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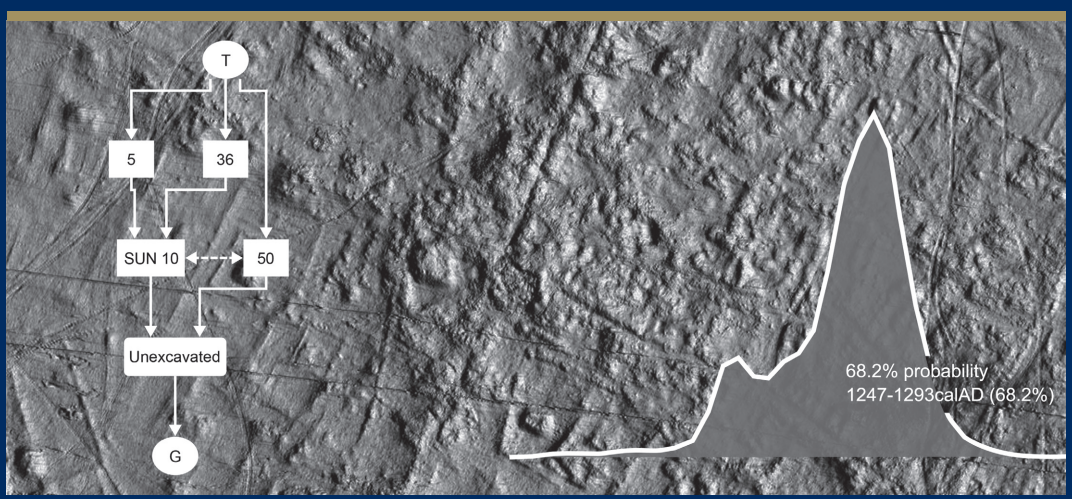
*Susanne Reichert*

# A Layered History of Karakorum Stratigraphy and Periodization in the City Center



# A LAYERED HISTORY OF KARAKORUM

Bonn Contributions to Asian Archaeology

Volume 8

Mongolian-German Karakorum Expedition

Volume 2

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# A LAYERED HISTORY OF KARAKORUM

## Stratigraphy and Periodization in the City Center

Susanne Reichert

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# PREFACE

This volume presents the stratigraphic analysis of the excavations by Bonn University in Karakorum from 2000 to 2005 which forms the basis of my Ph. D. thesis (Reichert 2020). When I first visited Mongolia in 2009 I did not imagine that I would be writing my Ph. D. on Mongolian archaeology let alone would be actively involved in research there as I have been for the good part of the past ten years and I would not want to miss it for anything. I feel very fortunate to be given these opportunities, for which I thank Prof. Jan Bemmann most heartfully.

The work had been supported by Ph. D. scholarships by the DAAD and a position within the DFG graduate school 1878 "Archaeology of Premodern Economies" at the universities of Bonn and Cologne. The present publication was generously supported with financial aid by Deutsche Forschungsgemeinschaft (DFG) and the foundation Geschwister Boehringer Ingelheim Stiftung für Geisteswissenschaften (Siblings Boehringer Ingelheim Foundation for the Humanities), Mainz.

Concerning the chapters gathered within this volume I am particularly grateful to Dr. Timo Bremer (Bonn University) and Jonathan Schönenberg M. A. for their insight into stratigraphic issues and the usage of their stratigraphic software package. Dr. Güde Bemmann and Dr. Ute Arents efficiently undertook the revision and copy-editing work, I am most grateful to them, all remaining mistakes are of course solely mine. Tobias Pfaff M. A. revised all figures and maps, another cumbersome work for which I thank him very much. For typesetting and layout I would like to thank Volker Babucke M. A. and Alina Bell M. A. I also thank Dr. Ernst Pohl, who was responsible for the field work on which this volume is based and who let me work on these materials. It goes without mention that such a work cannot be done without the support of my family and friends, to whom I am most indebted.

Susanne Reichert — Bonn, July 2019

# INTRODUCTION

Karakorum, located in the Orkhon Valley, central Mongolia (see Fig. 1), once was capital of the Mongol Empire, the largest contiguous land empire in world history. The city is one of the most important archaeological sites of the country and highly esteemed for its importance for the nation's genesis[1]. According to possibly interpolated written sources 1220 founded by Chinggis Khan (c. 1161–1227)[2], the designated place had been developed under his successors Ögödei and Möngke Khan since 1235[3]. It was thus a planned city, erected from scratch. From then, it served as administrative and fiscal center of the empire (Allsen 1996, 121). What becomes apparent from this circumstance is that there is no lasting tradition of fixed habitation sites that Ögödei could have used as capital city within the Mongol heartland. Fixed settlements, to avoid the term "city", are a recurring but intermittent phenomenon in the Mongolian steppes. Within the pastoral economy of Mongolia, the emergence of large, fixed habitation sites follows the emergence of large-scale polities: Earliest pre-cursors can be found during the time of the Xiongnu polity as expressed by rectangular walled sites the functions of which are still being discussed (Miller et al. 2019). Fixed sites reappear in a more pronounced and developed character during the Uighur period with Karabalgasun also situated within the Orkhon Valley as the most famous example (Dähne 2017; Hüttel/Erdenebat 2011). All of these sites, however, were only used for restricted periods and did not fuel sustained urbanization processes within the region. Although the Mongol Khans could surely have used a pre-existing town in the territories further west that they had conquered by then, they consciously decided to found their own city. The decline of Karakorum is not yet archaeologically determined with any certainty. After the capital status was transferred to Shangdu in 1260, the city kept administrative and ideological meaning. Sources reporting that even at the beginning of the 16th century Batu Möngke Dagan Khan (1470–1543) temporarily raised its status to capital again, however, need to be treated with caution. After the city had probably long been abandoned, in 1586 the large monastery "Erdene Zuu" was built on top of what we now assume to have been the palace area with construction material from the city[4]. Thus, it can be assumed that the erectors still had some knowledge of the ideological and political meaning of the locality. Even the modern city of Kharkhorin, which developed from the monastery and stretches west of the now waste area of Karakorum, echoes its ancient name. The main body of the old city is surrounded by a comparatively shallow rampart, the

1 See Dschingis Khan und seine Erben 2005, 31–32 Karte 3–6, for maps of the Chinggisid conquests during the 13th century. Morgan 2007 provides a concise introduction into the history of the Mongol Empire and its successor states.

2 For a detailed discussion on the disagreement among written sources on Chinggis Khan's year of birth see Hung 1951, 475–478.

3 Karakorum's founding date has been intensely discussed in research, starting with a first controversy on its correct localization as different readings of Juvainī led to confusion with Karabalgasun; see Abel-Rémusat 1825; Pelliot 1925. The bilingual inscription from 1346 passed on in literary and epigraphic fragments in Erdene Zuu as well as the *Yuan Shi* helped to identify the wasteland north of Erdene Zuu as the locale of Karakorum and attributes the decision to found a city or rather the designation as the place for a residence in the Orkhon Valley to Chinggis Khan, while actual building activities started only later in 1235; Abramowski 1976, 130; Cleaves 1952; Munkhtulga 2005; Sagaster 2005. It is therefore important to clearly differentiate between these two phases in the city's genesis; Di Cosmo 2014/15, 69–70; Hüttel 2007, 286–287; Pelliot 1959, 167; Pohl 2009, 513.

4 See Hüttel/Erdenebat 2011; Kiselev/Merpert 1965a; contradicting view see Brandt/Gutschow 2003, 41.

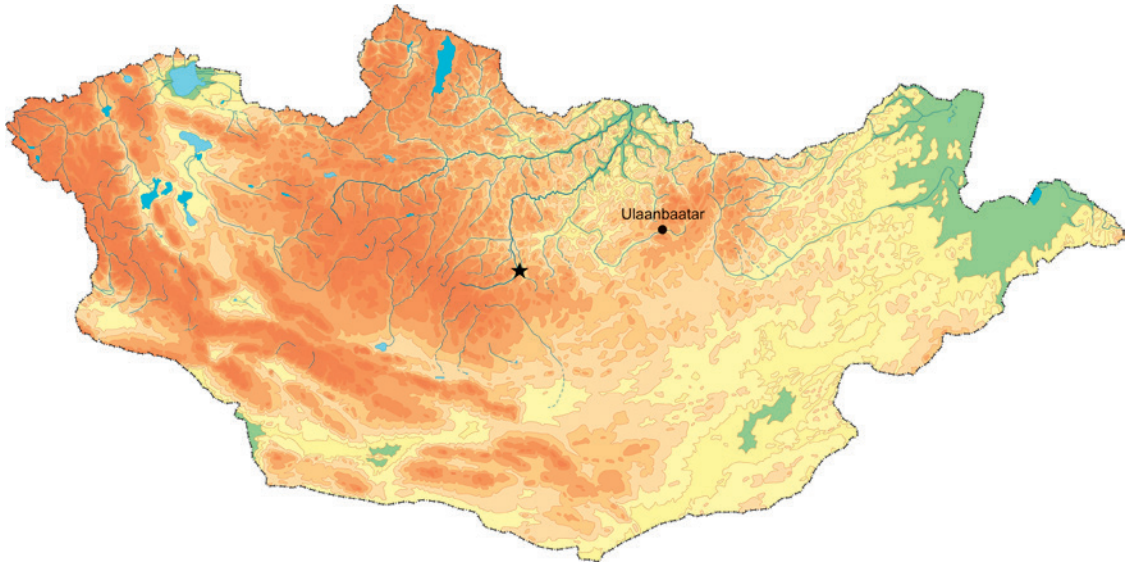


Fig. 1. Karakorum's location in modern-day Mongolia (size of Mongolia: 1,566,000 km²) (© Bonn University).

defensive worth of which had been questioned (Kiselev/Merpert 1965b, 173). This area of approximately 1.65 km² displays a densely-developed structure of building mounds within the southern and central parts that loosens towards the northern extent. This northern area might have been used as camping grounds with yurts as traditionally used by the pastoral people (Kiselev/Merpert 1965a, 126), although written sources stay conspicuously silent on the question of pastoralists living within the confines of the city. The settled area, however, does not stop at the surrounding wall, the developed area stretches outside the main body, which can be easily seen on topographical surveys (Hüttel/Erdenebat 2011, 65 Fig. 5) and even on conventional satellite imagery. The first published map by Wilhelm Radloff already took notice of compounds and building platforms with up to 2.6 km distance from the outer city wall wide outside the walled area (Radloff 1892, Pl. 36). The overall extent still needs to be determined. Keeping all that in mind, it is all the more surprising that the excavations by Bonn University in the geographical center of Karakorum near the point where the main north–south and east–west ranging roads meet (Fig. 2) yielded layered settlement remains, not unlike tell stratigraphies commonly found in Near Eastern archaeological sites, of about four meters thickness (Fig. 3). The excavations by Bonn University from 2000 to 2005 were led by the late Prof. Dr. Helmut R. Roth (14 July 1941 – 22 September 2003) (local field director Dr. Ernst Pohl) and conducted under the framework of the Mongolian-German Karakorum Expedition (Mongolisch-Deutsche Karakorum Expedition, in the following short MDKE), a research collaboration between Bonn University and the Commission of General and Comparative Archaeology of the German Archaeological Institute (Kommission für Allgemeine und Vergleichende Archäologie des Deutschen Archäologischen Instituts), now Commission of Archaeology of Non-European Cultures (Kommission für Archäologie Außereuropäischer Kulturen – in the following shortly as KAAK) on the German side and the Mongolian Academy of Sciences on the Mongolian side[5].

5 On the development of this bilateral research cooperation see Bemmann et al. 2010b; Hüttel 2004, 179; Hüttel 2005. Excavations und following research were generously funded by the Ministry of Science and Education of the state of North Rhine-Westphalia (2000–2001), the Directorate General for Culture and Communication of the Federal Foreign Office (2002), and the Federal Ministry of Education and Research (2003–2005) as well as the German Academic Exchange Service (DAAD); Pohl 2009, 506 fn. 1; Roth 2002, 25.

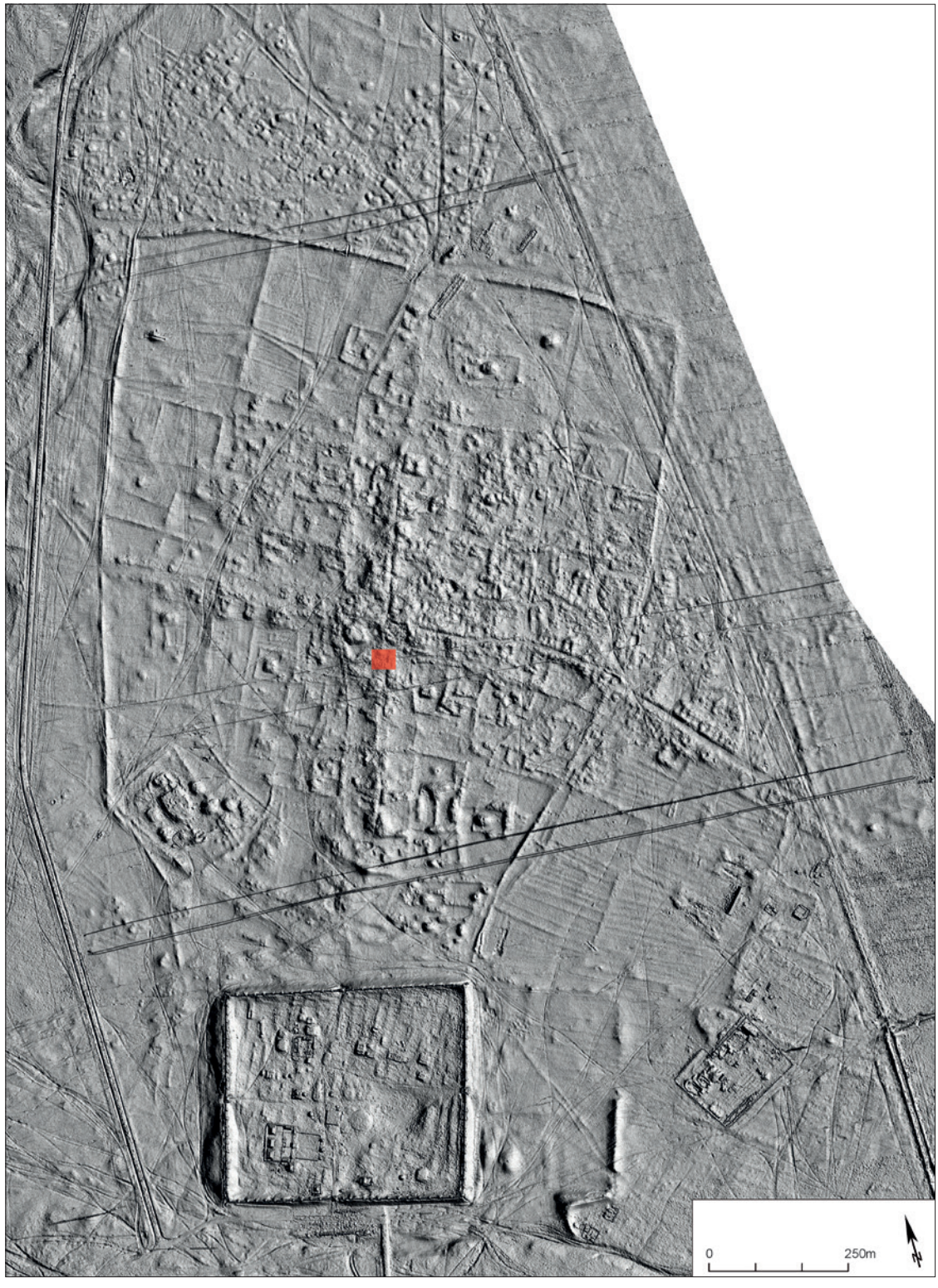


Fig. 2. Location of excavations (red) by Bonn University 2000–2005 ("KAR-2") in the city of Karakorum (topographic map is based on high-resolution survey data of a ground-based SQUID system. Some areas have been supplemented with aerial photo data [M. Oczipka, HTW Dresden]. Results from ongoing DFG project [Reference Bemmann and Linzen 2016–19]. Topography: S. Linzen, Leibniz-IPHT Jena, 2019).

Fig. 3. Photo of the massive settlement layers taken during excavation (© E. Pohl, Bonn University).

These excavations have been unmatched in their scope and archaeological substance in archaeological research of walled sites in Mongolia. They allow a detailed view into the lifestyle of the city center's population in the 13th and 14th century. Results have been presented so far in several preliminary reports and papers on specific aspects (Roth/Erdenebat 2002; Bemmann et al. 2010a). Karakorum is the only site in Mongolia with such a deep stratigraphy and therefore of the utmost importance for the periodization of find material, especially the development of a reliant chronological system of various ceramics wares, as well as contemporaneous sites[6]. The documented layers form thus a formidable basis for a relative sequence of occupation through time – a layered history of Karakorum – and at the same time, they contain material remains of various workshops feeding into a study of economic entanglements of Karakorum with the wider political history. The exposed workshops show evidence for iron, bronze[7], birch bark, bone, glass, textiles, and precious stones works, attested by slags, crucibles, tools, and installations such as furnaces (exposed area about 400 m$^2$). The present volume deals with the relative stratigraphical sequence and its absolute dating in time, while a second volume based on these results looks into the theme of craft production carried out at Karakorum (Reichert 2020)[8].

The first major analytical step will be the verification of the stratigraphic sequence of the areas excavated by Bonn University. Different periods will be defined, thus establishing a new chronological framework from the first settlement activities to the decline of the city. However, methodological foundations will be laid out initially. Before any in depth analysis of the archaeological material can take place formation processes that led to the existence of the archive and affect its chances of survival and retrieval need to be addressed. Four critical phases for the evaluation of the validity of the archaeological sources at hand will be introduced and discussed for the specific case of the excavations in the city center of Karakorum. Furthermore the stratigraphic analysis is based on the principles as derived from geological stratification as detailed for archaeological use by Edward Harris (1989), the documented stratigraphic relations are fed into a computer program that automatically reconstructs every feature's relations to any other. This tool is further combined with a cognitive sequence that results from a feasible combination of building structures, a reconstruction of room ground plans, which together inform the construction of sub-periods within specific excavation areas and the reconstruction of overall periods for the complete area discussed here. These periods will be set into absolute time settings by the combination with dates provided by a variety of data from dendrochronology, radiocarbon dating, coinage, and a seal. The resulting scheme will be the first complete stratigraphic sequence of a settlement site in Mongolia with such a scale of about 200 years of occupation.

6 Ceramics, either local or imported varieties, were not part of the presented Ph.D. work. The glazed ceramics were subject of another Ph.D. thesis: Sklebitz 2018.

7 Throughout this study, the term "bronze" is used to designate any copper-based alloy irrespective of the contents of tin, arsenic, or other admixtures. There are no analyses of the chemical composition of bronze artifacts from this collection.

8 The presented system of spatial units and periodization is intended to serve as formal basis for further, context driven analyses of the excavated materials in the future.