the site of excavations. In 2005, at the wish of all involved, the cooperation contract of the MDKE was extended for five more years.

Since 1999 two projects, each working independently and providing logistical support, have been running in cooperation with the Institute of History in Mongolia, and as of 2003 with the newly established Institute of Archaeology of the Mongolian Academy of Sciences in Mongolia. One project has been given the abbreviation 'KAR-1' and involves the activities of KAAK, led by H.-G. Hüttel; its focal point of research is the so-called palace area in the southwest of the city. At the outset of excavations, the opinion was often expressed that this was the site of the residence of the Mongolian great khans until the capital was relocated to Shang-tu and later to Beijing.

The second project, 'KAR-2', previously headed by H. Roth and now by his successor Prof. Dr. Jan Bemmann of the University of Bonn, is concerned with excavations which were undertaken in the centre of the city under the direction of E. Pohl, in order to document the entire chronological time span of urban settlement. The excavations of the University of Bonn have followed two major objectives, which evolved from the history of the city as recorded in historical sources (cf. Hüttel 2004; 2005). To begin with a framework



Fig. 1. On occasion of the state visit to Mongolia by the President of the Federal Republic of Germany, Prof. Dr. Roman Herzog, on September 18, 1998, in the area of the old Mongolian capital of Karakorum, the cooperative project was signed by (from right to left) Prof. Dr. Baatar Chadraa (Mongolian Academy of Sciences), Prof. Dr. Wolfgang W. Wurster (German Archaeological Institute) and Prof. Dr. Helmuth Roth (University of Bonn).

of chronological dates for the city had to be established. Thereby, as a complement to historically documented dates, work was concerned primarily with questions regarding the founding and planning of the city, its inner subdivision during different periods of time and the length of settlement.

The second objective was to reassess the extent to which the change in the city's importance and function as known from written sources is reflected in material finds, eg. Chinese tableware and botanical and zoological remains (ie. supply of the population with imported foodstuffs).

A district located directly south of the central intersection of the main north-south street through Karakorum was chosen for investigation. Here the topography was marked by a raised terrain with numerous platforms, mounds of debris and the axes of roadways. Under the mounds of debris lay the remains of buildings or complexes with courtyards that once stood along the street. The height of the individual mounds as opposed to the normal surface level justifies the assumption

that structures from a succession of several building phases can be found there. Under favourable conditions, this would enable the correlation of archaeologically attested breaks and continuities with historically documented epochs in the city's history and, thus, help to augment the sometimes sparse framework of dates.

Moreover, our excavations were also concerned with questions as to the status and activities of the population that lived at the street. According to written sources, members of various ethnic groups lived in Karakorum, practicing different trades. The best source of information here is the travel diary of the Franciscan monk William of Rubruck, who reported a merchants' quarter, which was apparently dominated by Muslims, and a craftsmen's quarter in which Chinese lived and worked.

In the course of excavation, a great amount of evidence was gathered that related to handicrafts and trades practiced along the street or in the back yards of buildings in the centre of Karakorum. In all excavation trenches and

throughout the building levels, fireplaces and ovens were repeatedly found that were used in processing different materials. The presence of slag and crucibles is evidence of metalworking as well as the production and processing of glass products, especially glass beads. Further handicrafts attested during excavations include the carving of bone and precious stones as well as the production of birchbark objects, evidence for this being raw materials, semi-finished products, debris and the finished products themselves.

After clarifying the stratigraphy, reaching the original surface soil in several trenches and documenting several significant and unique find contexts in the craftsmen's quarter, excavations were concluded at the end of the 2005 season; then work on processing and studying the finds began.

The University of Bonn's expeditions to Karakorum were supported by the Ministry of Science and Education of the state of Nordrhein-Westfalen from 1999–2001. Aside from the annual costs of the project, this also included a start-up financing for the acquisition of two vehicles for the project. For this support on the part of the Ministry our sincere thanks are extended to MR Dr. D. Möhler, MR B. Reith and OAR M. Peppekus. The Directorate-General for Culture and Communication of the Federal Foreign Office continued the financial support of the project as of 2002, for which our special thanks are offered here to MD Dr. A. Spiegel. In 2003–2005 the Federal Ministry of Education and Research continued the sponsorship of the project. Our gratitude goes to Dr. K.-Chr. Blaesing and his successor Dr. Chr. Stienen for the department's year-long funding, and also to T. Schierer and Dr. L. Mennicken, who were responsible for the financial calculations. In particular, our thanks go to Dr. K. Korn-Riedlinger and Dr. E. Jobst, who, with their never-dying élan and enthusiasm encouraged our work in Mongolia.

We are also grateful to the German Academic Exchange Service (DAAD) for its year-long support of the project. The office's continuous sponsorship of short-term teaching contracts made it possible to carry out the advanced education programme in the form of a series of lectures for the future generation of Mongolian archaeologists, as formulated in the MDKE's cooperative contract.

Furthermore, through the DAAD's support in cooperation with the Academy of Sciences, a bilateral scientific exchange program was

created, which enabled several trips to be made to Mongolia, and helped us keep in contact with our Mongolian partners. Our sincere thanks for this permanent backing go to Dr. D. Rüland and Dr. K. Birk as well as their counterparts, Secretary General of the Academy Prof. Dr. D. Regdel and Dr. S. Saran, in Mongolia.

Our research would not have been possible without the multifarious support and help from institutions and persons in Mongolia. First and foremost is the Academy of Sciences with its president Prof. Dr. B. Chadraa. Thanks to his efforts and those of Dr. T. Galbaatar, at that time Secretary General, then Ambassador of Mongolia in Germany, German archaeologists were allowed to undertake activities on the terrain of the old Mongolian capital city. We are indeed most indebted for this decision of such scientific-political importance, for it shows the great trust that the Academy has towards German archaeological research. Following his appointment to the ambassadorial position in Berlin, Dr. T. Galbaatar has continued to aid the work of the MDKE in many ways and keeps a paternal watch over the successful progression of the project as well as the partnership.

Ultimately, the colleagues and friends of the Institute of Archaeology of the Academy of Sciences of Mongolia are the people who contributed decisively to the realization of this project. The director of the Institute, Prof. Dr. D. Tseveendorzh, and until recently the officiating director of the section for Medieval Studies, Prof. Dr. D. Bayar, receive our sincere thanks here for their attentive care, which ensured efficient and reliable cooperative work. Prof. Dr. Bayar and Dr. U. Erdenebat have participated in all excavations as project leader on the part of the Mongolian partners, and after working together for many excavation seasons we have become good friends. The same applies to the students and young colleagues from Mongolia, L. Mönkhbayar M.A., G. Nomguunsüren M.A. and S. Khürelsühk M.A., who received archaeological training on site and will hand over this knowledge to the following generation of students. The project was able to win the support of Dr. Kh. Ariunchimeg and Dipl. Ing. S. Ochirpurev as participants in the excavations. Their organisational talents and friendship was and still is indispensable for the success of the project. Indeed, the teamwork has led to good friendships!

We are indebted to the Embassy of the Federal Republic of Germany located in Ulaan-

baatar, which, since the very beginnings of the MDKE ten years ago, has provided constant support for the project. Our thanks go to the former ambassadors J. Elias, K. Schröder, M. Vorwerk (†), U. Dreesen and the present ambassador P. Fischer. Equally sincere thanks are extended to R. Nuklies und M. Rossbach, both secretaries responsible for cultural matters.

Large-scale excavations at tell-like urban settlements demand not only a large number of excavation workers, but also a staff of experts, who possess sufficient experience in excavations and, thus, can guide workers in the correct procedures. It was decided from the very onset of the MDKE that a younger generation of Mongolian scientists should be trained in this process. Therefore, staff members with enough excavation experience were chosen each year, who were capable not only of applying their knowledge to unusual structures, but also of imparting this knowledge further to Mongolian colleagues. The following persons listed as participants in the excavations possessed these outstanding capabilities; many have returned several times to work in the excavations in the past years. Active as trench director and member of the team processing the finds were: B. Ahrens (2005; Bonn), E. Becker M. A. (2001; Berlin), Dr. U. Brosseder (2001; now in Bonn), D. Fischer (2002; Bonn), M. Horlemann (2000–2003; Römisch-Germanisches Museum Köln), M. Janßen (2003; Bonn), H. Kelzenberg M. A. (2000; 2002–2005; Bonn), P. Kießling M. A. (2003; Bonn), H.-J. Lauffer (2004; Bonn), S. Liebetau (2003–2005; Bonn), D. Pluppins (2002; Bonn), C. Pohl-Thiblet M. A. (2000–2001 and 2004–2005; Bonn), T. Potthoff (2000; Bonn), H. Prison (2002; Bonn), Dr. M. Schefzik (2000; now Halle/Saale), A. Schröder (2003–2004; Bonn), D. Үтүрүга (2004–2005; Bonn), J. Uschkoreit M. A. (2005; Bonn) and M. Wiehen (2001; Bonn). Dipl. Ing. (FH) A. Bechstein has been active as technician at the excavations since 2001 and was responsible for all technical aspects in excavation work. Our thanks are extended to all of these persons for their commitment.

With the motivation and support of our Institute, other scientific groups have participated in investigative work on the terrain of Karakorum during the many excavation seasons. The Helmholtz Institute of Nuclear Physics of the University of Bonn, led by Prof. H. Mommsen, and Dipl. Phys. R. Renner carried out geomagnetic survey in a large part of the southwest area of the city in 1999 and

2000, where they were able to attest several building phases (cf. Mommsen / Jansen / Renner 2001). At the same time Dipl. Ing. A. Rieger, S. Kühn and M. Tisler of the Department of Geodesy at the University of Applied Sciences in Karlsruhe surveyed and measured the surface structures of almost the entire southern urban area. The surface relief that thereby emerged has contributed fundamentally to understanding the various structures on the city's terrain. In association with the research programme of the German Archaeological Institute in 2006, a surface plan of Karakorum – at that time still unfinished – was completed, so that in the future a complete image of the surface relief will be accessible (eg. Hüttel 2008, Abb. 66).

Another group from the University of Heidelberg and the Landesdenkmalamt Baden-Württemberg, led by Prof. Dr. M. Rösch has carried out palaeobotanical investigations since 2002 (cf. Rösch / Fischer / Märkle 2005). At the wish of our Mongolian partners, and helped by Dipl. Biol. E. Fischer and Dipl. Biol. T. Märkle, M. Rösch is engaged in training Mongolian students in various aspects of palaeobotany. Initial results of the joint investigations, in which B. Oyuntuya took part, will be presented in this volume.

In 2006, a summer school in Ulaanbaatar was set up with the support of the German Academic Exchange Service, dedicated to the processing of archaeological, palaeobotanical and palaeozoological finds from the excavations. Prof. Dr. A. von den Driesch and Prof. Dr. J. Peters (University of München), as well as E. Pohl and M. Rösch, lectured on the subject of palaeozoology. L. Delgermaa M. A. represented the Mongolian scientists in palaeozoological part of this cooperation.

The radiocarbon dates for the excavations that are published in this volume stem from two different laboratories. This is due to the differences in the size and material of the samples taken, as well as the conventional measurements and the AMS measurements that were carried out. Conventional datings were made in the radiocarbon laboratory in the Academy of Sciences in Heidelberg at the Institute of Environmental Physics, University of Heidelberg. Dr. B. Kromer and his staff deserve our sincere thanks for providing these dates. The AMS-datings were made in the AMS Radiocarbon laboratory in the Institute of Physics, University of Erlangen; here as well we wish to express our gratitude to Dr. T. Uhl and his staff for their work.

Following the publication in 2002/2003 (Roth et al. 2002) with the initial results of the excavations of 2000–2001, this volume presents new contributions by authors from different fields of study and countries in accordance with the interdisciplinary-oriented approach to work and the international cooperation of work groups. Thereby, archaeological as well as natural scientific results form one focal area, which is associated with the excavations of the University of Bonn in the centre of Karakorum (cf. articles 5–12). Articles 2–4 and 13 pertain to former excavations in Karakorum; they are augmented by two geoscientific contributions (articles 1 and 14) as well as a study of the history of the Buddhist monastery Erdeni Joo (article 15). To all of the authors we extend our profound thanks for their valuable contributions and laudable cooperation.

In addition to the authors there are a great number of persons who were involved in the preparation of this publication. The drawings of bone and clay artefacts were made by our associates D. Uuriintuya M. A. in Mongolia and A. Binder von Krieglstein-Bender and G. Höhn in Germany. During two excavation seasons Dipl. Rest. A. Steffen restored selected finds for the exhibition “Genghis Khan and his Heirs, The Empire of the Mongols” in Bonn with the support of the Art and Exhibition Hall of the Federal Republic of Germany in Bonn. A selection of these finds is published in this volume. Graphic work (digitalisation, mounting, image adjusting) was in the able hands of G. Höhn and A. Bechstein in the Institute of Prehistoric and Early Historical Archaeology of the University of Bonn and H. Wittersheim at KAAK. H. Prümers assumed the task of editing; E. Schalk (Berlin), P. Yule (Heidelberg) and S. Harder (Rendsburg) undertook translating the German texts into English and corrections. Our sincere thanks go to all of these persons.

This publication of the first results of excavations in the city centre of Karakorum is to be followed by further similar studies. A dissertation by G. Nomguunsüren is concerned with the supposed indigenous grey pottery. It is a part of an extensive study on this group of wares, which has been known since the Xiongnu epoch during the centuries around the birth of Christ, and which can be traced continually throughout the early historical epochs until the high medieval period. The study of this particular ceramic category should enable the first presentation of a complete

catalogue of wares and types of a specific material group found within Mongolia, as well as pursuing the question about the possible production of this pottery by mounted nomad populations. Together with the presentation of coins by HD Dr. S. Heidemann (University of Jena), bronze and iron weights by Prof. Dr. H.-U. Vogel (University of Tübingen), birchbark fragments by Dipl. Rest. I. Przemuß (restoration and excavation techniques at the University of Economic and Technical Studies, Berlin), and a catalogue of the find contexts, these principal aspects will determine the programme of future publications during the next few years.

The commitment of the University of Bonn in Mongolia still continues after the conclusive excavations at Karakorum. In summer 2007, together with our colleagues from the Mongolian Academy of Sciences, the National Museum of History in Ulaanbaatar and the German Archaeological Institute, we held the First International Conference on Archaeology in Mongolia, which was made possible by the generous financial support of the Gerda Henkel Foundation. In the course of the four-day conference, more than 40 project reports were presented. With this convocation, it was possible to carry out and intensify the international exchange of knowledge about all periods of time in the archaeology of Mongolia. Since 2008 members of the Institute of Archaeology in the University of Bonn in association with geographers from the Free University of Berlin, development technicians from the DLR at Adlershof in Berlin, and geophysicists from the Institute of Photonic Technology in Jena and the RWTH Aachen University conduct geoarchaeological investigations in specific areas of the Orkhon valley for the next three years. These investigations, which once again are supported by the Federal Ministry of Education and Research, are situated at the interface between the arts and natural sciences; they are devoted to the relationship between humans, the environment and the city and its surroundings in the steppe. Thereby the reconstruction of the development of the landscape in the immediate surroundings of Karakorum is the centre of our interest.

The year 2008 marked the tenth anniversary of the founding of the Mongolian-German Karakorum Expedition! It was in March/April 1998 that Klaus Sagaster made his final official visit as director of the Seminar of the Study of Languages and Cultures

of Central Asia of the University of Bonn to Ulaanbaatar, during which he and Hans Mommsen, Hans-Georg Hüttel and Ernst Pohl made the initial steps towards future German archaeological research in Mongolia. Without the year-long efforts of K. Sagaster and the request of the Academy to venture upon a cooperative project in Karakorum, we would not be working in archaeological field work in Mongolia today. For this reason we wish to dedicate this publication to the “fathers” of the Mongolian-German Karakorum Expedition: Prof. Dr. K. Sagaster, Prof. Dr. B. Chadraa and Dr. T. Galbaatar, combined with the hope for a long-term continuation of this successful cooperation.

Bonn, Ulaanbaatar,
Summer 2009

J. Bemmann, U. Erdenebat, E. Pohl

BIBLIOGRAPHY

Hüttel, Hans-Georg

2004 Im Palast des ewigen Friedens – Die mongolisch-deutschen Ausgrabungen im Palastbezirk von Karakorum. In: Expeditionen in vergessene Welten. 25 Jahre archäologische Forschungen in Afrika, Amerika und Asien. Forschungen zur Allgemeinen und Vergleichenden Archäologie 10: pp. 179–208. Aachen.

2005 Karakorum – Eine historische Skizze. In: Dschingis Khan und seine Erben. Das Weltreich der Mongolen, pp. 131–137. München.

2008 Ausgrabungen des DAI und der Mongolischen Akademie der Wissenschaften in Karakorum 2005–2006. Zeitschrift für Archäologie Außereuropäischer Kulturen 2: 402–412. Wiesbaden.

Mommsen, Hans / Jansen, Florian / Renner, Roger
2001 Geomagnetische Prospektionsmessungen in Karakorum, Mongolei. In: Pohl, Ernst / Recker, Udo / Theune, Claudia (Hrsg.), Archäologisches Zellwerk. Beiträge zur Kulturgeschichte in Europa und Asien. Festschrift für H. Roth. Studia Honoraria 16: pp. 71–77. Rahden/Westf.

Rösch, Manfred / Fischer, Elske / Märkle, Tanja
2005 Human diet and land use in the time of the Khans – Archaeobotanical research in the capital of the Mongolian Empire, Qara Qorum, Mongolia. In: Vegetation History and Archaeobotany 14 (4): 485–492. Heidelberg.

Roth, Helmut R. / Erdenebat, Ulambayar / Nagel, Eva / Pohl, Ernst (eds.)

2002 Qara Qorum-City (Mongolia) I. Preliminary report of the excavations 2000/2001. Bonn Contributions to Asian Archaeology Vol. 1. Bonn.

Figure credits

1 Christian Stutterheim, Presse- und Informationsamt der Bundesregierung, Bundesbildstelle Bonn.