

**Západočeská univerzita v Plzni
Fakulta filozofická – katedra antropologie**

**Université de Paris I Panthéon – Sorbonne – UFR d’Histoire
de l’Art et d’ Archéologie**



Doctoral thesis

**ALOIS MUSIL (1868 – 1944): ARCHAEOLOGY OF
LATE ANTIQUITY AND THE BEGINNING OF
ISLAMIC ARCHAEOLOGY IN THE MIDDLE
EAST**

Mgr. et Mgr. Martina Veselá

**Doctoral thesis in the Departments of Ethnology and Archaeology, written
under the supervision of Professor Ivo T. BUDIL, Západočeská univerzita,
and Professor Alastair NORTHEGE, Université de Paris I Panthéon -
Sorbonne**

Pilsen 2012

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Tuto disertační práci jsem zpracovala samostatně a vyznačila jsem použité
prameny tak, jak je to ve vědecké práci obvyklé

V Praze dne:

Acknowledgements

First of all, I would like to thank my supervisors, Professor Ivo T. Budil from FF ZCU in Pilsen, and Professor Alastair Northedge from the Université de Paris I Panthéon-Sorbonne, for their support during this as well as my previous works, both for direct assistance in research and for help in overcoming administrative difficulties related to the study.

In particular, I would like to express my thanks to Professor Northedge for his help in obtaining the requisite literature on the subject of Islamic archaeology, which is virtually inaccessible in the Czech Republic.

For facilitating my study of this rather interdisciplinary topic and discipline, which has been lacking continuity in the Czech Republic from the time of Musil, I would like to extend my thanks to the French Government which granted me a postgraduate scholarship for the purpose of obtaining the doctorate under double supervision; this enabled me to overcome the aforementioned problem, gave me the opportunity to attend lectures in the Department of Islamic Archaeology at Université de Paris I Panthéon – Sorbonne, and made considerably easier my access to the indispensable literature for this work in Parisian libraries.

I would like to thank also the Austrian Government for three-month scholarship Action, which enabled me to acquaint myself with materials related to Musil, which are deposited in the Viennese archives, where Musil worked in cooperation with various institutions until the establishment of the first Czechoslovakian Republic.

I would like to express my gratitude to the administration and staff of the Museum of the Vyškov region in Vyškov, where most of Musil's papers are deposited, and also to the directress of the Literary Archive of the Museum of Czech Literature, Ms. Macurova, and to the local archivist Mr. Bílek, who permitted me to work in the normally inaccessible Collection of Alois Musil's papers. I would also like to thank the family of Alois Musil for loaning me long-unknown materials.

Further, I would like to thank Petr Mudra, Josef Hložek and Libor Kučera who helped me to work out a solution to technical problems connected with the creation of archaeological database.

I would like to extend my acknowledgement to all those who willingly helped me with archaeological localities described by Musil, to my colleague Inna Mateiciucová and to Jan Bárta working in the Czech Embassy in Damascus for their help with travel arrangements to less accessible localities around Palmyra and also to my guide Fuez Assad and to all his Bedouin friends, who were not only helping me to reach those less accessible localities, but also made my stay in Palmyra more pleasant, thus enabling me to experience the present change of the Bedouin way of life on a practical level.

Last but not least, I would like to express my gratitude for support and help with the correction and translation from foreign languages to Viktor Faktor, further to Eva Bělkovská and Miroslav Hanák, to Martin Rose for his help with graphic processing of photographs and plans, and to Vladimír Daněček for giving me as a gift the first book by Alois Musil I had read before my first journey to Asia in 1994, because this book not only changed our planned route, but later also influenced the direction of my studies.

And finally I would like to express my gratitude to Václava Dopitová and to my grandmother for support in everything I ever did, and to all those, who gave me support and help during this work.

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Motto:

All the places uncovered by me were thoroughly examined, plans and cross-sections drawn up, decorations and reliefs copied, maps completed, so now I can finish and publish my works. At the same time I engaged in ethnographic studies with a steady regard to the biblical and the Arabian old science – and after six years the accumulated material entitles me to hope, that my ethnographic work about Arabia Petraea will become the fount for exegetes, archaeologists and ethnographers.

Alois Musil

1 INTRODUCTION

1.1 Aims and scope

This thesis is a comparative analysis of Alois Musil's theoretical approaches and recording methods, based on historical and archaeological sources.

The purpose of this work is to evaluate the personality of Alois Musil as an archaeologist, to put him into the context of scholarly work conducted in the Near East and to compare the results of his pioneering work in the field of archaeology and anthropology with the methods of research of several scholars, with the range of their work, with their system of site documentation and the contributions of their results to contemporary knowledge and revised prospectings and excavations.

With regard to his merits in the discovery and documentation of some Umayyad desert castles and in the presentation of the first comprehensive hypotheses on the origin of these building complexes and their significance in later archaeological exploration in the field of Islamic archaeology, special attention will be given to the origins and development of this discipline and to the contribution of Alois Musil to this scientific field.

The aim of this work is a retrospection of the archaeological research of Alois Musil, an evaluation of his explorative methods and documentation of the conception of his research, an appraisal and a reflection of his research in works of later scholars and the inclusion of his influence into the context of works of other researchers and archaeologists in the Near East, the extent of their activities, the methods of their field documentation, the contribution of the results of their work to contemporary archaeological knowledge and the intensity of their mutual contacts.

Another aim consists in the depiction of the origin and development of trends at the outset of Islamic archaeology. Islamic archaeology itself is a relatively young discipline which emerged as an independent field of study about a hundred years ago. Compared to other disciplines of archaeology, it has developed relatively late. Islamic

archaeology is considered as a branch of medieval archaeology in the areas where Islam has spread and it includes artifacts related to Muslim culture.

The study of the origins of European scientific engagement in exploring the history of the Near East presents an important culturally anthropological dimension of my work.

1.2 The reason for the choice of this topic

The personality and the vast scientific work of Alois Musil has been the object of interest of researchers from various disciplines, but his work was not fully evaluated until now. Musil focused mostly on the fields of geography, ethnography, linguistic etc. For this reason, the majority of existing works on Musil stress only his importance for historical, political and orientalist research.

Musil did not consider himself an archaeologist, nevertheless because of his extraordinary discoveries, documentary and interpretative abilities he was often quoted not only by his contemporaries, but in specialized publications and projects he is quoted to this day. For many reasons, however, there does not exist a single study, which would comprehensively evaluate his contribution to archaeology of the Near East.

As already mentioned, some current archaeological disciplines, including Islamic archaeology, developed relatively late. Musil's discoveries concerning the field of this discipline needed a time interval. Another fact was, that in the former Czechoslovakia and the present Czech Republic this new discipline did not have and still does not have any successor after Musil. In the Czech Republic, it is even now possible to study non-European archaeology only at the very narrowly specialized Department of Classic Archaeology at Charles University in Prague, and only recently was opened a bachelor Department of the Archaeology of the Near East at Masaryk University in Brno, which is specialized at present only in ancient archaeology; further it is possible to attend only individual, summarizing and usually one-semester-long lectures on selected subjects related to the archaeology in the Near East.

Another reason is a fragmentation and lack of orderliness of Musil's inheritance in various archives and in the possession of private owners. For foreign as well as

Czech researchers the possibility of research until 1989 was further complicated by the political situation in the Czech Republic. Moreover, for many foreign researchers the language barrier presented a serious problem.

To the topic of this work brought me my interest in archaeology of the Near East and with it associated my first visit of the most important Musil's archaeological discovery – the Umayyad castle Qaşayr °Amra in 1994 - unavailability of publications about new development in research about these sites in my native country and the discovery, that there exists no modern monograph about the personality of Alois Musil, which would evaluate the significance of this first Czech engaged in Islamic archaeology, and also the sad realization, that there is no monograph in my country mapping the origin and development of Islamic archaeology.

There is also a purely personal reason for my interest in Alois Musil, and it is the curious fact, which I found out already during my first research in archives. Alois Musil probably saved my great-grandfather's life by politically interceding on his behalf. At the end of the First World War, my great-grandfather took part in the revolt which broke out among sailors in Santa Catarina in Pula and for which he should have been executed together with other rebels. It did not happened only because of the intervention from the highest political authorities and according to written documents of Alois Musil also on the basis of his intercession with Karl I and Zita of the Habsburg Dynasty.

In my choice of this thesis topic I was also influenced by the opportunity to attend lectures about Islamic archaeology led by Professor Alastair Northedge during my exchange scholarship in Paris in 2004 and other lectures related to Islamic archaeology I could attend again during my postgraduate scholarship I was granted by the French government in 2007-2009. During his sojourn in the Near East, Professor Northedge undertook many researches of Islamic monuments, of which the most significant was the project of „The Historical Topography of Samarra“, and at the same time he also evaluated Sarre-Herzfeld's exploration of Samarra. In his unpublished dissertation on the topic of archaeology of the elite at the beginnings of Islamic period he engaged, besides other things, in comparison and interpretation of the phenomenon of the desert castles. In relatively recent time there were also

published reports and documentation from the first systematic archaeological exploration of an Islamic locality in the Near East – Samarra by Sarre-Herfeld, and the archive of Musil's contemporary and researcher Gertruda Bell was also made partly accessible.

Another reason for my choice of this topic was my second diploma work at the Department of the Near-Eastern Studies at the Faculty of Philosophy of the Západočeská Universita in 2006, which I wrote on the topic „Archaeology of the Near East in the work of Alois Musil“. My opponent Professor Veselý recommended to enlarge this work in a subsequent dissertation.

1.3 Sources of the work

The thesis is based on the study of Musil's works while the comparative part comes primarily from foreign literature and published plans and documentation, as well as from the study of Musil's archives, see below.

For the purpose of gathering materials for this dissertation I made several visits to the Czech archives depositing Musil's inheritance. I visited the Archive of the Memorial of National Literature in Staré Hrady, the Archive of the Vyškov Museum and the Archive of the Department of Architecture of the ČVUT in Prague, which brought inconsistent results, because a large part of the archaeological documentation, which Musil processed with architects, were not yet found. I also visited the Archive of the Academy of Science of the Czech Republic and the Archive of the Bureau of President of the Republic.

Besides visiting the above mentioned domestic archives, I made during my scholarship in the program „Action“, sponsored by the Austrian government, several visits to archives in Vienna depositing Musil's documentation. These were primarily the following institutions: Handschriftensammlung in Österreichische Nationalbibliothek, Haus-, Hof- und Staatsarchiv, Kriegsarchive, and archive in Akademie der Wissenschaften, as well as The National Archives, fond Foreign Office and Charles R. Crane Papers, fond Alois Musil, correspondence 1922–1933.

In autumn 2010, I flew to Beirut with the aim of visiting the Archive of the Universite St. Joseph, where I intended to locate letters sent by Alois Musil to H.

Lammens and his colleagues. I knew about their existence from the answers deposited in the archive of the Museum in Vyškov and also from a short report and two drawings printed in al- Mashriq on the basis of photographs from Musil's journey during which he discovered Quṣayr ʿAmra. As all my attempts to make a phone connection completely failed, I visited the archive personally. Unfortunately, this part of materials is deposited in a private Jesuit archive, which I did not have permission to enter; nevertheless during a subsequent personal meeting with the custodian of this archive, Alex Bassili, I was informed that no Musil's materials and letters were preserved.

In 2008 we founded the Academic Society of Alois Musil. The activity within this society enabled us to establish close relations with the family of Alois Musil and to obtain from its members some as yet unknown materials.

In 2010, I made a number of visits to the region Bilād al-Shām, where I attempted to find monuments documented and described in Musil's *Palmyrena*. In Damascus and in German and French Archaeological Institutes, as well as in the libraries in Paris I had the opportunity to study literature absolutely inaccessible in the Czech Republic. Consultations with archaeologists working in this region enabled me to seek out some almost forgotten monuments described by Musil and to focus on revised researches.

Unfortunately I could not find all Musil's monuments; not only because of Musil's choice of localities accessible with great difficulty even in his time, but also because of my limited financial resources and interruptions of my activities caused by change in the political situation in Syria. But even before this change, the possibility of making documentation in some regions of the country was considerably limited and a new survey in these localities was not possible without permission; even visits to certain places, especially in the region between Damascus and Palmyra, posed sometimes great problems. For example, during my study tour in 2005, I and my colleagues were detained while visiting archaeological sites in the locality khān abu Shamāt, and on other occasions we were given an unwanted official escort. For this reason I based my work on the plans in articles I acquired from published materials of other researchers.

Because it was impossible to cover the whole ambit of territory which Musil visited during his travels in the Near East, I am focusing in this work on the selection of archaeological monuments localized in al- Bādia in the territory of present Syria and Jordan.

I endeavoured to include in the selection mainly the most important sites, which can be compared with recent revised researches, and for the purpose of comparison I included also some localities, which were not the subject of further scientific interest later on and some of which are completely forgotten today. The influence of the selection of monuments and comparative researches bolstered my interest in Islamic archaeology which was always connected with the fact, that Musil's most important archaeological discovery - Quṣayr ʿAmra - stood at the beginning of the development of a newly established scientific archaeological discipline of Islamic archaeology. Musil fixed his greatest attention on two significant archaeological sites, al- Ruṣāfa and Quṣayr ʿAmra, which later became the subject of frequent archaeological research. For this reason were these sites selected before all others, followed by a selection of several Umayyad desert castles and other localities in part II (database). During the selection of sites in the both part of this work, I derived materials mainly from Musil's monumental work *Oriental Explorations and Studies*, especially from the volume *Palmyrena a The Middle Euphrates* and from another Musil's monumental work *Kuṣejr Amra*. Into a successive database of archaeological sites were also included localities from Musil's comprehensive work of several volumes, *Arabia Petraea*.

1.4 Brief content of the work

To put things in proper context, I start with a short chapter about the beginnings of Czech interest in the Near East and about origins of Czech archaeological explorations in the Near East. Because most researchers of the late 19th and the early 20th centuries were not closely specialized in any particular period, as was Musil's case, they focused first on monuments connected with biblical geography and consequently also with monuments from the Roman or Byzantine period. For this reason, I included in the summary of the origins of the development of archaeological research in the Near East also some researchers oriented on the Roman period. I also

added a separate chapter dealing with Musil's exploration of the Roman limit. Considerably important is also the fact, that some sites classified by Musil and his contemporaries as Roman or even „undoubtedly Roman“ forts turned out to be in reality Islamic monuments, as modern revised researches proved. Some of these originally Roman fort and fortresses were in reality a part of the network of Umayyad residential structures in Bilād al-Shām and quite often they were Umayyad castles.

I also included in this work a subchapter about A. Musil a T. E. Lawrence because political activities of these two men were in the past often compared, and in some articles Musil is even called „Moravian Lawrence“. Because of the orientation of my work I focused on the comparison of their research potentiality in the archaeological field.

As Musil's archaeological discoveries, including his well-known discovery of Qaşayr ʿAmra, were strongly bound with Bedouins, or to be more precise, made possible by his close contacts with them, and because most of his research in the Near East was from the beginning of his travels closely connected primarily to ethnographic research of Bedouin tribes, I included in this thesis also a separate chapter on Musil as an anthropologist and on the development of ethnographic research in the Near East in general. Musil's orientation in these two fields – the ethnographic research and the archaeological research – was undoubtedly influenced by his study at the Université St. Joseph in Beirut which in the first years of his stay in the Near East was distinguished in these two disciplines. And last but not least, the reason for including the summary of Musil's anthropologic engagement is the fact, that in the Czech Republic I wrote this doctoral work just at the department of anthropology in the doctoral program „Ethnology.“

The aim of this work is not an attempt to describe the multilateralism of research interests or the rich life story of this man, but to point out his contribution to both archaeology and anthropology, since in Musil's research activity in the Near East they especially blend. For this reason I focus in the chapter about Musil's life on the studies, which formed his research interests and travels, during which he engaged primarily in the documentation of monuments, topography and ethnographical activity.

1.5 Method of presentation

The thesis is divided into two parts. The first part is primarily historical and focuses on the history of European archaeological interest in the Near East in the second half of the 19th century and at the beginning of the 20th century; it also mentions individual researchers and their evaluation.

Further I describe the studies and exploratory journeys of Alois Musil with respect to the disciplines he pursued, including general summary of his Orientalist activity after the foundation of Czechoslovakia and the publication of his research in the Near East. Next part is dedicated to Musil as an explorer and to his documentation, together with his most explored and documented localities.

Besides a separate chapter on Qaşayr  Amra, I also describe the development of research of Umayyad castles, Musil’s hypothesis and the evolution of research of this phenomenon after Musil.

It also contains a chapter about Musil’s research of Roman eastern frontier, summarizing problems concerning the frequent confusion of Umayyad castles for Roman fortresses by Musil and his contemporaries and the evaluation on the basis of modern prospections and excavations by present scholars.

The second part of the thesis contains a database of selected archaeological sites visited and documented by Musil, incorporating, in the case of essential localities, the comparison of their time inclusion, classification and documentation with the researches of his contemporaries and, where possible, also with modern researches. Making it possible to compare Musil’s documentation with that of other researchers, this database facilitates comparative analysis of Musil’s research activity.

2 THE ORIGINS OF THE EUROPEAN INTEREST IN THE NEAR EAST

2.1 The first journeys from the Czech lands to the Near East and the origins of scientific explorations of Czechs in the Near East

The first historically documented mention about a Czech traveller to the Holy Land is recorded already in the so-called „Kosmas´ Chronicle“. It mentions the journey of a canon from Prague called „Osel“ (Donkey), who already at the end of the 11th century, according to the entry in this chronicle, undertook the journey from Prague to Jerusalem (Sklenář 1989, 361).

Starting in the 12th century, there were more such pilgrims, for example abbot Božetěch of the monastery in Sázava, who made the pilgrimage with a large cross, Přibyslava and bishop Menhart, who undertook the journey to Jerusalem several years after him in 1132 or abbot Silvestr from the monastery in Sázava together with Jindřich, bishop in Olomouc, in 1137. Pious warrior Ruzin died in the same year during his pilgrimage (Hrdina ed. 1950, 73, 79). The first travel book about the journey in the Holy Land was written by Martin Bakalář, who undertook the journey in the second half of the 12th century. The original of his book unfortunately did not survive (Sklenář 1989, 361).

The other Czechs, who were motivated to undertake the journey by religious reasons, were among others Bohuslav Hasištejnský z Lobkovic, Voldřich Prefát z Vlkanova, Kryštof Harant z Polžic and Bezdrůžic and Heřman Černín z Chudenic. There were other travellers, who set forth to the region of Palestine for diplomatic and military reasons, notably Václav Budovec z Budova and Abrahám z Donína. These journeys of noblemen from the Czech lands to the Near East were interrupted during the baroque period and were resumed only in the 19th century. The religious or political motivations for the journeys were transformed into more „scientific“ reasons, which of course at that time were expressed rather as tourism and sightseeing or collecting all kinds of objects, including historical artefacts. Probably the first Czech who visited Babylon, in 1836, was a doctor and natural scientist Jan Vilem Helfer

from Prague. Karel Sklenář¹ in his publication *Z Čech do Pompejí* points out the fact, that at that time archaeologists and historians in the Czech lands, who were studying the ancient history, were focused more on the national struggles of given communities and for that reason they concentrated mainly on the research at home (Sklenář 1989, 367).

One of the first Czech travellers to the Near East apparently interested in archaeological monuments was Josef Wunsch, originally a geographer, who on advice of Vojta Náprstek undertook the exploration and mapping of the region of Euphrates and Tigris. During his journey he soon joined the German archaeological expedition led by O. Puchstein. Wunsch at first set forth to discover the headspring of Eastern Tigris in the region already described in 1850 by Henry Austen Layard, the archaeological discoverer of Ninive. Already during his visit in 1882 he was informed about the finding of the cuneiform writings in Ashrut Darga. During his second visit one year later he described problems regarding the construction of a makeshift scaffold needed to copy one writing and also the procedure of making the copy of the text. Given the lack of light it was not possible to take the photographs of the text they had at their disposal in the niche in any way, or to make a copy of the text. Nevertheless, Wunsch, before he started his journey, went through the „training“ provided by at that time well-known architect Schmoranz, who taught him how to make „paper photos“: „Every sheet of paper was damped. Thereafter they lifted me on the scaffold and they handed me a damp sheet of paper in an empty box. I carefully put the sheet of paper on the script and with the help of a sponge and a brush I pressed the sheet on it“² (Wunsch, quoted by Sklenář 1989, 371). Wunsch during this journey discovered the headsprings of Euphratus and Tigris. After his return to Prague in September 1883 he sent his squeezes to Vienna to D. H. Müller, who deciphered the writing and together with Wunsch they published it in the Academy of Science in Vienna (Sklenář 1989, 371).

1 Karel Sklenář is the archaeologist and the former director of the National Museum in Prague, who engaged for a long time in the popularization of archaeology and he focused especially on the history of the archaeology in the Czech lands, and eventually on the archaeological „engagement“ of the Czechs abroad.

2 This method of wet paper mash, which was glued on the walls and the result of which was the squeeze, does not need to be, with the exception of distinctive reliefs, too effective; yet it was used often at that time. Much later it was found out, that it also destroys the original, so it was later abandoned.

Fifteen years later it was also Alois Musil who contacted David Heinrich Müller. After Musil moved from École Biblique to the Université St. Joseph in Beirut he fell into a desperate financial situation (see the subchapter „Transfer to Université St. Joseph in Beirut“) but Court Councillor Müller was able to procure for him, from the Academy of Science in Vienna, the subsidy of 2000 guildens designated for obtaining the new scientific material for the Academy of Science in Vienna. Musil's task consisted in „writing, copying and photographing as much as possible...“; simultaneously Müller asked for Musil's consent to the publication of the writings from Musil's previous expeditions, which Müller obtained from the Academy of Science in Vienna and which he wanted to publish in the journals of the same Academy of Science (a letter from 16th February 1898, Collection of A. Musil in the Museum of Vyskov region, Vyskov, H 19 083/1).

The next very important Czech researcher, who was working in the Near East, was Bedřich Hrozný. He was born eleven years later than Musil. The interest in the Near East studies prompted him to learn the ancient oriental languages. Originally he was supposed to study theology like Musil and take over the „sceptre“ from his father, who was a Protestant pastor. In the gymnasium his interests were considerably influenced by dr. Justin Prášek, the author of many works about the ancient Near East, who inspired Bedřich Hrozný to be interested in the cuneiform script and the ancient oriental languages. Hrozný continued the studies of these languages at the Faculty of Philosophy, but his main target was the history of ancient Near East. During a year-long scholarship with professor Delitzsch in Berlin he wrote works designed to answer everlasting historical questions of the ancient Near East, which are susceptible to proofs by the archaeological artefacts. After the study tour in London he received the position of a librarian in the university library in Vienna. In 1904 he set forth with professor Sellin for the first time for the archaeological explorations in the Near East. There, in Ta'anek, he worked for the first time on the excavations. After his return to Vienna he worked already as a private senior lecturer, but his chance of promotion was considerably limited. The opportunity came from Berlin, when he received, after the death of professor Winckler, the offer to take over the publishing of cuneiform writings from Boghazköy. In April 1914 Hrozný left for Constantinople, but after the outbreak of the war he was called back. In December 1915 he published at first in

Berlin the work „*Rozluštění chetitského problému*“ (A solution to the Hittite problem), which later in Prague and Leipzig became the full monograph on this topic. After the war he became, just as Musil, a member of the Faculty of History of the Charles University in Prague in the ancient Orient and the cuneiform section. In 1926/1927 he became the dean of the faculty and shortly before the outbreak of the Second World War even the rector. Together with Alois Musil he took part in the establishment of the Oriental Institute in Prague and he was one of the main initiators of its press organ „Archiv Orientalni“ (Souček, 1979, 1- 6, Sklenář 1989, 372-376).

Likewise Musil's effort on enforcement of the newly created state division with the connection of explorations in the Near East is at the end supported also Hrozný's effort to push through in the Near East the first Czechoslovakian research with the help of the Academy, the ministry of education and president T.G. Masaryk, who in the same extent as to Musil contributed also to Bedřich Hrozný from his fund. This first Czechoslovak archaeological research in the Near East was taking place in 1924 and 1925 in Syria, as the original attempt to carry out the research on the territory of Turkey failed because of the permission. Bedřich Hrozný took with him also architect Jaroslav Cukr from the Institute of technology in Prague. Karel Sklenář believes, that this decision was influenced by Alois Musil, who was convinced about the indispensability of an architect in researches and about his conviction, that Bedřich Hrozný should take an able architect with him, wrote to professor Niederle to England³ (see subchapter „Musil's cooperation with architects and the interest in modern archaeological research“).

3 PhDr. **Lubor Niederle** was slavist, anthropologist, ethnologist, archaeologist and he also worked in museums. He was one of the main representatives of more theoretical, so called „universal school“ and is regarded as the founder of the modern archaeology in the Czech republic. With Musil they had not only common interest in anthropology, ethnography and archaeology, although Niederle was unlike Musil oriented on the prehistory of the Middle Europe, but they were also very good friends, as we can see from relatively numerous correspondence in Musil's inheritance (Musil's papers in the Literary archive of The Museum of Czech Literature, Chateau Stare Hradky 2-B/121). He was three years older than Alois Musil and both died in the same year 1944. In 1898, when Musil discovered Qaşayr ʿAmra, Niederle became the first professor of the prehistoric archaeology at the Charles University in Prague, where he worked in 1927-29 as the rector. By his credit it was established also the State archaeological Institute, contemporary ARÚ AV ČR, of which he was also his first director. He was primarily the protagonist of modern archaeological methods, characterized by already critical and analytical approach to sources. He never confused a conjecture and the concrete, provable fact, he thought about the ethnicity of individual archaeological cultures. He edited several archaeologically oriented periodicals. He was also the founder and the first director of the State Institute of Archaeology (1919-24) and the Slavic Institute (1928-32).

During the second year of the expedition Hrozný shifted the research into Kültepe in Turkey, where he discovered the archives of the Assyrian merchants from the settlement in front of the walls of Kanesh. After this expedition Hrozný returned once more for five months to the Near East and occupied himself with copying and photographing of the writings, of which he obtained during this expedition almost one hundred. After his return he published them in the work which had three volumes. However, the most of his findings were unfortunately destroyed in the fire of 1969 because of the negligence of the National Gallery combined with problems issuing from a neighbouring restaurant (Sklenář 1989, 379-387).

2.2 The origins of European interest in the Near East and the state of archaeology in the Near East in the time when Alois Musil worked there.

European travellers were attracted to the historical territory of Syria and Palestine as well as some other regions of the Near East for many reasons. At first, the main reasons for their visits were religious and political, but later on there were also many visits by collectors of artefacts. Scientific expeditions to the Near East started in the 18th century with extensive researches of Carsten Niebuhr. Among other researchers in the Near East we should mention at least Ulrich Jasper Seetzen, Johann Ludwig Burckhardt, Sir Francis Burton or Rudolf Ernst Brünnow (compare Drápal 2005a, 5-15). Instability of the Ottoman Empire in much of the 19th century occasioned considerable limitations for explorers and travellers and due to low safety the explorations depended in a vast measure also on the courage of explorers as to where they were able to penetrate.

Petra was discovered again for the Western civilisation the 22nd of August 1812 by Swiss explorer and Orientalist Johann Ludwig Burckhardt in disguise of a Muslim pilgrim. This town reached the peak of its development from the 3rd centuryBC till the 4th centuryAD, when it was the metropolis of nomadic Nabateans. At that time also merchant caravans stopped here. However, the place was kept in secret and not many travellers knew about it. In 106 AD it was incorporated into the Roman Empire. Petra expanded and at that time the most of the preserved buildings was constructed. In the course of time but the importance of the town started to decline. The centre of trade became Palmyra. After the crusades the town disappeared from the awareness of

Western civilisation. Mamluk sultan Bajabars was in 1726 in all probability the last, who has seen it. From that time only Bedouins came there. Only in 1812 Johann Ludwig Burckhardt, who previously during his two years long stay in Syrian Aleppo (Halab) learnt perfectly the Arabic language, heard about the existence of this town. At that time less than thirty years old Burckhardt fabricated a story, according to it he promised to sacrifice a goat to prophet Aaron at his tomb in Petra. By this he enforced the enter in the town, where he secretly made sketches and notes. Petra was newly discovered and Burckhardt's travelogue *Travelling through Syria and Holy Land* aroused in 1822 a sensation. Burckhardt was in all probability also the first European, who entered in Mecca. He died at the age of 32 years in 1817 in Cairo. Publication of this travelogue unleashed "an Oriental fever", artists and scholars started to arrive here. Among them was also Alois Musil, who visited Petra as the first Czech and in 1907 he published his travelogue oriented on this region under the title *Arabia Petrea* (Musil 1907b).

Ulrich Jasper Seetzen visited Decapolis in 1806 and Williem Bankes ventured into the steppe to explore the ruins reported at Umm al-Jimāl. Most of the travellers had a Classical education and brought with themselves the interest in the Graeco-Roman past together with the interest in exploration of „The Holy Land“. We can divide explorers, who took interest in monuments and travelled in the Near East in the 19th century, into several groups: there were travellers, adventurers, treasure hunters, orientalists and archaeological amateurs, who often combined their passion for discoveries with political interests. Among the last mentioned belonged for instance French consul in Mosul Paul Émile Botta, who devoted himself to the research in the Assyrian Khorsabad in 1842. Henry Layard begun with excavations at the same time in Nimrud. Among other researchers, who worked in Mesopotamia with Babylonian and Assyrian earthworks we can name at least Hormuzd Rassam and H.C. Rawlinson (Leisten 2003, 3). The breakthrough for scholarly interest in the Roman army came with work of German scholars Rudolph Brünnow and Alfred von Domaszewski who worked in the Middle East in 1897 and 1898⁴. Their researches extended from Petra up to Hauran and they published the results of their expedition in a monumental study

4 It the same year, when Musil discovered Amra

„*Die Provincia Arabia*” (1904-1909). These volumes contain a wealth of descriptions, several hundred photographs and plans of the military installations. Soon afterwards members of the Princeton expedition came through the northern Jordan to Syria. They collected several inscriptions and drew up plans of several key forts (Butler et al. 1907- 1949; Kennedy 2004, 21). Among researchers who took interest in the Arabian epigraphy we can name for example Joseph von Hammer-Purgstall, the Austrian Orientalist and translator of Arab and Persian sources.

In 1835 he published his book „*Über die Länderverwaltung unter dem Chalifate*“, with a paraphrase of the text on the story of a fabulous building erected by al-Mutawakkil in Mas’udi’s⁵ *Murūj al-Dhahab*, which was the most extensive source for the reign of this Abbasid ruler (Hammer-Purgstall 1835, 26-28; quoted in: Leisten 2005, 378).

One of the prominent places among travellers-explorers belongs to epigraphist Max von Berchem, who studied inscriptions on the buildings in the Near East and found out that many of them provide wide range of information, including structural details or dates of origin (Vernoit 1997, 3).

2.2.1 Max van Berchem (1863-1921)

Max van Berchem was the Swiss scholar, who was born in Geneva in 1863. He completed his doctoral thesis, focusing on the Islamic kharāj, at the University of Leipzig in 1886. There he was initiated into Semitic languages, particularly Accadian, but later he turned decidedly to Arabic. After he completed his doctorate, he left for his first journey to Egypt. He was the first to recognize the value of Arabic inscriptions for a more exact reconstruction of mediaeval history. He began systematically to explore the old quarters of Cairo looking for inscriptions and photographing mosques, schools, palaces and walls. He divided the work among certain number of scholars. He explored Egypt in 1887, 1888, 1889 and 1890, Jerusalem and Palestine in 1888, 1893, 1914 and Syria in 1894 and 1895. World War I had broken out in 1914 and had severely disrupted the international collaboration. In the spring of 1921 he travelled to

5 Mas’udi was a historian and geographer of the tenth century.

Cairo. He suddenly became ill and returned prematurely to Geneva, where he died a few weeks later.

Max van Berchem collected an impressive number of Arabic inscriptions. He was deeply aware that only in the global framework could texts assume their full significance. This kind of methodology can be noted in his published works, where the philological edition of the inscriptions is accompanied by a detailed historical commentary.

His main published works are *Corpus Inscriptionum Arabicarum*, principally volumes devoted to Cairo and Jerusalem, the *Voyage en Syrie* and articles collected in two volumes of his *Opera Minora*.⁶

2.2.2 The beginning of German archaeological engagement in the Near East

At the end of the 19th century Germany started to invest into archaeological explorations on the territory of the Ottoman Empire, especially in regions of Iraq and Levant. Their effort to invest into explorations on the territory, where explorers from France and Great Britain worked already over the period of fifty years, was motivated by the attempt of the emperor Wilhelm II to put Germany among the rank of world powers and influencing affairs in this region. Interest in Oriental studies was increasing. In 1887 the „Seminar für Orientalische Sprachen“ was founded in Berlin to educate students from all professions in languages of the Middle East. Among the outstanding teachers of the Arabic was Martin Hartmann (1851-1918)⁷. The most of the members of the faculty were distinguished by research into earlier periods, rooted in the German philological tradition (Hagen 2004, 148). In Hamburg, the „Deutsches Kolonial-Institut“ was founded in 1908. This seminar was not, just as above mentioned

6 Website Foundation Max van Berchem, <http://www.maxvanberchem.org>

7 In Musil's Archive in Vyškov there are 11 letters deposited by Martin Hartmann, mostly in relation to Musil's discoveries and publications (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 661). In the letter from the 5th of January, Hartmann hopes that if he will write more extensively about Burckhardt he will find materials on Musil (Collection of A.Musil in the Museum of Vyškov region, Vyškov, H 18 661). In the letter from the 31th of July, he thanks to Musil for the defense against Moritz's attack and he adds that he used Musil's treatise in a short article for daily press, but he is afraid that the article will not be published because nothing is ever printed what could be unpleasant to the government of the Ottoman Empire (Collection of A.Musil in the Museum of Vyškov region, Vyškov, H 18 661).

„Seminar für Orientalische Sprachen,“ the part of the University. Carl Heinrich Becker (1876-1933)⁸ became its first director and he considered himself a part of German philological tradition which included Wellhausen, Nöldeke and Hurgronje. In June 1914 C. H. Becker writes to Musil from Bonn that he intends to establish a seminar there which could be well-equipped with the library (given as a present) and generous state subsidy. He also writes that here, unlike in Hamburg, he is not overloaded with organising work and so he hopes in successful establishment of the Centre of Oriental Studies (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 451/17).

Becker as well as Hartmann and many others played roles in the episode of the so-called German Holy War. The German interest in the practical dimension of Orientalism coincided with increasingly political dimension of Islam, Pan-Islamism. On the other hand, German academic Orientalists, like Hartmann and Becker, were not concerned by Pan-Islamism (Hagen 2004, 149)⁹.

Thanks to the friendship between emperor Wilhelm and sultan Abd al-Hamid Germany obtained the concession for excavations in Babylon (1899-1917) and Assur (1903-1914). Researches in these two localities were executed in years 1899-1914 under the leadership of Robert Koldway and Walter Andrae. Until that time archaeological interests in the Near East were oriented to ancient monuments (Leisten

8 In Musil's Archive in Vyškov there is a deposit of the correspondence between Carl Heinrich Becker and Alois Musil. From the first letter it is obvious that they were planning together a journey to Orient. Becker writes that in this case he is willing to submit himself fully to Musil's leadership because he has no experience with travels in Orient and he expresses the hope that by that time he will perhaps speak Arabic fluently (the letter from the 16th of October 1900, Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 451/1). From another letter it nevertheless follows that their journey was postponed and obviously later definitely cancelled (the letter from the 8th of October 1901, Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 451/2). In other letters they communicate together mostly about Quşayr ʿAmra, new Musil's discoveries and publications (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 451/3-14, 16).

In the letter from the 2nd of July 1914 from Bonn Becker wrote to Musil that he hopes he will establish there The Centre of Oriental studies (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 451/17).

9 In the letter from the 5th of September 1911 Martin Hartmann writes to Musil that he is sending reviews about Musil's Reisebericht and that he is rather blunt about the Turks (which caused the Ottomans' anger) but, he writes, what good is possible to say about that incompetent society which leaves only devastated lands behind itself? (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 661).

2003, 3). Speaking in general, the golden age of German research in the Middle East lasted until World War I.

The driving force behind the idea of German-inspired Holy War came from an amateur archaeologist and ethnographer trained in law as well as in Oriental languages Max Freiherr von Oppenheim (Hagen 2004, 149) who in 1899 excavated the first borehole in Tell Halaf where he later dug from 1911 till 1913 (with some breaks till 1929).

At the outbreak of the First World War Oppenheim left archaeology and returned to the Foreign Office where he started to resurrect the old idea of jihad. Oppenheim's assessment of different ethnic and social groups reflects ethnic stereotypes in the Middle East. He, for example, believed that the urban population was weak and degraded in contrast to the militant spirit of the Bedouins.

We can find the stereotypes like this also in older Middle East travelogues, as well as in *Orientzyklus* of popular novels of Karl May (Hagen 2004, 150). For Alois Musil the books of Karl May were considerable inspiration during writing of his own adventurous books.¹⁰

2.2.3 The development of priorities in the archaeological research in the Near East and in the Islamic archaeology

Archaeologists from the Central Europe were at that time oriented primarily on gathering of ancient artefacts both for private and national collections. However, they were more interested in ancient civilizations than in Islamic archaeology which thus occupied minority position in this region, similar to archaeology of the Middle Ages and the modern times in Europe.

Moreover, researchers and amateur archaeologists in the 19th century and at the beginning of the 20th century did concentrate more on looking for and identification of the sites and their cursory documentation (alternatively on copying the writings and

¹⁰ Musil in his youth liked to read May's books. His first horse in the East he named Rih, which was the name of May's alter ego Kara ben Nemsī and imitating Karl May's villa Shatterhand, which May had in Radebeul near Dresden, Musil's villa in his native Rychtářov near Vyškov in Moravia was also named Musa.

inscriptions of all kinds) than on more detailed survey and documentation of individual sites which would require much more time. The first more systematic explorations limited to smaller regions of the Near East were primarily focused on the exploration of Roman *limes*. Among researchers who worked in these localities were, for example, Adalbert de Vogüé, above-mentioned R. E. Brünnow, Alfred von Domaszewski and Howard Crosby Butler (Gregory 1995, 22).

The Islamic archaeology as a field of science is comparatively new and was born only about one hundred years ago (Vernoit 1997, 2) which means relatively late in comparison with other fields of archaeology. Islamic archaeology is considered a branch of mediaeval archaeology in the areas where Islam has spread. At the present time we conceive the Islamic archaeology as a wide spectrum of scientific activities, starting from recording of the artefacts, architectural features, and other aspects of human activity recovered from systematic excavations and surveys, through analysing of the aerial and satellite photography, geophysical survey, reconstruction of the phasing of buildings, the analysis of the construction techniques and also a multiplicity of post-excavation techniques, allowing the interpretation of the material record. Like other branches of archaeology, Islamic archaeology attempts to reconstruct past practices through the interpretation of physical evidence. It is dealing with the material record from the text-based study of history. But written sources like pre-modern archival documents, chronicles or geographical works tend to be focused on short-term events. These sources provide a record of the past, that is clearly defined in chronological and geographical terms, but they are largely devoted to the lives of the political and economic (and literary) elite (Milwright 2010, 4-5).

Central European notions about the material culture of the Islamic world in the second half of the 19th century was rather influenced by historians of art than by archaeological knowledge.¹¹ In this respect the development of the Islamic archaeology was more similar to the development of the European archaeology of the Middle Ages and the modern times than to the development of the ancient archaeology. The exploration of Syria-Palestine and Arabia in the later nineteenth and

11 For the problems of the Islamic archaeology see Grabar (1971), for the anthropological syntheses see Insoll (1999).

early twentieth centuries endeavoured to be thoroughly comprehensive in its work by describing, mapping and photographing in detail the places visited. The scholars researched earlier sources and they added the possible historical context to the location of buildings and sites investigated. Early studies in the first half of twentieth century focused mostly on „standing“ architecture. The prevalence of this kind of architectural studies can be traced back to ground-breaking work in this field in the late nineteenth century and early twentieth century by pioneering explorers such as Alois Musil, Rudolf Brünnow, Alfred von Domaszewski (1904-9), and Antonin Jaussen and Raphaël Savignac (1909-1922), later followed by the more analytical research of K.A.C. Creswell.

2.2.4 K. A. C. Creswell (1879 – 1974)

Creswell's most influential work was „A short account of Early Muslim Architecture“, which was subsequently reprinted and later revised and updated by James Allan (Creswell and Allan 1989). This book was a shortened version of Creswell's monumental „Early Muslim Architecture“, published in two volumes with one later revised into two parts (Creswell 1932, 1940, 1969). In this work Creswell analysed the extensive architectural heritage of the Umayyad dynasty in Syria-Palestine.

As an expert on the history of architecture he was concentrated primarily on a chronological development of architectonic forms and decoration, and the historical context is in his works rather in the background. The main significance of Creswell's work consists in a systematic method with which he studies the Islamic architecture in a chronological order. He strictly rejects illogical conclusions of his contemporaries, as for example of Austrian researcher Strzygowski. The force of the argumentation, as well as clear presentation influenced most of researchers of the following generation. Alastair Northedge in his work of habilitation surmises that Creswell perhaps could not read properly in Arabic language, despite the fact that he methodically quotes Arabian texts, which were of course translated by other people. This shortcoming had to limit him necessarily in his work because of the limited access to Arabic sources (Northedge 2000, 12). Alastair Northedge points out also the differences in approaches between Herzfeld and Creswell, his example being Samarra. Herzfeld was full of ideas

about the archaeology of the Near East and at the same time he barely managed to publish the results of the Samarra expedition. Creswell with his systematic approach evaluated the Islamic architecture to present the classic publication (Northedge 1991, 90). Among pioneers of the Islamic architecture indisputably belonged Friedrich Sarre together with above mentioned Ernst Herzfeld.

2.2.5 Friedrich Sarre (1865-1945) and Ernst Herzfeld (1879-1948)

Artefacts of the Islamic world were made accessible to Europeans by some European museums of which the largest collections were incorporated in the museums in London and Paris. In the museum of emperor Friedrich in Berlin Friedrich Sarre arranged in 1910 the extensive exhibition of the Islamic art from borrowed artefacts of various international collections (Leisten 2003, 3-4).

Herzfeld visited the Near East in 1903 as a member of Walter Andrae's expedition to Assur. His interest in Islamic archeology can be seen already in his diary from early 1900s where he describes his visits to al- Mushatta. In 1909 he published his article „*Die Genesis der islamischen Kunst und das Mshatta-Problem*“ (Herzfeld 1909) in the first volume of Carl H. Becker's new periodical *Der Islam*. In this article he already connected al- Mushatta with Islamic art. Just one year before he returned from an extensive archaeological journey through Great Syria and Iraq where he went with Friedrich Sarre, director of the Islamic collection at the Kaiser-Friedrich-Museum in Berlin. There was a lot of speculation about the date of origin of al- Mushatta; it was supposed that the assumed age of these sites dated from the second to the ninth century AD. Becker suggested an Umayyad date in response to Strzygowski's argument for the Ghassanid origin of this monument¹². Due to the fact that, unlike in Qaşayr °Amra, the inscriptions in al- Mushatta had not yet been found, Becker sought support for his hypothesis among art historians. Becker asked Herzfeld to support this hypothesis from an art historian's perspective. The result was „a debate of art historians with gloves off“. There was a conflict of opinions of „an armchair art historian“ with

12 Becker's conclusions undoubtedly influenced also the previous publication of Musil's „*Kuṣejr Amra*“ (1907), as well as previous tumultuous debate in academic circles on this topic and also for example documented correspondence with Musil from the years 1900- 1907 about the date of origin of Qaşayr °Amra (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 451).

Herzfeld's analysis which took into consideration architectural details. Herzfeld agreed that the plan of Mshatta came from a form of Roman *castra* and moreover he postulated that the origin of this type goes back to the royal palace built by the Lakhmid dynasty of pre-Islamic al-Ḥīra in southern Mesopotamia (quoted by Leisten 2005, 372-375).

The expedition in 1907-1908 included methodical visits of dozens of sites and monuments, recording of details and comparative analysis.

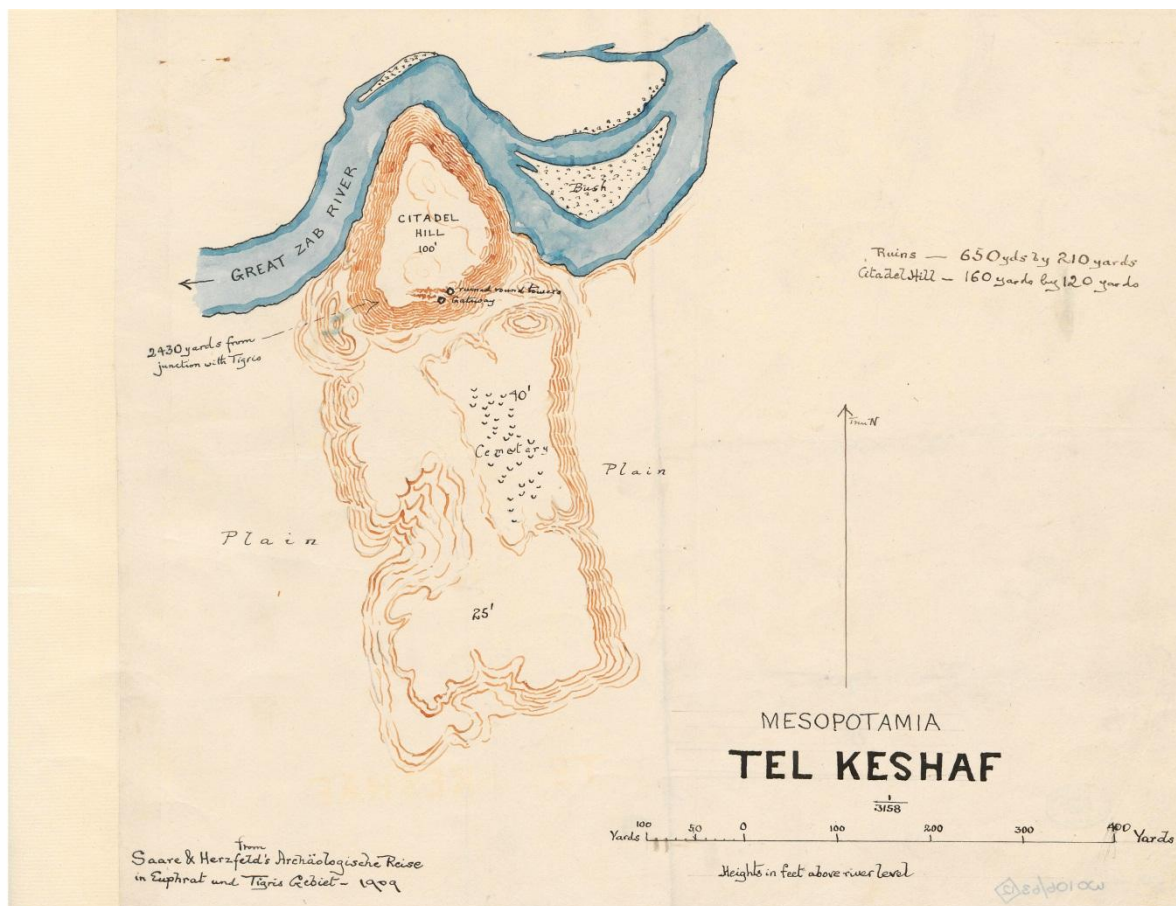


Fig. 1 Draft of Map from Sarre-Herzfeld expedition, NA-MFQ 1/442 002 Sarre-Herzfeld- Archäologische Reise 1909- Tell Keshaf –Mesopotamia.

One of the tasks of this expedition was to select a suitable location for systematic large-scale excavation.

He published archaeological pieces of information from this expedition under the title *Archäologische Reise im Euphrat und Tigris Gebiet* (Sarre-Herzfeld 1911-1920). Among localities, which were taken into consideration, were al-Raqqa and al-

Ruṣāfa; however, in the end Samarra was selected, situated 120 km from Baghdad on the bank of Tigris. French general Lucien de Belié visited Samarra in 1907, together with Orientalist Marcel-Auguste Dieulafoy and one year later French architect Henri Viollet arrived there. During his sojourn he drew a plan of the Great Mosque and documented architectonic structures in the Dār al-Khilāfa and Qaṣr al-Āshiq. He published the results of his work one year later (quoted by Leisten 2003, 4).

Herzfeld visited Samarra for the first time in 1903, then again in 1907. Excavations of Herzfeld and Sarre in Samarra in the following years (1911–1913) were one of the first systematic archaeological researches focused on learning about Islamic architectural structures.¹³

These excavations became a milestone in prehistoric as well as Islamic archaeology. It was also Herzfeld's first great excavation, when he spent two long seasons lasting altogether about twenty months. During these two seasons the large number of about nineteen different sites were excavated. During this time, Herzfeld was accompanied for a shorter period by the Swiss architect Samuel Guyer.

Later it was Hauptmann Ludloff, a military surveyor of the German General Staff, who took a part in the second campaign of the survey in Samarra. The methods he used were not specified. According to Alastair Northedge he probably triangulated from a plane table. This plane in scale 1:25 000 was never published, as it was destroyed during the bombing of Germany in World War II. Nevertheless, the copy of this plan survived and is deposited with Herzfeld's papers in Washington, D.C. (Northedge 2005, 390).

The Islamic mausoleum Qubbat al-Ṣulaybiyya was excavated for only three days and from the research under the floor of the dome chamber we have only one not too satisfactory photography which was taken without giving a scale. The excavation

13 Herzfeld, who in Samarra executed research also in Qaṣr al-chalīpha, wrote at the beginning of February 1913 in his letter to Musil, who became famous primarily for his discovery of Umayyad's figural frescoes in Quṣayr ʿAmra, postscript about findings of figural frescoes from ʿAbbasid period in caliph's palace: „Es wird Sie gewiss interessieren, dass wir hier täglich Bruchstücke zerstörten figürlichen Gemälden in Mengen ausgraben. Der ganze Khalifenpalast war bemalt!“ (the letter of Ernst Herzfeld to Alois Musil, Samarra, the 2nd of February 1913, inheritance of Alois Musil in Muzeum of Vyškov region in Vyškov, from now MV, H 18679/8.)

techniques employed were not exceptional: there is not even any evidence that experienced foremen were employed and Herzfeld's supervision was evidently not satisfactory as there is some evidence from the excavating along the walls that the interior of rooms was not cleared out and the publication with the finds from the cemetery of prehistoric Samarran culture proves the lack of description of the site. Herzfeld was mostly interested in architectural sequences. On the grounds of well-founded indications Alastair Northedge supposes that no other research after 1913 was planned; but in any case all potential possibilities ended with the outbreak of the First World War and the British conquest of Iraq. After excavation, the publication of results was never completed. Only six volumes, mostly about the different kinds of finds, were published before Herzfeld's death (quoted by Northedge 2005, 391- 392). In comparison with Musil's publication about Amra, the third volume is interesting.

It focuses on the wall paintings which were mostly found in fragments. Photographs of the fragments were published together with watercolour reconstructions, which as in the case of Mielich's pictures in the second volume of Amra, were not correct. The main criticism of this watercolor reconstruction in Samarra came from Jean Sauvaget (Sauvaget 1939, quoted by Northedge 2005, 397).

In summer of 1909 Gertruda Bell worked in Samarra doing her research (Winstone 2004, 173-176). Later activities of this English lady, born in the same year as Alois Musil, in the territory of Iraq just as activities of her compatriot Thomas Edward Lawrence present an exemplary proof of interconnections of archaeological and political interests in the Near East (see for example Gunter, Hauser 2005,3-45).

2.2.6 Gertruda Bell (1868-1926)

Gertruda Bell studied history at Oxford. After she finished her studies she engaged in travelling. During her journeys she mostly preferred the Arabian culture in the Near East. She learnt the Arabic language and started to document monuments of the Near East, undertook several journeys deep into the desert where she pursued, just as Musil, ethnological and anthropological observations. She took part in archaeological researches. In the same way as in the case of Lawrence and Musil the government of her country (Great Britain) used her knowledge of local conditions during the First World War. After the war she stayed in Iraq where she established a

museum in Baghdad. Beside of her work in the Institute for Research of Monuments she used her influence in the formulation of a legislative law limiting researches of foreign expeditions. Requirements of this law with regard to granting licences to engage in archaeological researches come close to the present conception of the law and, particularly in the Near East, it was a revolutionary act (Vernoit 1997, 7-8). During her travels she compiled sixteen diaries, various notes on loose sheets, letters and about 7 000 photographs. At the present time they are being processed. Many of these photographs are significant, since many sites, which they recorded, were later destroyed by new housing developments and by war events (Bell www.gerty.ncl.ac.uk).

2.2.7 T. E. Lawrence (1888-1935)

Musil is often compared to Thomas Edward Lawrence and he is even sometimes called „Lawrence of Moravia“. Their political and diplomatic activities are usually mentioned, but their archaeological activity and their abilities until now were not given too much attention so far. Lawrence and Musil had many common interests and qualities as, for example, the ability to find understanding with Bedouins and to adapt themselves to their milieu, as well as political loyalty to their own countries, which both proved during the First World War, and last but not least also resistance to classical school education as both of them considered the performance of school tasks as a loss of time and they unequivocally preferred self-education. Both of them were also familiar with the cartography of the Near East, but Musil evidently did not have any rivals in the physical knowledge of the local terrain. They both shared also the interest in archaeology.



Fig. 2 Lawrence's suggestion to Musil's map, NA- WO 302/113/ 773.

The war terminated Musil's scientific expeditions and shifted his activity towards diplomatic efforts, a task for which he was predestined by his knowledge of local inhabitants, languages and geography. They never met personally, but they both visited often the same places, including Qaşayr  Amra. Musil criticized Lawrence for his activities and had not much respect for his knowledge of Arabic language but he consented that Lawrence was able and accurate observer (Musil 1935).

Lawrence studied history at Oxford and successfully completed his studies with the dissertation about the influence of crusades on the military architecture in Europe during the Middle Ages. His work „Crusader castles“ was published for the first time in 1936, one year after his death. New edition with notes and introduction written by Denys Pringle was published in 1988 and reprinted in 1990 (Lawrence 1990).

In order to gain materials for his dissertation he set forth to Syria in 1909, where he took photographs from about fifty crusader castles. Beside the exploration of the

castles, he gathered during his stay in Syria also certain amount of the Hittite seals. Interest in the Hittites was elicited in him by Dr.Hogarth who occupied himself with Hittite civilization. The young student caught his attention by exemplary arrangement of a neglected collection of ceramics in the Ashmolean.

After graduation he dedicated himself to the study of ceramics from the Middle Ages. With the support of David Hogarth he took part in the scientific expedition of the British Royal Museum to the Upper Euphrates, where according to the prevalent assumption the Hittite seat of Carchemish should be located (compare Decker 2006, 7–8). In 1911 D.G.Hogarth and T. E. Lawrence were in the field, and from 1912 to 1914 C. L. Woolley and T. E. Lawrence. Excavations were interrupted in 1914 by World War I.

During the expedition Lawrence processed the ceramics from the research, designed the complete typology of the ceramics obtained from one layer and photodocumented it. Together with Charles Leonard Woolley they published the results of their journey from Gaza around southern Palestine where they were looking for biblical and Byzantine monuments (Wooley, Lawrence 1914/15).

Later he worked shortly under the Flinders Petrie's leadership in Egypt but he returned soon to Carchemish where he continued with photodocumentation, ceramics and copying writings and inscriptions up to the outbreak of the First World War which definitely terminated his archaeological career (Hart 1937, 8- 11).

2.2.8 A. Musil a T. E. Lawrence

The war terminated also Musil's expeditions in search of Oriental monuments. Musil's self-sufficiency enabled him to move successfully in two completely different environments: the surroundings of the Arabic desert and the spiritual and academic world of the Central Europe. Musil, originally rather a biblicist and philologist without an archaeological experience from researches and at first without the ability to do a proper documentation, eventually occupied himself with terrain cartography and with documentation of archaeological monuments which he discovered himself. Musil's orientation on biblical geography, knowledge of languages, passion for science and systematic diligence, as well as the fact that he was familiar from the early youth with

the academic world, provided suitable prerequisites for his research activity. Knowledge of cartography as well as perfect knowledge of the local surroundings and his long-time friendly relations with natives predestined him also for diplomatic work, especially in unstable historical conditions which occurred as a result of the First World War. His faith in God helped him to overcome hardships and have confidence in his own abilities, diligence and self-sufficiency. Lawrence's sojourn among Bedouins was on the contrary more accidental, resulting from external development of military situation in the Near East. Without enjoying a benefit of any systematic preparation, his individual success was helped by external circumstances which he was fully able to utilize. Musil commented Lawrence's success in a radio lecture with the following words: „*Lawrence served in Palestine and Transjordan, he never set foot into Arabia as such. In Arabia nobody didn't care for him because they didn't know him... Lawrence wasn't a diplomat and as a leader followed guidance of his chief Aude. He was winning supporters not by his personality, but by gold. He spoke with them in English or with the help of interpreters... He never learnt fluent Arabic, which is clear from inspecting his books. It is, however, also apparent, that Allah endowed him with unique ability to observe, perceive, and express himself exactly. His personal memoir is the best book of this kind, since the times of the Napoleonic wars. It preserves his famous memory about a revolt in the desert, although the genuine desert didn't know anything about it*“ (Musil, A. 1935: Colonel Lawrence in the reality and the legend. The lecture given for the Czech radio, The Archive of the Museum in Vyškov, 8488/26.V.'35). Lawrence in his book states, that his knowledge of Arabic language helped him to obtain the position in the Intelligence Department of the British command in Cairo (Lawrence 1935, 12). Although they never met personally, the destiny often brought them to the same places. For example in 1918, when Lawrence was in command of the Arab units and had his headquarters in by Musil formerly explored desert castle al-Azrak, Musil's Bedouin friends, now fighting on the British side, were destroying out of boredom the frescoes and mosaics in Qaşayr ʿAmra by arms and fire, the artefacts which Musil discovered twenty years previously (Fowden 2004, xxi; Sklenář 1989, 402)

2.2.9 The origins of aerial archaeology in the Near East

Big progress for archaeological knowledge of the Near East was achieved by the development of aerial archaeology after the First World War, when this new documentary method was invented due to the necessity to explore terrain for military purposes. This new undestructive archaeological method made possible the identification and the classification of many sites and structures. Beside other things, it contributed to precise delimitation of the course of the eastern „*Limes Romanus*.“ Also many, at that time unknown Islamic sites, were found with the help of this method. The significance of the aerial photography for the discovery of archaeological structures from Islamic period was fully appreciated by one of the first researchers K. A. C. Creswell who used photographs of the 39th Regiment for clarification of the structures of Raqqa from the Middle Ages (Vernoit 1997, 6).

French Jesuit Antoine Poidebard was the main pioneer of the aerial archaeology in the Near East in the thirties of the last century.

2.2.10 Antoine Poidebard (1878-1955)

His area of study included about 1200 km of territory, from southwest to northeast with the width of up to 300 km, from Basra to upper Tigris in the northern Mesopotamia. This region covers an essential section of Roman *limes* in the East (Deuel 1979, 87). He published the results of the survey of the eastern Roman *limes* in 1934 under the title *Les Limes de Trajan a la conquête arabe, Recherches aériennes* (Poidebard 1934). Like the most of the pioneers of the aerial archaeology neither Antoine Poidebard was by his original profession a trained archaeologist. His life career was taking place, in essence, in exactly reverse direction than the one of T. E. Lawrence who was originally a historian, an archaeologist and only later became a soldier. A. Poidebard, on the other hand, started his career in military intelligence and gradually he began to be interested in archaeology. He was born in 1878 (ten year later than Alois Musil) in Lyon and in 1897 he became a Jesuit. After the First World War he became in 1924 professor of the Jesuit University of St. Joseph in Beirut. In 1925 he was commissioned by the French Geographic Society to make survey of agricultural regions in northern Syria. Aerial survey of traces of vanished agriculture was the beginning of Poidebard's archaeological aerial survey. Poidebard experimented with

the sensitivity of photographic material. He developed the technique which used light coming from the opposite side at rather low height. During trial flight above the desert to the north of Euphrates he discovered in this way an ancient road about sixty kilometers long. He did also aerial survey of „Via Diocletiana“. He was dealing mainly with the survey of Roman and Byzantine monuments, mapping of Roman roads and strongpoints of Roman *limes*, but he covered during his surveys also other periods. In 1934 Poidebard completed survey of *limes* along the eastern Syrian border (Poidebard 1934) and afterwards he started with survey of Roman monuments adjacent to the border on the western side up to Palmyra (Poidebard 1945). Deuel states that Poidebard devoted to these two projects about 550 hours of flying time during 250 take-offs (Deuel 1979, 102).

In 1930 he started with survey of „La Strada Diocletiana“ between Palmyra and Dumayr, where relatively preserved Roman monuments were located. Similar to the most of previous surveyors, he wasn't the pioneer because substantial part of this road was already explored before by Alois Musil who published the results in one of the six volumes issued in New York under the title „Palmyrena“ (Musil 1928). Another part was explored by Maurice Dunand in 1925, but as Nordiguian states at the time, when Poidebard surveyed this territory Dunand's „Strada“ was not yet published (Nordiguian 2000, 68). Poidebard's aim was to correct Musil's work by a new method, which was provided by the aerial archaeology. Poidebard combined methods of aerial survey with field survey and measuring. If we compare Musil's and Poidebard's plans and aerial photographs, it is evident that although Poidebard in many cases corrected considerably schematized Musil's plans, on the other hand, in spite of the fact that he had at his disposal aerial photographs and results of his own field survey, he often corrected his results using Musil's work, which is quite evident in cases where he, in fact, copied Musil's errors. Otherwise he adhered strictly to contemporary condition of the locality without taking into consideration recent changes.

From the point of view of Poidebard's accuracy, the problem is that he drew his plans based on originals of vertically made photographs of localities. The verification by field surveys was, to say the least, insufficient. Therefore, certain distortions were incorporated, as for example in the case of Roman fortification Khān al-Manqūra, which has two main opposite gates (beside posterns at the base of circular towers).

Musil depicted both gates opened (Musil 1928, 32 fig.3, 33 fig.4), while Poidebard, on the basis of aerial survey and aerial photographs of de Boysson, drew the plan of this Roman fortification with the gate in the northeastern wall walled up and also without posterns, which means exactly how it appeared from the plane (Poidebard 1934). Nevertheless, it is evident that the gate was walled up at the time, which is from the point of view of the original function of the construction as a Roman stronghold irrelevant and similarly at Khān ‘Anaybe, where Musil depicted from the ground two entries in this fortification (Musil 1928, 106 fig.26, 107 fig. 27). Poidebard drew, again on the basis of aerial survey and again on the basis of de Boysson’s photographs only one. Also in the case of Khān al-Hallābat Poidebard in his plan didn’t draw any of the four posterns leading to the base of the circular towers. Moreover, evidently influenced by Musil’s plan (Musil 1928, 92 fig. 25), he depicted, just as Musil, all these towers in the same size. In reality the tower, in which the well is located, is distinctly larger than three towers in the corners. This was evident as well from de Boysson’s aerial photography which Poidebard used. According to the aerial photography, two stages of construction of this fortification are recognizable. Poidebard ascribed the construction of towers to the second stage. Thomas Bazou states in the chapter entitled „Les limites de cette méthode“¹⁴, that both stages were evident already from the aerial photography. However, field survey at first sight revealed that the construction took place in reversed stages, contrary to what Poidebard claimed (Bazou 2004, 138). Besides, in Poidebard’s publication there is the plan of Khān al-Hallābat where it is stated that the plan was created on the basis of aerial photographs and verified by the field survey (Poidebard 1934).

Thomas Bazou comments on these inaccuracies and states that according to these examples it is evident that Poidebard’s published plans are in reality only sketches and not exact plans as it is actually indicated (Bazou 2004, 139).

He successfully collaborated with historian and epigraphist René Mouterd on interpretations of inscriptions of which he made copies and prints during the survey. Nordiguian reflects in his publication „Aux origines de l’archéologie aérienne,“ on the

14 Thomas Bazou has evidently in mind the archaeological survey performed on the basis of purely aerial survey and vertical photography which Poidebard used as materials for his publications.

fact that he didn't collaborate with an architect, a practice common at that time for French archaeologists of the classical period and period of the Middle Ages (for instance, Paul Deschamps and architect Jean-François Anus). To such collaboration Poidebard agreed only at the end of this survey in the spring of 1932, when he cooperated in several localities with architect André Godard. Approximately at the same time Poidebard started to use new camera which was lighter and much easier to handle (Nordiguian 2000, 69 – 70)

Just as in the case of Musil and other explorers from the beginning of the last century as well as in the Poidebard's case, we could say that on the basis of typology and location - region of Roman *limes* - he mistakenly considered as Roman also some localities from the period of the Early Islam, as for instance Qaṣr al- Ḥayr al Gharbī, Jabal Says, etc.

As Denis Genequand claims, on the basis of typology defined by cursory surface survey, it wasn't possible to distinguish strongholds of Roman *limes* from externally similarly looking Umayyad castles because these castles differ from earlier times chiefly in their inner structure (for more detail, see for instance, Genequand 2006, 3-25).

Bazou ascribes the efforts of Poidebard and his contemporaries to identify all similar stone buildings „lost in the middle of al-Bādiā“ as Roman camps, without any attempt to verify these claims on the basis of other archaeological artefacts (ceramics or coins), to the effort to avoid open confrontation with historical conclusions which were generally accepted at that period.

Nevertheless, Poidebard's publication „La trace de la Rome“ became an important source for archaeologists who from the sixties of the last century worked in the Syrian steppe of the period of Umayyad caliphs (Bazou 2004, 140).

Beside several localities interpreted as Roman, which modern research confirmed as Umayyad castles, some other ones were identified as objects from the Bronze Age (Bazou 2004, 293).

Poidebard was gradually improving the method of aerial prospection and photographing. At the beginning he flew with an observer who was sitting behind him,

and thus the role of a pilot was decisive (Nordiguian 2000, 59). After 1927 he switched to a more suitable method of aerial archaeological prospection. The innovation consisted in having a crew, which beside pilot and researcher had also a photographer¹⁵. The expeditions proceeded in three stages. The first stage was a reconnaissance flight in order to reconnoitre the terrain, followed by specification of flight route, discussion, adjustment of route plan and finally the photographic mission itself, during which the photographer made vertical photographs according to exactly fixed plan. From the publication *La trace de la Rome* it is apparent that Poidebard is the author of photographs mainly made from the ground, while the author of almost all vertical photographs is de Boysson (Nordiguian 2000, 64-65).

The method of aerial archaeology, which was used by Poidebard, enabled researchers to see more of the architectural detail of the building than methods which were used before. These newest methods were based on series of aerial photographs made from higher altitude, which enabled them to understand better the context of archaeological monuments within wider territory. The verification of localities, which he explored, in many cases showed that Poidebard's note „verified by land survey“ (which he inserted at some *loci* in his publications) evidently didn't mean exploration on the basis of shards or architectural details. Moreover, the interpretation of his photographs is today outdated but the photographs themselves, which depicted in many cases by now for a long time vanished monuments, have considerable significance for archaeologists because they serve them to precisely identify places which in many cases are today already practically extinct monuments. His vertical photographs depicted archaeological localities which until now were not submitted to any archaeological survey and which are situated in the countryside so far not disturbed by modern buildings and are thus usable almost as if they were the plans, much more accurate than those which Poidebard redrew from them.

Beside the research of Roman *limes* in Syria, Poidebard was working later on also on lost Phoenician and Roman ports in Sur (Tyre) and Saida (Sidon). With this effort he became the pioneer of photographic survey of submarine archaeology from

15 Photographs were made by de Boysson.

higher altitude. In general, we can say that Poidebard was, judged by his various specializations, indeed a „Renaissance personality,“ similarly as Alois Musil.

2.2.11 The development of archaeology in the Near East after the First World War

The creation of the British mandate of Transjordan after the First World War and subsequent establishment of a Department of Antiquities opened new possibilities (Kennedy 2004, 21). In 1938 the Hungarian-British orientalist, Sir Aurel Stein, spent some time flying over Transjordan with the RAF and exploring Roman *limes* - the ancient fortifications marking the frontier defences of the Roman empire. The results of his expedition were deposited later in the archives of the Bodleian Library. Revised edition of Stein's manuscript was published in two volumes in 1985 by Shelagh Gregory and David Kennedy (Gregory-Kennedy 1985).

Just as Islamic archaeology, Classical archaeology also focused on Roman monuments in the Near East and underwent considerable development in the seventies of the 20th century. Among researchers contributing to the knowledge of Roman monuments in this region we can name at least a G. W. Bowersock (1971; 1983), Thomas Parker (for instance 1986; 1987; 1997), David Graf (for instance 1995), David Kennedy (for instance 1982; 1996; etc;) and Shelagh Gregory (1995-1997).

The same institution was also created in the French sphere of influence – in Syria. Beside that, there were also important researchers at the French Institute in Damascus. The most important among them was in this period Jean Sauvaget (1939 and 1967), who continued Musil's explorations of the desert castles.

2.2.12 Jean Sauvaget (1901-1950)

After his studies at *l'École des langues orientales*, he studied Arabic language at Sorbonne and in 1924 he became a member and from 1929 the general secretary at *l'Institut français* in Damascus. In 1937 he was elected the director of historical studies of Islamic Orient at *l'École des hautes études*. In 1941 he received his doctorate and was giving lectures at *l'École des langues orientales* in Louvre and at the University in Paris. In 1946 he was elected a professor at Collège de France. His works were concentrated on Syrian towns Aleppo and Damascus. Beside that, he was one of the

successors of Musil in research of Umayyad castles (Savauguet 1934, 1967). He worked also on the development of *suq* in the Middle Ages (Sauvaget 1934, 99-102). Sauvaget was also the first historian who occupied himself with material culture of early Islamic period. In his collected articles from 1939 there is discernible for the first time an effort to solve the question of settlement structure under the Umayyads, even though it was proved later that some of these sites, which Sauvaget identified as Umayyad, come from different periods. Alastair Northedge ascribes this problem to archaeological methods Sauvaget had at his disposal at that time. These methods were in comparison with present techniques severely limited. Sauvaget's approach is completely different from Creswell's approach (Northedge 2000, 13).

2.2.13 The development of subsequent research in Islamic archaeology up to present times (in brief)

After Sauvaget's death, Mme J.Sourdel-Thomine published several of his unfinished articles, among them also a contribution to the knowledge of Arabic colonisation in the 1st and the 2nd century of hijra calendar (Sauvaget 1967), where Sauvaget was dealing with the question of relationship of the Umayyad dynasty to the landscape and the use of land. Unfortunately, Sauvaget, before his death, was able to manage in time only about one half of the projected articles and the part, which is dealing with supporting his claims by historical sources, remained unfortunately unfinished. Consequently, some of his claims are therefore unsupported (Sauvaget 1967, quoted by Northedge 2000, 14, Gennequand 2010). For more see the chapter "The development of the hypotheses about the function of the Umayyad castles from Musil up to the present".

Archaeologists working on Islamic archaeology, who are often historians or historians of arts, are providing mostly very limited interpretations. For example, King presents a hypothesis that the Umayyad castles were built as stopovers along Roman roads leading from Bilād al-Shām to Arabia (Northedge 2000, 17).

The first significant archaeological excavation of Islamic period sites took place in Syria-Palestine in the thirties, for example Khirbat al- Mafjār ('Hishām's Palace') in the Jordan Valley. These ruins were preliminarily dated from Hellenistic to Byzantine period, but excavations between 1934 and 1948 under the Palestine Department of

Antiquities proved their Islamic origin. Apart from this kind of researches, excavations of different tell-sites at the same time uncovered major Islamic period. One of this tells named Hisbān was dug out in 1968. This excavation was used as a support for a doctoral thesis by James Sauer in 1973. According to Whitcomb, Sauer was one of the first foreign archaeologist who took the material culture of the early Islamic period seriously (Whitcomb 2000; Walmsley 2007, 19). Early archaeological work in Syria-Palestine focused on a large-scale exposure of the buildings for the elite thought to be Islamic and on the salvaging of the architectural decorations they contained. For example excavation of the Umayyad castle Qaṣr al-Ḥayr al-Gharbī uncovered painted floors; the excavation at al-Raqqā undertaken by the Syrian Department of Antiquities between 1950 and 1954 revealed the mudbrick and stuccoed palaces. At ʿAnjār as well as in the most of the other sites, where excavations focused on Islamic structures, the main goal was the exposure of architectural structures.

Archaeological projects in the mid-twentieth century gave evidence that original assumption about “violent and destructive conquest by Muslim hordes” was wrong, as they revealed continuity of occupation. Original hypotheses came already from the time of the nineteenth-century scholarship and persisted into the twentieth century. For early explorers like Melchior de Vogüé (1865), Gertrude Bell (1907) or Alois Musil, who travelled through “empty landscape filled with deserted ruins and brooded on the fate of peoples and civilizations past”, only conceivable excavation was by “rapacious Arabs” (Walmsley 2007, 22). Different hypothesis originated in economic reasons: disruptions of production and trade. Advocates of these hypotheses pointed out to surveys of Howard Butler and Georges Tchalenko. These comprehensive studies of classical and post-classical period in Great Syria provided speculation about the fact that once densely populated areas were turned into vacant wastelands (Walmsley 2007, 23). At the beginning of the eighties of the 20th century theoretical, methodological and practical approaches investigating social, cultural and economic conditions in Islamic times were adopted. At the same time renewed explorations were focusing on the Islamic period in Syria, which in previous years lagged in this respect behind Jordan and Israel/ Palestine. In 1964 and 1972 Oleg Grabar undertook an investigation of Umayyad castle Qaṣr al-Ḥayr al-Sharqī (Grabar 1978). Explorations of Jean-Pierre Sodini and Georges Tate between 1976-1978

brought into question many of Tchalenko's earlier conclusions (Sodini et al. 1980; Tate 1992). Survey work at sites like al-Raqqa or al-Ruṣāfa (Sack 1996) in Syria started a new era of modern Islamic archaeology in Syria.

Among other modern explorations and publications we should mention at least research of Alastair Northedge and his project focused on recording of all archaeological remains in the capital of the Abbasid caliphs in Samarra, which started in 1983 (Northedge 2006) and recently also surveys and excavations in Syria and Jordan of Denis Gennequand (Gennequand 2002, 2003, 2010).

3 THE STUDIES AND RESEARCH JOURNEYS OF A. MUSIL

Alois Musil was born the 30th of May 1968 in Rychtářov in the region of Vyškov in the farmer's family. The basic education he acquired in one-class school in Rychtářov. Afterwards, he studied on gymnasiums in Kroměříž, Brno and Vysoké Mýto. He had very fluctuating grades (Drápal 2005b,14). Since the family homestead didn't prosper enough, he decided from the existential reasons to enter the theological seminary in Olomouc. During studies, he took the interest primarily in the biblical history lectured by professor Mlčoch and he showed considerable talent for languages.

ThDr. Melichar Mlčoch, a biblicist from Olomouc with whom Musil established very close relationship, undoubtedly got Musil interested in the Near East. Melichar Mlčoch was present, albeit only by means of correspondence, at the beginnings of Musil's field exploration in al- Bādiā, when he directed Musil through his letters how to proceed in recording data in the field. In a letter from 1896 Mlčoch recommends as the most suitable form of recording short entries in a diary with a date from which he can retroactively work out a longer report. He warns Musil that without such entries in the diary some events and pieces of information will disappear from memory (the letter from the 4th of June 1907, Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 19 0701/4).¹⁶

The fact that Musil listened to Mlčoch and started to make such entries in the diary is evident not only from his field diaries (family archive of Musil's family, Musil's papers in the Literary archive of The Museum of the Czech Literature, Château Staré Hrady 2-B/151, 166) but also from a major portion of Musil's foreign publications (*Arabia Petraea* and following works issued in the United States are evidently composed from the elaborated data found in diaries of this type).

In 1891, Musil passed final exams with excellent results and he was ordained as a priest. Despite of unfavorable working conditions and health problems, he finished the doctorate in November 1895.

¹⁶ Jaroslav Franc dealt with their correspondence in his until now unpublished dissertation in detail (Franc 2010, 25)



Fig. 3 Alois Musil (first row, second from the left side) with other teachers in Ostrava in 1895.

His original intention to engage in further study of religious life of the Czech people between 1650-1750. He changed his intentions when he learnt about the possibility to study in Jerusalem. New encyclical issued by Pope Leo XIII *Providentissimus Deus*, and the apostolic letter *Vigilantiae* instigated the increased interest in the studies of biblical history. Besides theological and philosophical analysis, also the systematic research of the Bible increased in the second half of the 19th century, because of new material gained by archaeological excavations in Mesopotamia and other countries in the Near East.

Musil was convinced that the Arabian desert is the source of biblical monotheism of the patriarchs. Musil believed that cultural and religious situation in the inner desert of the Arabian peninsula at the turn of the 19th and the 20th century was similar to the times of biblical patriarchs. He considered the Old Testament as a historical record of mankind, culminating eventually at the time of Christ's arrival.

Musil's work is methodologically close to the method of the fundamental theology and to the conceptions of his contemporary Wilhelm Schmidt (1868- 1954). Both scholars shared a common interest in the studies of ancient ethnic groups and cultures and both considered so-called primitive cultures as archaic.

They both believed that by obtaining pieces of knowledge about these cultures it will be possible, using backward projection, to gain a notion about a religious life in the biblical times. Both Musil and Schmidt considered field researches in the desert as an interpretative key for the understanding of monotheistic religion of Israel and the Old Testament. Musil later used the method of the retrospection, consisting of observing and recording of data about the life of the Bedouin society, to complete information from historical sources and backward projection in historical times. He also attempted to understand and interpret early Muslim society in al Badia and results of this method are also evident in his hypotheses about the founders of Umayyad castles.

3.1 Musil's arrival to the Near East, École Biblique, the first school expedition to Egypt and the origins of his studies of archaeology

In 1895, Alois Musil learnt about opening of a new biblical school of French Dominicans in Jerusalem. Musil received a small study scholarship from archbishop Theodor Kohn 's consent .¹⁷ In November 1895, he departed for the École biblique in Jerusalem. Although Musil did not belong to Egyptologists¹⁸ and he is not usually linked with them, his career had, in fact, a lot in common with Egypt. He became a respected orientalist In Bohemia after the first World War. However, not all People distinguished between his specialization and demarcation of the geographical region of the Near East, in which Musil predominantly was moving.¹⁹

17 For one-year sojourn in Jerusalem Kohn allotted to Musil 1300 guildens. (The letter of Aloise Musil to F. L. Rieger from Jerusalem, the 17th of April 1896, ANM, fond of František Ladislav Rieger, cardboard no. 41.)

18 From this view the letter from the 3rd of April 1925, in which a firm "J. Bělík, artistic plant for interior equipment," which appealed to Musil, invokes a smile: "Reverend Professor of theology Musil, Egyptologist, Prague IV., Strahov Monastery. "I take the liberty to offer you an Egyptian mummy sarcophagus which I succeeded in buying in the past days. If you are interested in it, please visit me in my firm." (Collection of A. Musil in Literary archive of The Museum of Czech Literature, Chateau Staré Hrady.)

19 About Musil's research relationship to Egypt in more detail see Veselá – Žďárský (2009, 89-129).

Egypt was also a gate to the Orient for Musil in 1895, when he decided to study at the École biblique in Jerusalem. The first step in the dreamt-of lands, that he saw from the steamer of the Austrian Lloyd Company, was the Egyptian coast.²⁰

After several weeks, he returned to Egyptian territory with a school expedition, which began its journey in early February 1896 (Musil 1898, 1).²¹ They traveled from Jaffa to Port Said and from there to Cairo (Menčík 1908, 6). This way, Musil toured the north part of the Suez Canal, Cairo and visited the pyramids and museum in Giza. Despite Musil's well known declaration that this expedition, based on Baedeker's guidebook, disappointed him, he was charmed by Egypt and inspired to undertake independent travels. Fascinated by wonders he saw, as well as the richness of collections in the museum, he wrote in his lyrical article called "On the bank of Nile, the 10th February 1896", ... „You have in the museum in Giza thousands of various statues, large as well as small, of marble, granite, basalt, bronze, gold, silver, earthenware as well as wooden, and you find on each of them peculiar, distinctive strokes. (...) However, let's continue. – We didn't go even through a third of the vast museum. We were passing lot of halls with instruments, tools and clothes, which testify about the great level of development. They are deserving thorough inspection.“ (Musil 1896, 30). In next part, he describes enthusiastically the mummies of pharaohs: "Here lies 'almighty' Sethi, I with his arms crossed over sunken stomach, thick neck, clenched teeth, but the expression on his face shows deep wit, and he is still very likeable. He lies beside Ramesses II, his son. His coffin has an image of the god Osiris (...) The face color is fairly natural. The forehead is flat. The brow ridge sharply formel. The nose hooked, the neck long. The overall expression of the face is rigid,

20 "I overcame various obstacles and difficulties, and I came to Egypt in November 1895 and then I went to Jerusalem, where I shall study at the École biblique." (Musil 1921, 215) See Menčík 1908: 6: He travelled via Trieste, Alexandria and Jaffa and arrived in Jerusalem on the 21st November. According to Musil's own records he established himself at the École biblique on the 23rd November (Musil 1898, 1). The trip took 10–12 days. The transport operator of shipping to Jaffa was initially a French company Messagerie Nationale, but as of 1852 two more steamship companies were established. Besides a Russian company sending out the ships from Odessa, there was also the Austrian Lloyd Company, operating between Trieste and Alexandria. Passengers had to change ships in Alexandria. (See Alroey 2003, 42.)

21 With two years distance Musil dates his departure on the 2nd February. However on the postcard from Cairo he mentions a later date of departure: "So I'm not already in Jerusalem. We left on Tuesday on the 4th February and as of then we wander through Africa. Our voyage was a very good one – and even in Egypt we are doing fine." (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18106/2). About the school expedition in Egypt see Lagrange (1896).

direct and when watching it intently, it seems as if the eyes and mouth are opening and listening to commands, accompanied by a move of his hand, which is, in fact, raised.” (Musil 1896, 31)²²

From Cairo, he sent home an undated greeting card (it arrived in Rychtářov on 21st February),²³ showing his enthusiasm: “I saw here many new things – what more is there to see... I reached the top of a pyramid, visited tombs, ancient collapsed towns, yesterday I saw a tree planted on a spot where Virgin Mary with her child rested. I visited a house where she lived – and many other places. (...) I am writing you from a large city that is very different from our towns.”²⁴

Besides a traveler’s enthusiasm, we can also read about remaining plans of the expedition, which still had more than one month of adventures ahead of them. “Tomorrow I’m leaving and, when you read this card, I will be – God permit – on Mount Sinai, where God revealed the Ten Commandments. We shall stay there longer. On 15th February, I shall go from Suez on the coast of Red Sea in Africa to Asia on a camel. I will travel through the Arabian Desert for 12 days, and I will be, God willing, on Mount Sinai on the 27th February (or the 28th). We will visit there all important places and on the 4th or the 5th March we shall start a journey on camelback along the Gulf of Aqaba to the rocky desert, which is known for a great number of ruins. I have no idea when we shall be back in Jerusalem. After the 15th–18th March I shall be at Mount Nebo, where Moses died. On the 25th near the Jordan in Jericho – and in late March – if God would grants – [in Jerusalem...]”²⁵

22 In Musil’s papers in the Museum of Vyškov region there are three photos of mummies, probably from this trip: pharaoh Amenhotep I (the 18th dynasty), queen Isimkheb (the 21th dynasty) and priest Nebseni (the 18th dynasty). I would like to thank to PhDr. Hana Navrátilová, PhD. from the Czech Institute of Egyptology, Faculty of Philosophy and Arts of Charles University in Prague, for consultations about mummies identification.

In the second half of the 19th century Egyptian museum acquired a new building built for its purposes on the bank of Nile (in the Bulaq quarter in Cairo). Flooding in 1878 forced Egyptians to change plans: the collections were moved to the museum in Giza, where they stayed until 1902. Afterwards they found its final place in the current building of the Egyptian Museum on Tahrir Square.

23 There unfortunately is no longer a stamp from the Egyptian post, as the exotic stamp was cut out by someone from the postcard.

24 Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18106/2. (See Bauer 1989, 30. However Bauer’s quotation from the letter is limited due to language barrier).

25 Ibid.

The school expedition left Cairo with the intention of following the Exodus route, and they tried to compare “hieroglyphic, scriptural, Greek and Latin references with information from the creators of biblical tradition, [Henri Édouard] Naville’s finds – together with [Oskar Friedrich von] Fraas’ and [Theodor] Fuchs’ geological researches” (Musil 1898, 1). In a report for the Czech academy of sciences (Musil 1898, 1–6) Musil named the places they visited: the northern part of the Suez Canal, Cairo, the Pyramids at Giza, the biblical land of Goshen, Where the Israelites should have dwelt since the days of Joseph (Gen 45:10), and after climbing Jabal ‘Ataqah (871 m above the sea level, west of Suez City) the expedition left Africa and entered the Sinai Peninsula. They traveled further to the south along the coast, via Ra’s Abu Zanimah to Mount Sinai. “The land from ‘Uyun Musa (...) looks like an inhospitable desert. ‘Ayn al-‘Amarah – biblical bitter waters (Exo 15:23 – authors’ note) – from [Georg Moritz] Ebers’ journey were buried totally under sand” (Musil 1898, 1). From Fayrān Oasis they climbed Jabal Sirbal and then they reached Jabal Mūsa. According to Musil, they stayed longer and thoroughly explored the mountains in the surroundings and they visited “in haste” the library of St. Catherine’s Monastery. The expedition then headed back to Palestine, partly in Moses’ steps, they travelled around the Sarbut al-Khadim, across the desert of al-Tih, Qal‘at al-Nakhl, the springs at ‘Ayn Qudays,²⁶ the ruins of the Roman town of al-‘Awja’, via Gaza, Ashkelon and Nicopolis (Emmaus) to Jerusalem, where they arrived on the 18th March 1896.

Just on Jerusalem’s École biblique Musil enrolled in the second class (1896/ 97) on archaeology (Tureček 2008).

26 Musil described enthusiastically details about a trip to springs of ‘Ayn Qudays in the manuscript entitled *Qadesh Barnea* (new materials in Musil’s papers in the Museum of Vyškov region, 57/2006). Musil’s enthusiasm is clearly visible in this text: “Contented and tired we got down from the camels in the camp, where all the Bedouins hailed us with firing in the air and with rejoicing, as if we came back from a raid.”

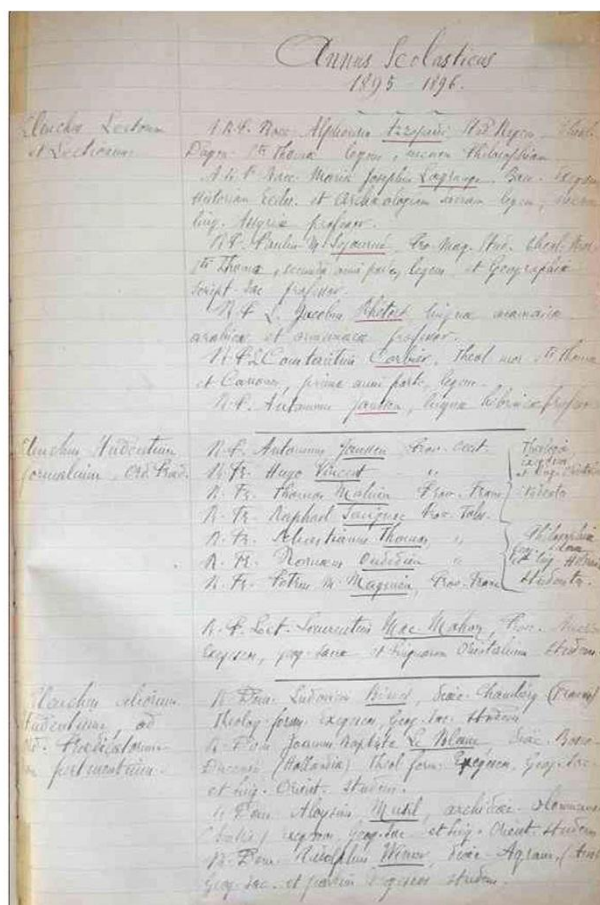


Fig. 4 École biblique, Class-book, school year 1895/1896 – photo by Břetislav Tureček.

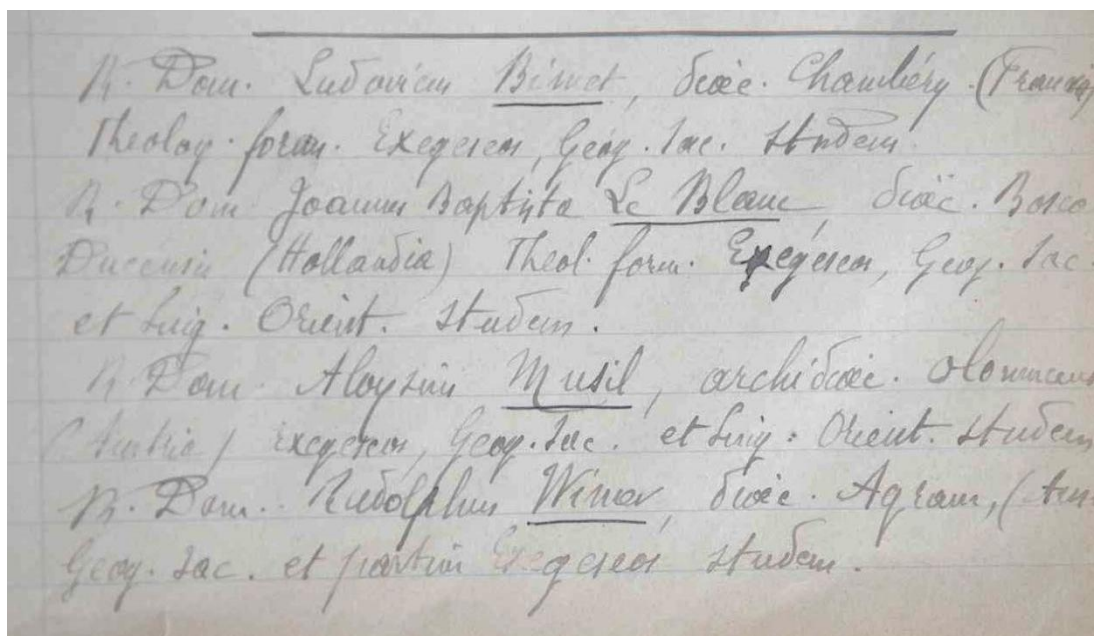


Fig. 5 During his second school year (1896/1897) at École biblique in Jerusalem Musil took lectures on archaeology - École biblique, Class-book, school year 1895/1896 – cut out from the photo above; the name of Aloysius Musil is on the fourth line from the bott.

Archeological excavations or as Musil at that time was saying - „diggings,“ (Musil 1902c, XII) he started to apprehend as necessary part of Old Testament historical and biblisticresearch: „When all Egyptian ruins are explored, When all towns of southern Palestine will be digged over,... many dark places of the Holy Scripture will be clarified..“ (Musil 1901, 784).

3.2 Transfer to Université St. Joseph in Beirut

Even so, to this ambitious young man the École biblique was insufficient and therefore, from the 23rd of February 1897. He continued in his studies at the Jesuit Université St. Joseph in Beirut.



Fig. 6 Port in Beirut, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.

Among his teachers were some excellent specialists: Louis Cheikho, Henri Lammens, Antun Salhani, Donat Vernier, Jean Baptiste Belot or Joseph Brun.

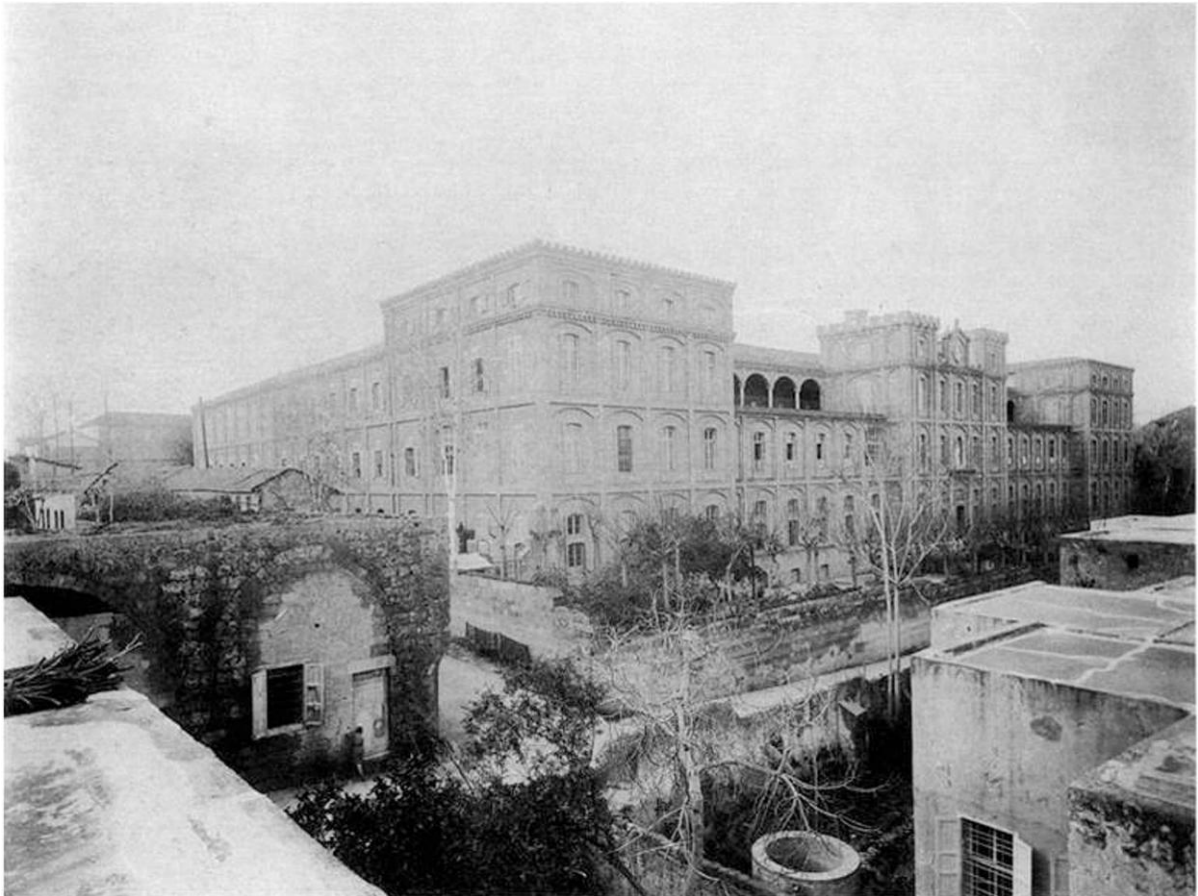


Fig. 7 Université Saint-Joseph, Beirut.

When archbishop Theodor Kohn after complaints of turned down Jerusalem's Dominicans stopped the financial support to him, the young researcher got into serious problems. He was searching for help anywhere it was possible. Moreover, the Archepiscopal consistory let him know, that to the 1st of November 1897, he should return from Orient. In July 1897 he again turned in a letter to his patron František Ladislav Rieger: „Noble Mr. Rieger! For the second time in my life, I am sending to you an ardent entreaty for advice and help – and I hope that also this time it will be heard.... On my last journey, I discovered completely unknown towns, castles, roads, many inscriptions, ale I couldn't to scrutinize them thoroughly and to copy the inscriptions. For one thing, the war between Banū Sha'lān and Shūr, and for another the lack of money hindered me... I would like to visit these places once more – and to complete and arrange thus my works, which would really enrich the science. I would like to visit those regions in March – but where shall I be in March? (The letter from the 16th of July 1897, Literary archive of the Monument of National literature, fond František Ladislav Rieger.) The fate gave to Musil on his rhetorical an unexpected

answer: in March 1898, Musil initiated the key expedition of his life – after two months he entered as the first European into by frescoes decorated interior of the Umayyad Quṣayr ‘Amra... Nevertheless, it was close and the merit for the discovered of Quṣayr ‘Amra for western science could be ascribed to English explorer and traveller John Edward Gray Hill: The 28th of March 1895, he explored in the company of Bedouins Qaṣr al-Kharāna, which he took for a crusader’s fortress. When they looked into surrounding landscape, Bedouins also mentioned °Amra and described it as ruins with paintings on walls. „Probably a church,“ Gray Hill stated and didn’t take any interest in visiting it.²⁷

The sojourn and the travelling in Orient was enabled to Musil by the Czech and Viennese academies of Science, which provided him with means for purchasing of „scientific material“. In this regard, for instance, court councilor David Heinrich Müller, professor at the university in Vienna and chairman of the North Arabic commission of the Imperial academy of science in Vienna, wrote to Musil in the letter from the 16th of February 1898 from Vienna. He informed him, that the Academy designated for him 2000 guldens, that mean the amount, which the Commission for languages had at disposal for the whole year. Musil should for provided money to copy, to impress and to make photographs as much as possible.“ He was supposed to send copies and imprints immediately to the Academy, the originals separately. In the selection of scientific materials Musil should have a free hand, as well as in that, how he will inconspicuously export these materials. In this regard, he can contact the general consul, to whom the Academy recommends Musil, otherwise he should proceed cautiously and cleverly.²⁸

27 “The situation is stern and gloomy – a large dark flint plateau, low hills to the north, the descent to the south bounded by some hills perhaps 20 miles distant, and to the east low wādy leading, our Sheiks said, to ‘Amr’, which they described as a ruin with pictures on the wall (perhaps a church), and beyond to Azrak...” (Gray Hill 1896, 34)

28 The letter from the 16th of February 1898 (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 19083/1).

3.3 Musil's travels to the Sinai Peninsula

Musil repeatedly travelled to the Sinai Peninsula to map Arabia Petraea and the result of his work brought an unexpected benefit to Egypt. He brought back early data for maps already from the school expedition in 1896: these included many notes about the landscape and distances. Full of traveler's enthusiasm he immediately crossed the river Jordan during the vacation of 1896 to explore territories connected with the second part of the Exodus (Musil 1898, 2). From Musil's reports we can see that since the very first moments, he purposefully started to build his extensive work, and that plans for creation of maps were part of his goals since the beginning of his stay in the Middle East. Along with biblical, ethnographical and archaeological findings, he also systematically collected topographical data. "I wanted to (...) see the second half of the Exodus route, borders of the Roman domain, learn about life, religion, customs, habits, legends, songs of the natives..." (Musil 1898, 2) The result of this trip, from which he returned to Jerusalem on 21st September 1896, was "abundant listing of ruins, mountains and valleys with data needed for creation of a map, photographs with notes about life of tribes..." (Musil 1898, 3)

Two years later, and after invaluable personal experiences with individual journeys, a critical distance in assessment of the school expedition is visible. However its cardinal importance for his travels and scholastic career is indisputable: "From this expedition I brought back a collection of plants, minerals, seashells, photographs and some drawings, plans, plentiful commentaries about formation of land, valleys, mountains, with directions and distances' records for a map, but altogether all was fragmentary, uncompleted and without knowledge of life and people living there – dead. Travelling with a caravan is comfortable, but expensive and it doesn't bring a grand benefit." (Musil 1898, 2)²⁹

²⁹ In Musil's papers in the Museum of Vyškov region are preserved 10 drawings from this trip. The author of these drawings is not yet identified. Jean-Michel de Tarragon from the École biblique in Jerusalem, after his search in the school archive, was convinced that the author was not a student nor one of the teachers. He pointed out that according to Lagrange (1896) the school expedition was accompanied by many other people. The identity of many of these we can no longer determine. For this information I thank to Dr. Břetislav Tureček, reporter of the Czech radio in the Middle East, for communication with the representatives of the École biblique.

Musil repeatedly returned to the Sinai Peninsula because of his cartographic work.³⁰ The first return visit took place in the spring of 1897. He set out for the trip on 10th May from Beirut. Among others, he was accompanied by his Professor Père Henri Lammens, who soon gave up his participation in the expedition.³¹ They left Gaza on 25th May and made their way as far as ‘Ayn Qudays (29th May). The following day they spent around the springs at ‘Ayn al-Qudayrat and ‘Ayn al-Qusaymah, and then continued in the direction of Subaytah beyond the then Egyptian territory. Musil planned the following expedition for the autumn of the same year. The expedition left Gaza on 16th November, but after an attack near the springs of ‘Ayn al-Qusaymah (20th November) they gave up and returned home (see below). During the spring of 1898, Musil was back in Sinai. After an initial delay in Jerusalem, the expedition left Gaza on 28th March and on 2nd April it headed south-east from al-‘Arish.³²

Again, they travelled through the surroundings of ‘Ayn al-Qusaymah, ‘Ayn al-Qudayrat and ‘Ayn Qudays and on 6th April, they headed towards Abdat (Avdat). From here over today’s Israeli territory they reached Aqaba on 14th April. Here the course of the expedition took an unexpected turn: Musil was detained under suspicion of being an Egyptian spy, and the next day was escorted to Ma‘ān, where he waited for the result of decision about the permission to continue to Kerak. During waiting, he visited again Petra, where he continued in copying of the inscriptions, and from there he departed to biblical Punón. There he occupied himself by exploration of ancient copper mines (Musil 1907b, 257; cf. Menčík 1908, 18).

Musil returned to the Egyptian-Ottoman borderland in summer 1902. The expedition started again in Gaza on 18th August. It advanced south-west along the shore of the Mediterranean. When they reached Rafah they received bad news: the whole territory further west was plagued by cholera (Musil 1908, 59). They changed

30 The single expeditions can be followed day by day in Musil’s work *Arabia Petraea*: about trips that led Musil at least for a short time to the Sinai Peninsula, see Musil 1907b, 165–310 and Musil 1908, 51–248.

31 “Also erudite P. Lammens set off with us, but had to return shortly as he was unable to bear the weariness.” (Musil 1898, 3)

32 “On 2nd April 1898, blessed by a stupid Mahometan saint, we left the town of al-‘Arish which – as well as the whole of Egypt – flourishes under the rule of the Englishmen.” (Musil 1899a, 253)

direction and travelled to Beersheba, from where Musil set out to explore territories along the southern border of Palestine, which allowed for substantial advancement in collecting of data for cartographic purposes (Menčík 1908, 34). The following trip led through al-‘Awja’ and Subaytah to Abdat and on 4th September they arrived to al-Muwaylah, again through ‘Ayn al-Qusaymah. From here they proceeded in a southerly direction through territory of the Sinai Peninsula as yet unmapped by Musil, through al-Kuntillah, which they reached on 7th September. Gradually, they started to turn East towards the modern-day territory of Israel and Jordan. Egypt continued to serve to Musil as a point of departure during his journeys to the Orient or on his way back.³³

A proof about Musil’s plan to visit St. Catherine’s Monastery is preserved in the Vyškov archive. It is a letter of recommendation of archimandrite Nikifor and deacon Daniil dated 28th April 1901 and addressed to Porphyrios, the Sinai archbishop in Cairo. In this letter Musil’s first name is not correct:³⁴ “The carriers of our letter of recommendation provided with a bull Ludvík Musil [LOUDOBIKOS MOUZIL – sic!], Professor, and Alfons Zografos, on the occasion of their journey from Austria plan to visit your ancient monastery to see the antiquities preserved there. We recommend these official foreigners along with the warm recommendation of honourable political representative Mr. Gryparis and ask your High Dignity to provide necessary instructions to the council of fathers of your Saintly Monastery to provide them (the foreigners) with the possibility to fulfill their holy aspiration, for which they

33 For example in August 1900 he was returning from Karak to Europe via Mādabā, Jericho, Jerusalem, Jaffa and Alexandria (Menčík 1908, 27). At the end of the expedition in 1901 after his recovery from fever, Musil “visited Damascus and returned home through Egypt” (Menčík 1908, 33). For his trip to Hijaz he left Vienna on 21st April 1910 via Trieste, Alexandria, Beirut and Damascus (Musil 1926, 1).

34 The Sinai Archbishop at that time had his seat in Cairo. This is mentioned in more detail in Musil’s book on Christian churches: “Along with an orthodox alexandrine patriarch, as of 1575 the Greeks had in Egypt an independent Archbishop of Sinai ordained by the patriarch of Jerusalem. He had a large house in Cairo with a church of St. Catherine. He was seated there along with his council and from there managed the Sinai monastery which he visited only once a year. The alexandrine patriarch was claiming supremacy over him. During the Turkish rule his effort was not successful as the Archbishop was protected by Russia. After the world war the monastery was divested of rich income flowing from estates in Russia and Bessarabia and became more modest. As there was nobody to support the Archbishop, in June 1928 the Patriarch closed the house in Cairo and had the Archbishop expelled. Representatives of both negotiated and the dispute was settled on 5th November 1932. The Archbishop and his council will be seated in Sinai monastery.” (Musil 1939, 108)

will come.”³⁵ It is impossible to prove yet whether the planned visit really took place or not.³⁶

3.4 The first research travels in the Near East

Musil was bringing from travels, which took place from 1896 until 1915 hundreds of copies of Nabatean, Grecian and Arabic writings, inscriptions, drawings, ethnographic records, photographs, samples of minerals and botanic findings. He explored the route of the Roman road and on the base of discovered inscriptions, he determined its further direction (Drápal 1972, 16-18; Drápal 2005b, 14-18).

One of the first Musil's journeys to Mādabā. During this journey in the summer of 1896, he visited together with a missionary – Catholic Arab Don Antūn Adrabb – al- Karak, where he explored remnant of Roman camps and milestones. Other journeys led among others to fortified station al-Qaṭrāna, on the coast of Dead Sea and to Nabatean Petra. There they engaged in exploration of town fortification, irrigation system, marketplace, ruins of pagan and Christian temples, drawing of grave ground plans and general plan of the city (Musil 1898b, 2). After return, he continued in the study of Assyrian, Hebrew and Arabic languages and in self study in Beirut's libraries.

A few weeks later he set off on another trip (from 10. 5. 1897 until 14. 7. 1897) with a clear cartographic aim, accompanied by a military specialist Rudolf Lendle: “To connect the first with the second, to determine the southern border of Palestine, both Roman routes leading from Aqaba (...) On this trip I was accompanied by a

35 A hand-written document provided with a large red seal even with an anonymous Czech translation is available in the Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18242/1.

36 According to his own records he set off for the expedition on 9th May from Mādabā (Musil 1907a, 265). The main goal was Qūṣayr ‘Amra, towards which he headed with an artist, Mielich. The letter of recommendation was written only 10 days before, during which time he would have had to visit the monastery, reach Mādabā and prepare everything necessary for the expedition. This year he again returned home through Egypt (Menčík 1908, 33). In 1962 a Czech three member expedition travelling from Prague on mopeds reached the St. Catherine's Monastery on the Sinai Peninsula. In one of the books devoted to this expedition (*On a Moped to the Bedouins*) the author and member of the expedition mentions a record in the guest book of the monastery about a visit of Prof. Alois Musil: “Father superior gloats upon our astonishment and opens before us an old guest book of the monastery. He points to one place: Prof. Alois Musil!” (Jedlička 1964, 133) Unfortunately a specification of the time of the record is not mentioned. A sole record suggests that it is not connected to the visit in 1896, when the expedition of the École biblique stopped for a short visit. For this information thanks to Mr. Tomáš Sadílek, a head of ‘Amra Expedition 1993, for drawing their attention to this popular publication.

German engineer-officer Mr. Lendle, who arranged the map, drew plans and was of great benefit to me.” (Musil 1898, 3). In spite of an apparent progress, Musil felt that the work is not yet complete: what was left was mapping Wādī Mūsā (Petra) and unexplored territory southwest of ‘Ayn Qudays, and this was a source of unrest for hyperactive Musil (Musil 1898, 4).

The next expedition he, therefore, tried to undertake in November of the same year. At the beginning of the month he arrived in Gaza, and on 16th November, he commenced his expedition. He reached the spring of ‘Ayn al-Qusaymah, where he was ambushed by a band of 40 raiders. Unfavorable circumstances forced him to return and on 23rd. November he was back in Gaza (Musil 1907b, 198–212, cf. Menčík 1908, 15).

3.5 The journey to Musil’s life’s discovery

In March 1898, a year after his departure from Jerusalem, he left for the most important expedition of his career, during which he discovered on 8th June an Umayyad Quṣayr ‘Amra. Already during his previous journey Musil learnt about the ruins of Qaṣr al- Ṭūba and about the Umayyad castle Quṣayr ‘Amra, which interior should be according to description of a Bedouin sheikh decorated by paintings and writings. Musil provisionally classified them as Nabatean (Musil 1898b, 3–6). In 1898 he visited for the first time Qaṣr al- Ṭūba, Quṣayr ‘Amra, al- Muwaqqar, al- Mushatta a al- Kharāna (Musil 1899, 252–262).

He had no idea before his departure what a radical change in his life was just around the corner: “The sole aim of my trip was to explore thoroughly the southern borders of Palestine and the adjoining territory. Along with this – if possible – I wanted to make cartographic records...” (Musil 1899a, 251).

This crucial expedition of his career he described immediately after his return to the letter sent from Damascus to the University in Beirut from the 17th of June 1898. The letter with only one sentence long introduction was published in the journal al- Mašriq. This article with the headline Nová cesta do pouště – „*The New Journey in the Desert*“ (Musil 1898a, 625–630) contained the itinerary of Musil’s journey, the description of natural conditions and complicated circumstances of travelling in the

desert among belligerent groups of Bedouins, and some monuments, which Musil visited. However, it is surprising that in the article is no mention about Quṣayr ‘Amra, which he happily discovered just eight days before he wrote the letter.

Quṣayr ‘Amra was mentioned only by Musil’s Beirut’s teacher Henri Lammens (1898, 630–637) in the last part of his article, *The Oldest Ghassaniad monument or the ruins of al-Mushatta*, which instantly followed. In his article Lammens published actually first pictures of Qaṣr al-Ṭūba and Quṣayr ‘Amra, drawn according to Musil’s photographs.



Fig. 8 First picture of Quṣayr ‘Amra in Lammens’ article published in al-Mašriq in 1898, after Musil’s photo.

The discovery of ‘Amra and the surprisingly negative reactions of the Viennese scholarly circles shifted aside Musil’s cartographic activities for a long period of time. Apart from studies in European libraries and museum, he trained himself in cartographic skills at a geographical institute in Vienna (Menčík 1908, 24).

Sheikh Banū Ṣakhr Ṭalāl promised Musil before his departure, that in Musil’s absence he will not allow anybody to enter into the castle (Musil 1899, 262). Other journeys oriented on exploration of Quṣayr ‘Amra and some other desert castles Musil

undertook in 1900, 1902 a 1908–1909 (to more details see the chapter „Quşayr °Amra“).

3.6 Musil's planned cooperation with Brünnow

In 1901, Professor Rudolf Ernst Brünnow, based at that time in Vevey in Switzerland, turned to the academy of sciences in Vienna with a request for cooperation. In his letter of 21st July he asked Professor David Heinrich Müller, to submit the attached map of al- Karak region for Musil's review.³⁷ Musil accepted,³⁸ and a long-term cooperation was started. The following year Brünnow suggested to Vinna. That Musil should publish his findings in Germany along with the local scholars. Menčík writes, that the academy sent Musil to Vevey to get acquainted with plans about the intended publication based on Brünnow's trip in 1897, and to prepare a report about it. He adds, that Musil was willing to take part in the cooperation with Brünnow, but eventually the academy decided to publish Musil's work as an independent publication (Menčík 1908, 33–4 and 42).³⁹ In reality, this matter was evidently more complicated and the dismissal of this offer realized probably not only from an incentive of the Academy, however, also from Musil's side, as we can see from received letters of the Viennese academy in Musil's inheritance in Vyškov and from the drafts of his letters in the same place.

In these letters David Heinrich Müller at first informs Musil, that they received a letter from Brünnow and he asks Musil, what is his opinion about Brünnow's proposals, if they are acceptable for him, because the Academy holds a view, that

37 Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18496/1.

38 Brünnow in a letter to Musil from 9th October 1900 writes that he accepts his suggestion and will use for his map Musil's information. Also he will use Musil's records about localities that he had not visited himself. (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18496/2.)

39 Brünnow was willing to finance Musil for another expedition to complete the cartographic data and offered a sum of CHF 5000 (a letter dated 12th May 1902, H 18496/4). He regretted that the plans for cooperation did not work out (details in a list from 13th June, H 18496/5). Brünnow, Alfred von Domaszewski and Julius Euting published in 1904 a book *Die Provincia Arabia*, to which was attached a map at a scale of 1:100 000 focused on a territory of 12 000 km². Brünnow had an agreement with Musil that he will review the book (e.g. letter dated 21th June 1904, H 18497/5). Musil fulfilled his promise (1904, 379–404) and suggested about 300 topographical changes, which Brünnow accepted and took into account in his second volume from 1905 (Menčík 1908, 42). In this respect Brünnow's letter from 30th January 1905 is interesting, H 18498/2.

Brünnow is an important man and his proposals shouldn't be rejected⁴⁰, and about a fortnight Müller writes again, that he could not let Brünnow to wait for the answer any longer. He also writes, that he received Musil's letters and reminds him, that guidances and wishes of the Academy are determinant only if they are in the interest of science and if Musil's and Mielich's works will find use, and also that they acknowledged "confidential information," but they can't use them. Which makes difficult to write the answer to Brünnow. Therefore, they ask Musil to write a precise viewpoint in such a way, which will make hard for Brünnow to answer. He adds that Brünnow probably interrupted his work and was waiting for an answer. At the end of his letter Müller yet reassures Musil, that *Quṣayr ʿAmra* will be naturally published separately.⁴¹ From Musil's enclosed draft of his answer to Vienna from the 17th of November is evident, that he agrees with the cooperation only, to a certain extent. More exactly he suggests that with the consent of the Academy, he is willing to answer to Brünner on his precisely formulated questions, but all ethnographical works are, for the time being excluded, and further *Quṣayr ʿAmra*, and *Quṣūr al-Tūba* and *Mushatta*...⁴² Müller in one of the following letters writes to Musil, that he learnt from Karabáček, that Musil as well as Mielich hesitates in the relationship to Brünnow, therefore he can't accept the responsibility alone, and asks Musil to come to Vienna for the session of the commission, because they have to decide.⁴³ In January 1903, Müller yet writes to this topic, that he obtained another letter from Brünnow and asks Musil to take a viewpoint in a letter to North Arabic commission, if he intends to pass materials to Brünnow and Euting, because Müller wants to summon the commission to make the final decision.

44

40 A letter from 4th November 1901 (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 19084, 5).

41 A letter from 16th November 1901 (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 19084, 5).

42 A concept from 17th November 1901 (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 19084, 8, 9).

43 A letter from 1th June 1902 (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 19085, 3).

44 A letter from 19th January 1902 (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 19086/2).

3.7 Musil's essential monographies published in Vienna

Musil at the end published his discovery of the Umayyad Quṣayr 'Amra in 1907 in Vienna under the title “*Ḳuṣejr 'Amra*” (see more in the chapter „The documentation and problems of the publication“).

In the same year his extensive work about Quṣayr 'Amra was published in Vienna also on three sheets with size of 65 x 50 cm as well as the map *Karte von Arabia Petraea nach eigenen Aufnahmen* representing in the scale 1:300 000 the territory with area of 95 000 km², from which approximately 50 000 km² represent territory not explored before, (Drápal 2005b, 27) and the four-volumes *Arabia Petraea* started to be issued with dozens of sheets with detailed maps and 1800 text pages.

According to Menčík, the ministry of war at the request of the academy sent out a specialist to Olomouc, with whom Musil worked on the maps for thirteen months. The result was sent to a military institute of geography for publication. Musil was granted a year-long holiday in Olomouc and moved to Vienna to supervise the work. The map *Arabia Petraea* covering a territory of 95 000 km² at a scale of 1:300 000 was finished under the supervision of colonel.

Wieserauer and published in 1906 in three sheets. It was closely followed by a map of Wadi Mūsa at a scale of 1:20 000 (Menčík 1908, 42–43). Even in comparison with Brünnow's project, it was an extraordinary work for its time. A. Musil was named for his merits the member of the Royal scientific society (Drápal 2005b, 30).

3.8 The summary of Musil's journeys in 1908 – 1917

In 1908-1909, Musil undertook together with cartographer Rudolf Thomasberger from the Military geographic Institute in Vienna an expedition to inner Arabia. The main reason of the journey was mapping of a region between 37°-43° eastern longitude and 31°-33° northern latitude. Their work was interrupted in 1910, when Musil on the request of Ottoman government engaged in the mapping of the surrounding of the Hijaz Railway between Ma °ān and al-°Ulā (Musil 1928b, xiii). Next journey to northeastern Syria and Mesopotamia Musil undertook together with Prince Sixtus Ferdinand of Bourbon and Parma in 1912. The expedition started in

Damascus and travelled via Palmyra, the basin of Euphratus and Babylon to the basin of Tigris and back via Homs to Damascus. On the expedition Musil engaged in further documentation of historical monuments, besides drawing maps and collecting minerals. The last expedition to the Near East he undertook took place in 1914-1915. Main objectives of this journey unlike previous expeditions were political and military and scientific researches were in all probability secondary (Drápal 2005b, 36), just as on his last journey to Orient in 1917.

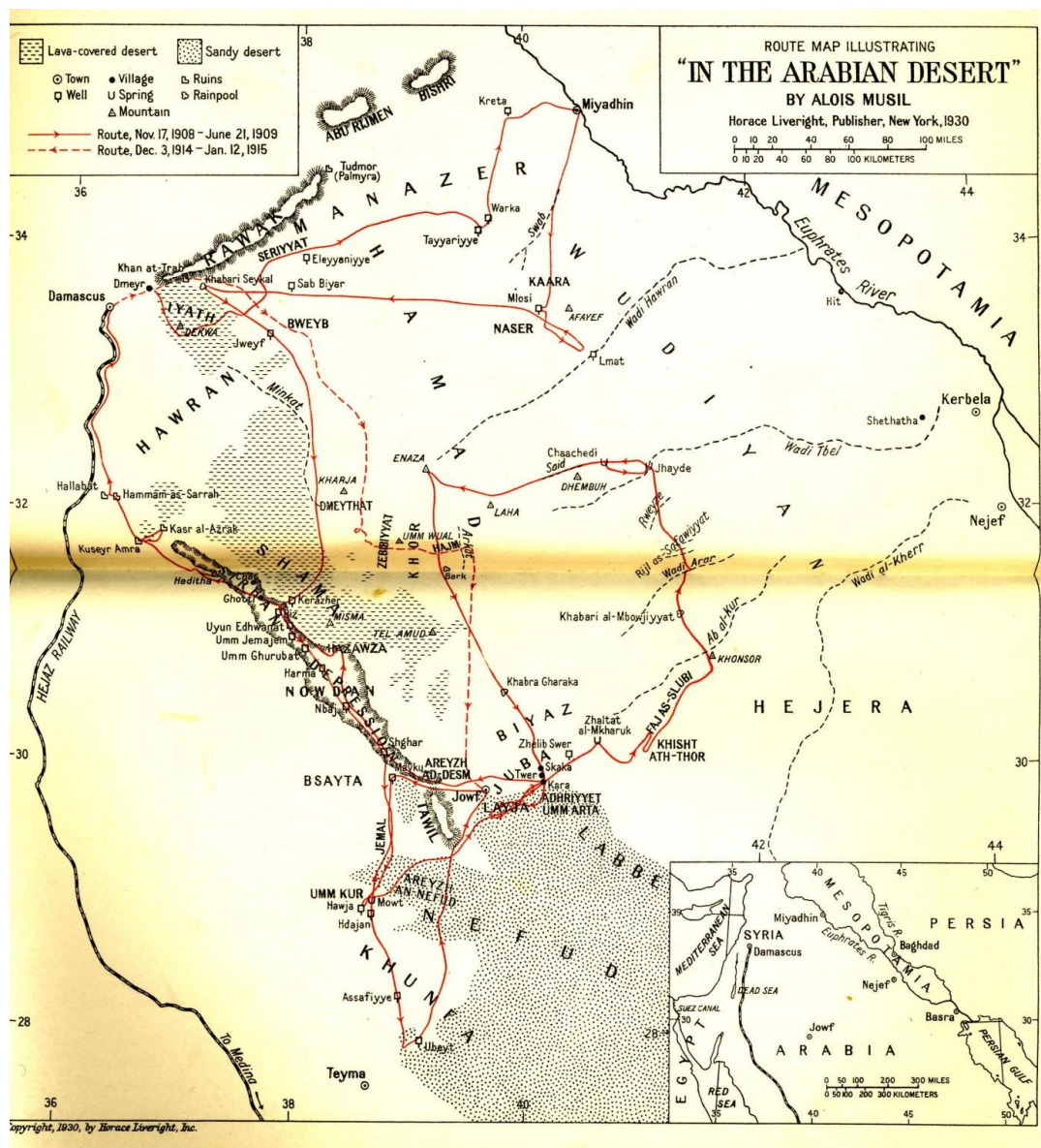


Fig. 9 The map of Musil's routes (1908- 1914).



Fig. 10 Musil mission with Hubert Salvator in 1917.

The analysis of Musil's political mission nor the description of his post-war life is not the aim of this work with the exception of his publishing activity and activities regarding the establishment of the Oriental Institute.

3.9 Musil's activities after the First World War

In brief, we can say that the 21st of January 1920, he was named a permanent professor of Oriental auxiliary sciences and modern Arabic language at the Philosophical faculty of the Charles University in Prague.⁴⁵ Musil had also great merit

⁴⁵ Proposal for Musil's appointment was approved by government the 17th of December 1919 and presented to the castle. President confirmed it one week later and the 21st of January 1920 was Alois Musil officially appointed as the professor of auxiliary Oriental sciences and modern Arabic language at the Philosophical faculty of the Charles university.

for the establishment of Oriental Institute in Prague, which was founded the 25th of January 1922 (Bečka 1995, 29-31).⁴⁶

This new institution should have worked according to Musil's vision in the similar way as Austrian C.K. Oriental and overseas company (K. K. österreichische Orient- und Überseegeellschaft).⁴⁷ The company should have facilitated travels to Orient for specialists, artists and merchants, cooperated with local compatriots, supported publication and lecture activities and last but not the least as well as archaeological excavations and ethnographic research. One part of Musil's plan consisted in founding of an Oriental library, publishing of journals and gathering of collection of „light pictures,“ as he called glass slides, for enlivening of lectures. Its base could be small glass plates, which Musil had in his collection.⁴⁸

Musil found the inspiration in this regard probably also in the Université St. Joseph in Beirut, where photographs and projections of „light pictures“ were usual already at the time, when Musil studied there and they were very important didactic instrument (For more details see the chapter „Musil as the pioneer and the creator of documents).

Apart from above-mentioned matters Musil had the intention to acquire instruments for scientific expeditions and excavations in the Orient.⁴⁹ His precise plan included also a budget on establishment of individual institutions. During his inauguration lecture on the Charles University in the hall of the Institute of natural sciences in Albertov, which took place the 11th of February 1920.⁵⁰ Musil said:

46 The first president of Czechoslovakia T.G. Masaryk commissioned Musil to prepare statutes of the Oriental Institute. (the letter to František Lexa from the 8th of June června 1920, AAV, fond 357 František Lexa, cardboard 4; compare Bečka 1995, 30)

47 The company was established by transformation of K. K. Österreichisches Handelsmuseum. To Musil's role in the Viennese Oriental Company and in establishment of the Oriental Institute see primarily documents in Museum of Vyškov region (H 19549–H 19552), and also Gombár (1995), Bečka (1995) and Navrátilová, Míšek (2002).

48 In Musil's inheritance in Museum of Vyškov region is preserved several dozens of these plates.

49 Musil's mentions about archaeological excavations in the article about tasks of Czechoslovakian Oriental studies explicitly took over Bedřich Hrozný the 20th of April 1920 in the journal *Naše doba*, also in the programme text *Nové úkoly orientální archeologie – New tasks of Oriental archaeology*. (Hrozný 1920, 484–490)

50 The lecture took place with the attendance of journalists and politicians led by the minister of the foreign affairs Edvard Beneš.

„Orient can substitute us colonies, It can supply to us raw materials in exchange for various products, and it can also provide to our numerous compatriots‘ favorable living places. Necessary is only to arouse a continuous interest in the living Orient at home and in the Orient in our country, in order to facilitate on the cultural base vital relations for the national economy“ (Musil, 1921, 226).

Although Musil repeatedly stated that he would not undertake another expedition,⁵¹ On Masaryk’s wish he prepared a large expedition to the Near and Middle East in 1920, where he should defend Czechoslovakian political and commercial interests. The journey, however, was postponed by several years, and at the end it never took place. In the similar way, the establishment of the Oriental Institute was also permanently prolonged, which was one of the reasons of postponing the planned journey to the Near East. The law no. 27/1922 about the establishment of the Oriental Institute was approved already the 25th of January 1922,⁵² but due to organizational complications only the 25th of November 1927 president Masaryk appointed 34 regular members of this Institute.

3.10 Musil’s publication activity after the First World War

Results of his scientific works from above-mentioned journeys were supposed to be published at first in German in Vienna. After the radical change of the political situation, Musil adapted manuscripts for a Czech edition.

51 „I can’t travel any more alone, because I would not be able to publish results of these dangerous, but so interesting journeys.“ (Musil 1920a, 280) „Inner Arabia probably will not see me any more. I concluded gathering of scientific matter, and only me can process it and publish earlier than my life will die out...“ (Musil 1921, 226)

52 For fulfilment of this law were responsible the ministries of foreign affairs, education and commerce.



Fig. 11 Musil's „Villa Musá“ in Rychtářov, Private archive of Musil's family.

On a proposal of T.G. Masaryk, the first president of Czechoslovakia, he published at the end these works in English in the American Geographical Society in New York. Whole work *Oriental Exploration Studies* was divided into six books and three maps, which were published during 1926-1928 (Musil 1926; 1927a; 1927b; 1928a; 1928b; 1928c).⁵³

Masaryk supported Musil not only in publishing of his works, but also for the reason of representation of the young Czechoslovak Republic abroad. In February 1928 the American Geographical Society rewarded Musil for the year 1927 the gold medal of the founder of this tradition Charles Patrick Daly (1816–1899) and Musil's name was put on the honor plaque in its ceremonial hall. Musil was the first and also

⁵³ The Northern Hegaz 1926, Arabia Deserta 1927, The Middle Euphrates 1928, Palmyrena 1928, Northern Negd 1928 and The Manners and Customs of the Rwala Bedouins 1928. To them he added three maps – Northern Arabia 1 : 1 000 000 (on four sheets), 1926; The Northern Hegaz 1 : 500 000, 1926 and Southern Mezopotamia 1 : 1 000 000, 1927.

the last Czech, who gained such success. Ceremonial handover of the award, which took place the 21st of February was connected with Musil's lecture *Desert Life in Northern Arabia*.

He described his expedition in the Near East for Czech readers in eight popular travel books. These books were published in the Publishing House Novina between 1929-19.⁵⁴ Between 1932-1948, he also published a long series of books for youths, which were inspired by above-mentioned travels.⁵⁵

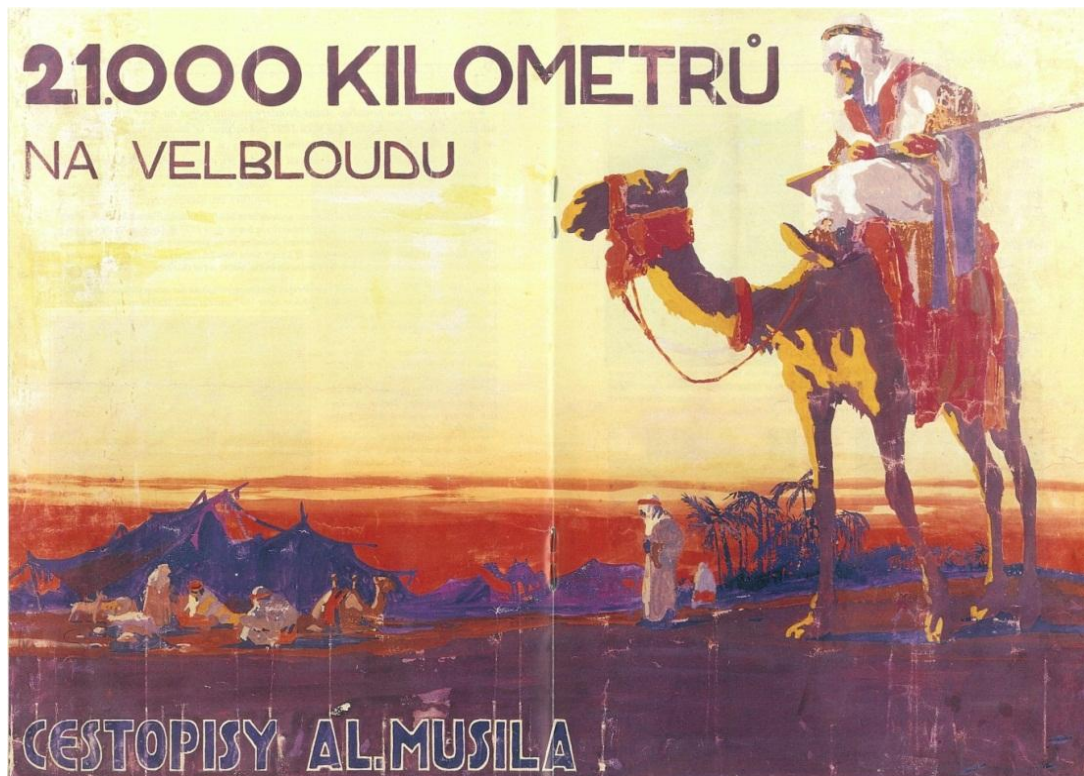


Fig. 12 An advertising poster supplemented Musil's publications of adventurous books.

54 *Pod ochranou Núrího* 1929, *V posvátném Hedžázu* 1929, *V zemi královny Zenobie* 1930, *V biblickém ráji* 1930, *Mezi Šammary* 1931, *Za Mrtvým mořem* 1931, *V roklich edomských* 1932 a *Tajemná Amra* 1932.

55 Between 1932–1944 Musil prepared altogether 33 adventurous manuscripts for youngsters. Their purpose was to mediate to readers a true picture of the Near East – real local names, authentic customs and behaviour of Bedouins, real events. Only 19 of them were published, some of them only after his death. Three books were issued in translation of *Zlatoš* also in the Slovak language (see above).

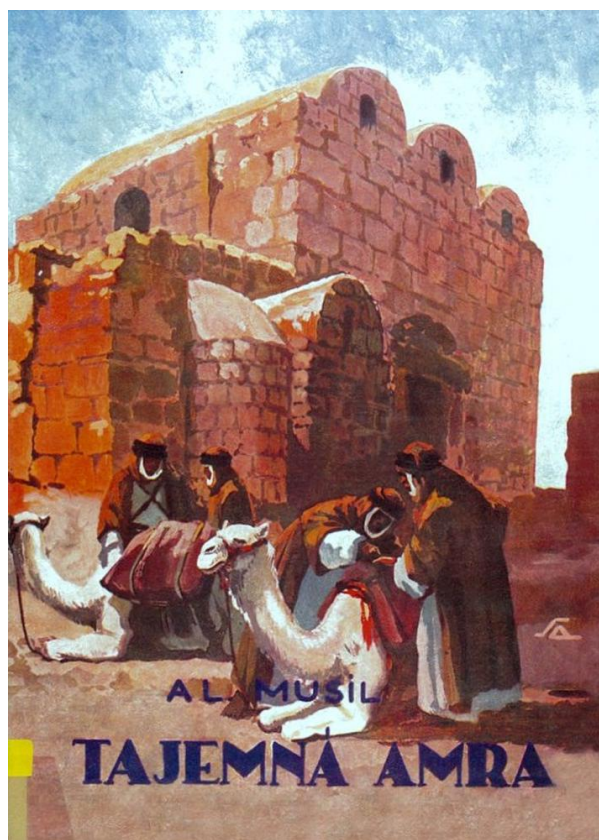


Fig. 13 Musil's book „*Tajemná Amra*“, published in 1932.

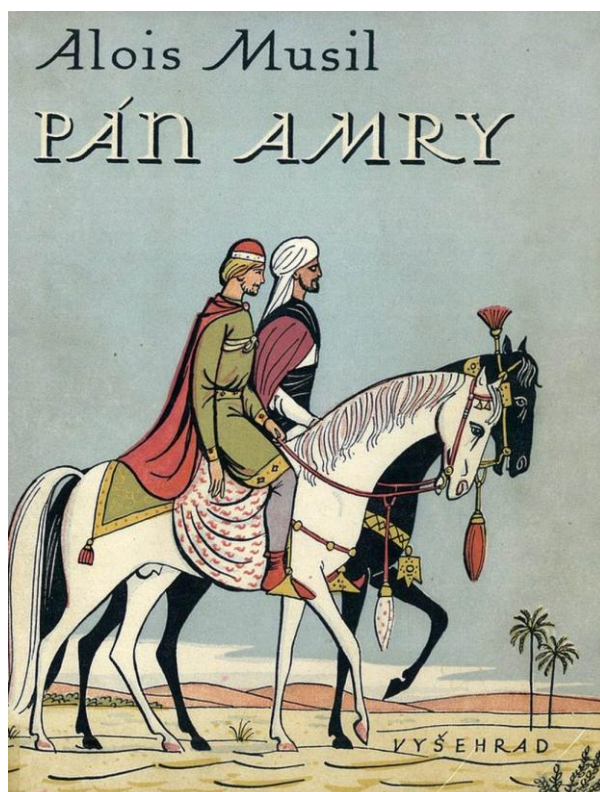


Fig. 14 Musil's book „*Pán Amry*“, published in 1948, illustrated by V. Fiala.

In 1934-1939 series of his writings about individual states in Orient was issued under the title *Dnešní Orient*. (Contemporary Orient).⁵⁶ Apart from above mentioned books he published over 1240 articles with various scientific and publicist topics (Veselý 1995, 33).



Fig. 15 Musil's death bed in the homestead in Otryby, Private archive of Musil's family.

Alois Musil died the 12th of April 1944 in Otryby, in the homestead, which he donated to one of his nephews. In the church in Otryby, he celebrated a Mass only one month before his death.

56 *Poušť a oasa*. Nová Arabie 1934, *Lev z kmene Judova*. Nová Habeš 1934, *Mezi Eufratem a Tigridem*. Nový Irák 1935, *Dar Nilu*. Nový Egypt 1935, *Pod Himalajemi*. Nová Indie 1936, *Země Arijců*. Nový Iran. Nový Afganistan 1936, *Zaslíbená země*. Nová Palestina 1937, *Od Libanonu k Tigridu*. Nová Sýrie 1938, *Italie v Africe*. Nová Libye. Italská východní Afrika 1939, *Most do Asie*. Nové Turecko 1940, *Stará Ethiopie*. Nový Súdán 1941. A secondary product of this series was the book *Křesťanské církve nynějšího Orientu*, 1939.

4 MUSIL AS AN EXPLORER AND A CREATOR OF DOCUMENTATION

During his travels in the Near East, Musil gradually changed from a theologian to a biblical geographer, topographer, ethnographer and „archaeologist,“ documenting and interpreting the ancient, classical and Arabic monuments. Apart from improvement of linguistic, cartographic and historical knowledge, he engaged also in the study of architecture. Already during his studies in Jerusalem and the school excursion to Sinai and Egypt he came to realize, that superficial travelling with a guide doesn't satisfy him. He started to improve his knowledge of languages, which he already studied in schools, where he was very dissatisfied with the quality of their teaching. He decided to learn them from native speakers. The contemporary Hebrew he studied at a local rabbi and the Arabic at a local compositor. First trips in the surroundings he planned according to memorable biblical places and in this way he got to know the ancient geography. During his first important expedition to Madaba and its environs in 1896 he became aware in visited places, from which the most of them were not in maps, ruins, burial sites and Roman military fortresses of the need to study the method of cartography and documentation. „The region, in which I travelled, was not so far geographically depicted, and therefore I decided that is necessary to draw the map of my journeys... I found old inscriptions and I didn't know, how to copy, to photograph and to imprint them in the best way. I wasn't able to draw up sketches and cross-sections of various old buildings. I found numerous monuments from post-biblical times – and it was necessary to study historical sources from all times, to compile historical sources of individual places, etc.“ (quoted by Sklenář 1989, 391).

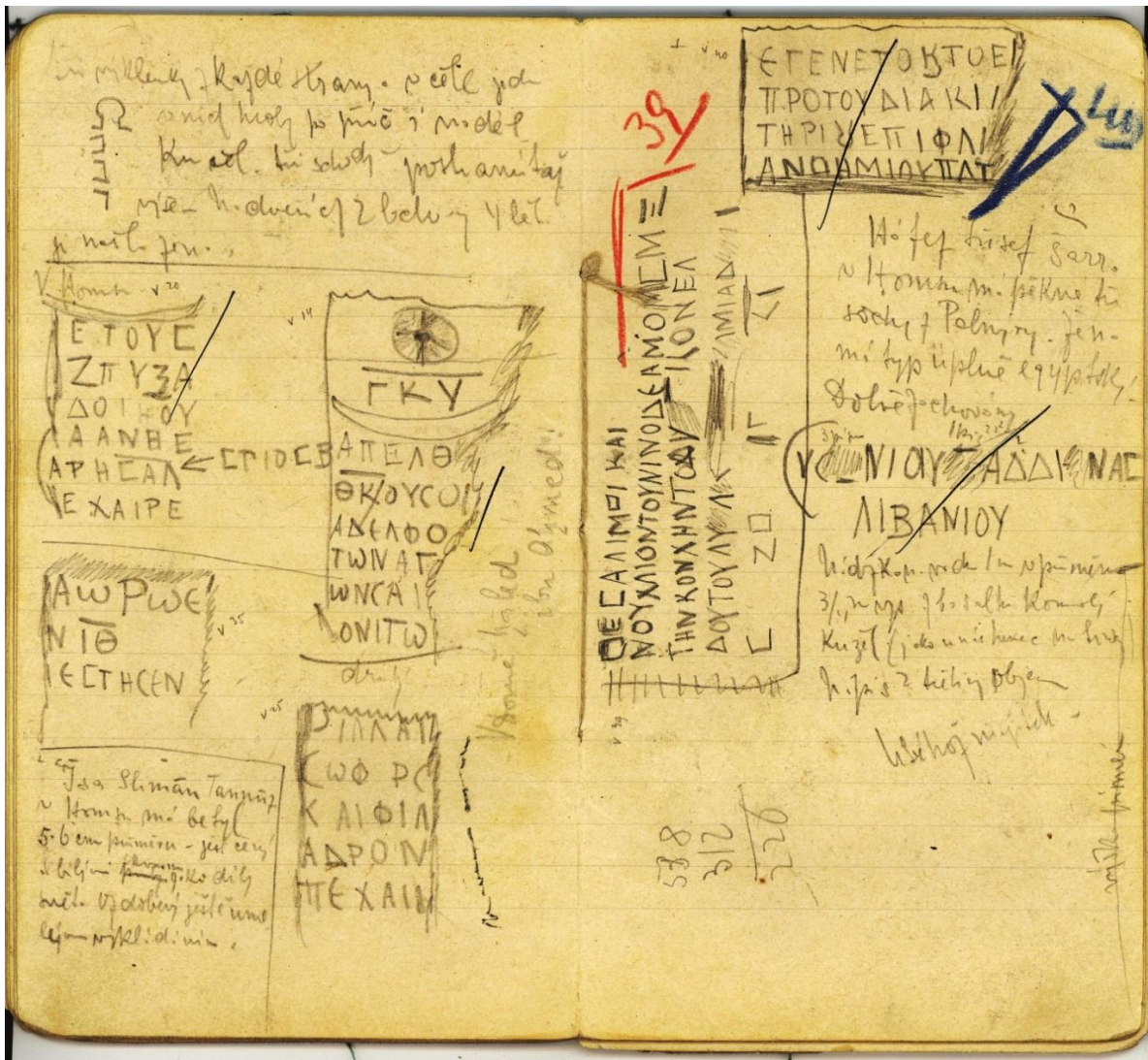


Fig. 16 Inscriptions in one of the oldest Musil's diaries, Musil's papers in the Literary archive of The Museum of Czech Literature, Chateau Stare Hradky, fond of Alois Musil, 2-B.

In regard to making copies of inscriptions for the Viennese Academy court councilor David Heinrich Müller repeatedly complained on indistinct imprints from the Nabatean period for instance in the letter from the 18th of July 1898. (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 19083/1) and from the 4th of March 1901, in which, however, he states afterwards, that inscriptions from Palmyra are moreover, very short, but nevertheless, he writes that the result is quite good (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 19084/1).

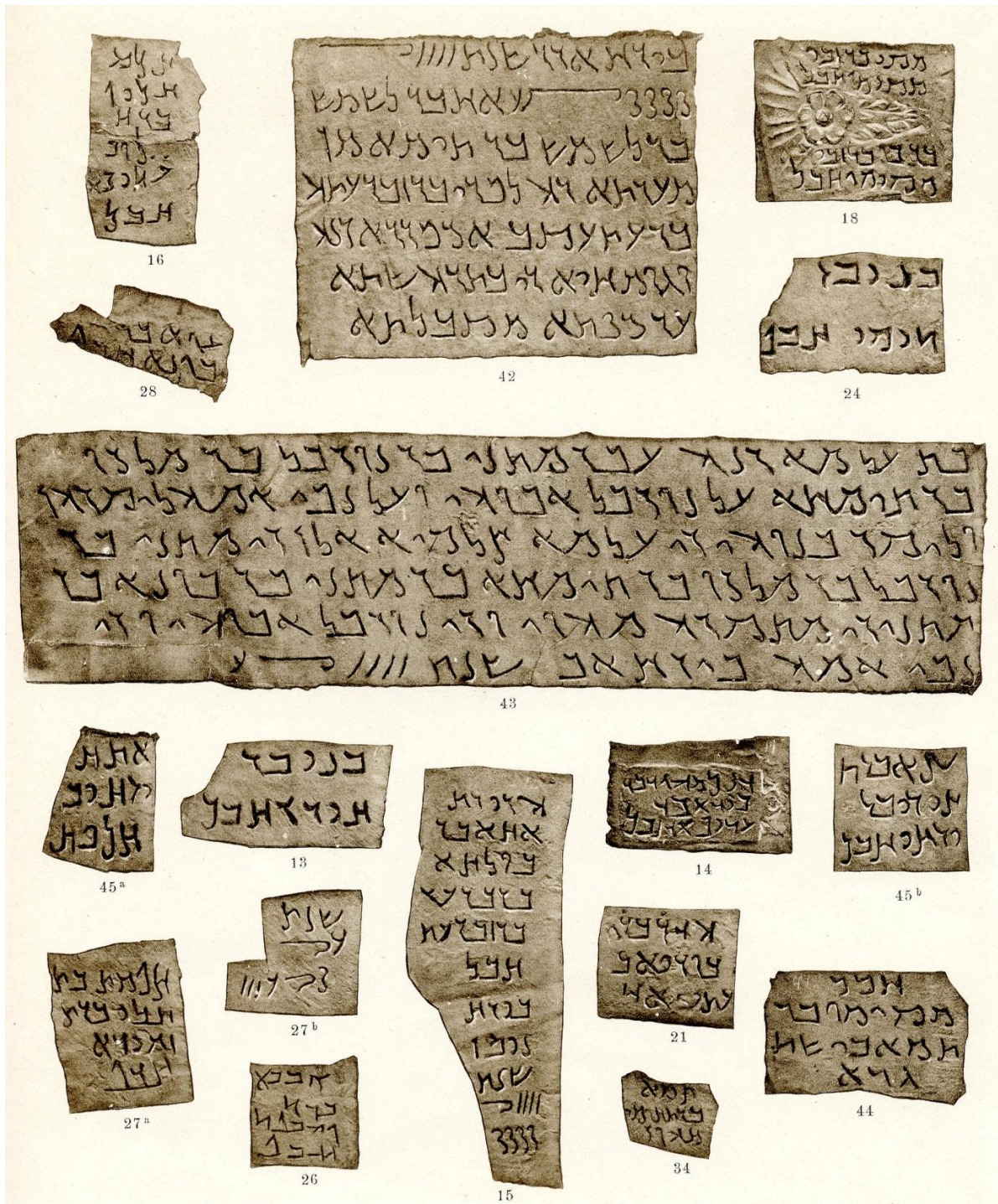


Fig. 17 Inscriptions collected by Musil from above mentioned publication.

In further research, he intended to focus on places, which were not sufficiently or not at all yet explored. For this reason, he avoided coasts of Palestine and Syria, which were full of researchers of various levels, and he focused in his next expedition on the territory of inner Arabia. In a similar way, he avoided the well-known and explored monuments, and he focused his attention on monuments in remote desert

places and which were situated away from main contemporary communications, Which were not possible to find and visit without of good knowledge of local language, customs and friendship and help of local inhabitants. He learnt about many monuments, including about his most important discovery of the desert Qaşayr °Amra only thanks to his long-termed coexistence and friendship with local Bedouin tribes.

4.1 Musil and photodocumention

He was undoubtedly introduced into the photodocumentation of monuments at the very latest in the Université St. Joseph in Beirut. As Nordiguian, who took an interest in the study of the photographic fond in Bibliothèque Orientale de l'Université Saint- Joseph, writes, taking photographs became one of their usual activities in the Near East from their return to Syria in 1831. This period is roughly identical with the birth of photography. From expansion of glass plates, the photography became common supplement of their academic studies, as was epigraphy, ethnography, archaeology or biblical sciences. However, photography wasn't only accompanying picture material of their studies, but also the didactic instrument. Nordiguian states, that the first luminous projection of religious pictures happened in Adana in 1894 (Nordiguian 2004a, 185), that means shortly before Musil's arrival in the Near East. The local archive contains various collections of glass plates. For example, Sébastien Rozenvalle left in that archive dozens of negatives and photographs of Armenian inscriptions. During long-lasting researches the negatives were developed in portable laboratories (Nordiguian 2004a, 186).

Some long-lasting vacation trips became the expeditions in the style of Jaussen-Savignac. In these vacation trips, for example, Henri Lammens took part. Lammens for instance, describes in a contribution "*Notes épigraphiques et topographiques sur l'Emésène*" published in 1901, how he set out in 1899 from Zahlē in the company of père de Martimprey, who specialized on photographing of monuments, inscriptions and other archaeological objects with photographic equipment, and Nordiguian states on the base of these facts, that from these expeditions is evident, that negatives were developed on the spot (Nordiguian 2004a, 187). Nordiguian also writes that similar photographic accompaniment père Joseph Goudard had during the preparation of his publication "*La Sainte Vierge du Liban*," too. This publication contained 650 photos

and was published in 1908 in Paris, that means approximately one year after Musil's publication of his monumental work "*Kuṣejr 'Amra*", which contained in total 64 photographs of the buildings.

Instead with a professional photographer, Musil travelled with the accompaniment of the Viennese painter Mielich, whose task was to make above all copies of photographs of Quṣayr 'Amra. The reason for this decision could be for one thing the assumption, that by coloured decoration of Quṣayr 'Amra made by an able painter is possible to describe it in a better way for researchers, and for another the fact, that original frescoes in Quṣayr 'Amra were in a condition, which did not allow to make high-quality photographs. This decision could be influenced by the photographs, which Musil brought from his previous visit to Quṣayr 'Amra in 1900. Correctness of this conclusion is supported also by the fact, that from the great amount of photographs from both visits in 1900 and 1901 (Musil writes about 120-130 photographs. It focused mostly on documentation of the Quṣayr 'Amra's interior) only a negligible part of them from the interior was published. There is, of course, the question, how the supplement of Musil's publications would look, if he had with him, a qualified photographer (see more in the chapter "Quṣayr 'Amra")

Similar couples, consisting from a photographer and a researcher worked in Syria, for example, Michel Jullien and Paul Soulerin in 1888 (Nordiguian 2004a, 187). Their journeys with photographs from that period were published recently by Lévon Nordiguian (2004b). Lévon Nordiguian states, that in the present time the main problem in the study of photographs made by Jesuits in the archive of Bibliothèque Orientale de l'Université Saint- Joseph is the fact, that these photographs are not signed. If we find some names on them, they were written subsequently.

Nordiguian deduces from this fact, that photographs were not at that time considered as an art or a separate field of activity, but they only supplemented the presented texts. At that time this phenomenon was quite common, as is evident also in Musil's case, who also considered photographs only as an illustrative supplement of his texts. However, in the introduction to Arabia Petraea he states, for instance, the names of authors of individual photographs. Jesuits have undoubtedly an important place in the history of the photography in the Near East. The photographic archive in

the Bibliothèque Orientale de l'Université St. Joseph clearly evidence (see Nordiguian 2004, 190), that Musil came in the Université St. Joseph into an environment with a considerable photographic tradition, which was oriented not only on monuments, but also on portraits of various ethnical groups, what had to be undoubtedly reflected in his publications.

For example his first volume of the large publication about Quşayr 'Amra contains in total 64 photographs of ruins of castles and their details, 13 drawings of ruins and 19 ground plans of these objects. The most photographs of details come from Quşūr Tūba and Mshatta. Quşayr Amra itself is displayed on 5 photographs from the external sides (Musil 1907).

Furthermore in the Museum of the Vyškov region, Vyškov and in the Collection of A. Musil in the Literary archive of The Museum of the Czech Literature, Chateau Staré Hrady several hundreds of photographs (and dozens of glass plates) are deposited depicting mostly archaeological localities and members of various Bedouin tribes.



Fig. 18 A photo of original cardboards with glass plates, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.



Fig. 19 A photo of original cardboards with glass plates, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.

Fowden writes: „...Musil was Quşayr ‘Amra’s ideal discoverer. Growing numbers of adventurous Europeans were now visiting the Middle East, but few knew Arabic and its dialects as he did, or had read the historical and literary sources in Hebrew, Syriac, Arabic, and Greek, or could match his dedication to minute topographical, architectural (when circumstances allowed), and above all ethnographical observation conducted while traveling and living as beduin. Musil had an unusual talent, too, for using these lines of research in order to be contextual each other. No one approach was sufficient“ (Fowden 2004, 13).

Nevertheless, the same author several lines further asks, why the interest in Quşayr ‘Amra, of which publication was expected with enthusiasm and accepted by contemporary academic milieu, subsided considerably fast. He sees the main reason in its presentation, the way of frescoes’ reproduction, their dating and their interpretation. He is dealing with the fact, why Musil, as the discoverer of Quşayr ‘Amra and the

author so enlightened linguistic and historical report failed in providing of visual documentation in the same publication. He sees the reason in the fact, that Musil was by his essence a loner in all respects, who was totally devoted to his work and not interested in feelings of other people. He wanted to be independent in all respects, apart from financing.

Fowden further states, that this quality of his character could have been sometimes unfavourable repercussion, as for example in 1901, when he refused to take with him, a specialist on the period of late antiquity, who was supposed to help to painter Mielich in situ to restore the frescoes. Many historians of art from Vienna criticized in their contributions Mielich's reproductions printed in the second volume of the extensive publication about Qaşayr 'Amra from 1907. Among opponents of this publication belonged, for example, A. Riegl a S. Reinach. In spite of difficult conditions, in which the publication was made in the field, and the awareness, that besides this the fault could be ascribed also to Mielich's „ability,“ Fowden can't understand, why Musil didn't supplement this publication with wider series of photographs. The only things Musil published were several pictures in his article from 1902 and in the first volume of *Arabia Petrae*. One of the causes was probably difficulties they met during cleaning of considerably dingy frescoes. Fowden believes, that if Musil supplemented his publication by fitting and high-quality photographs of frescoes, Qaşayr °Amra would gain yet bigger reputation in the academic world. He states for comparison, which response and following change of opinions on the development of Roman art elicited the publication of a high-quality photography made in 1899 by Dr.George Sobernheim, who used a long exposition. To the lighting of frescoes in the Tomb of the three brothers in Palmyra served the magnesium light. The light obtained by burning of magnesium dust produces a flash enabling to make photographs in dark rooms (Fowden 2004, 16).

From above mentioned facts is evident, that the criticism of insufficient photographic documentation was mainly related to the inner spaces, especially to the frescoes.

In the archive of Alois Musil in the Museum of Vyřkov there are at the present time three Musil's cameras. The first two Museum acquired in 2008 together with a

considerably extensive part of Musil's papers and several small glass tables and photographs.

One of the cameras is marked by a small plate with an inscription DUBRONI and the address Rue de Rivoli 250.

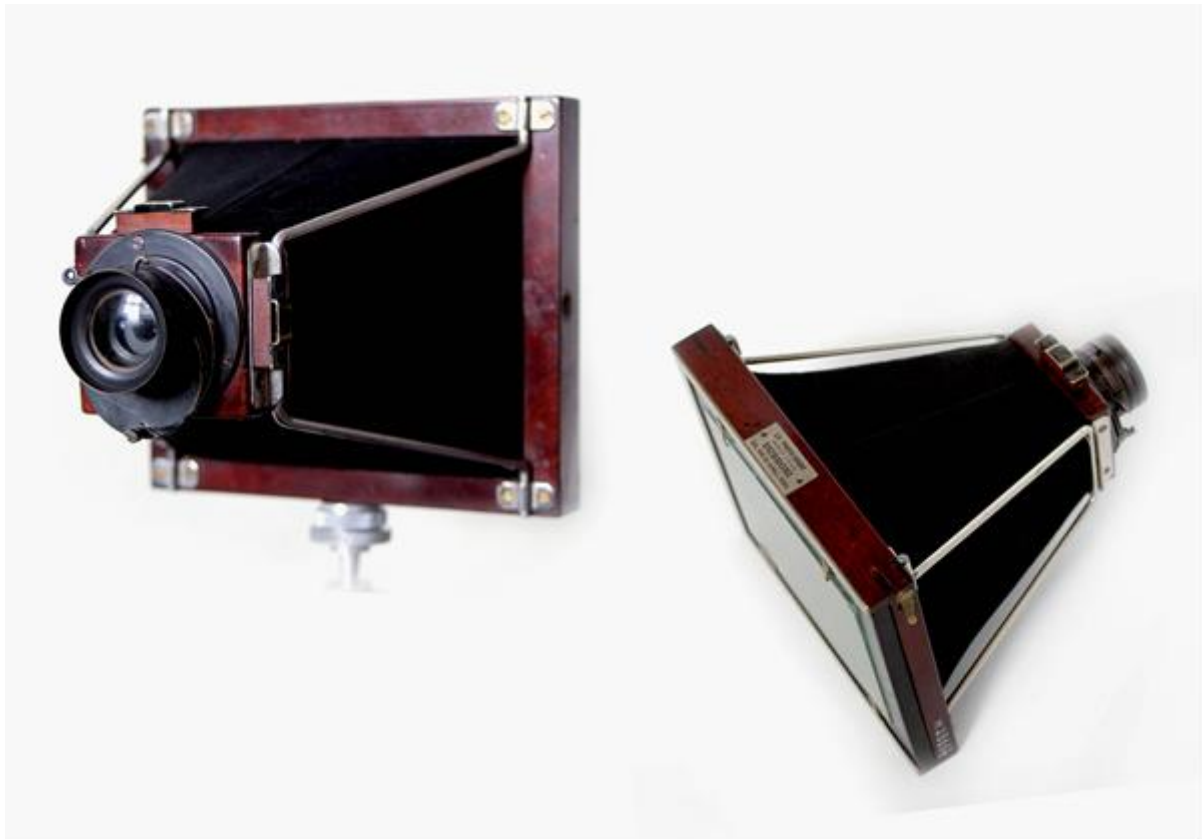


Fig. 20 Musil's camera „Dubroni“, Collection of Alois Musil in the Museum of Vyskov region, Vyskov, photo by M. Veselá.

It is the camera intended for macrophotographs from the tripod, alternatively for a reproduction photography of details. Musil could theoretically use it for making photographs of details, for example architectural inscriptions.

Classic cameras did not enable taking pictures of such near objects as macrocameras did. These were constructed for making pictures of details. (Note: the author thanks for these informations to Vladimír Daněček). According to Martin Rose, the construction of these cameras was at that time very light, space-saving and resilient, which indicates that this type of camera was used primarily for work in the

field conditions (the author thanks for this information to Martin Rose). The last camera the museum bought that year was from the family estate of Musil's relatives.



Fig. 21 Musil's camera, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.

4.2 Musil as a cartographer and his documentation of monuments

Into the basis of mapping in the field Musil was initiated by Austrian officer ing. R. Lendl during the expedition in 1897, when they were planning the mapping of the Roman military road between Aqaba and Damascus. Unfortunately they had to cancel this plan because of the war between two large Bedouin tribes, which was just taking place (Sklenář 1989, 392). Permanent wars among individual tribes, for that matter, brought complications to Musil's expeditions yet many times. Often he could, for his scientific activities lose in these regions his life, but fortunately every time he escaped without any harm. However, the same thing can't be said about his documentation, which was stolen from him several times during attacks of hostile tribes and in this way it was wasted.

Several times he succeeded thanks to friendship with important members of some Bedouin tribes to get it back, but for example, just from this reason nobody believed in the unique discovery of Qaşayr ʿAmra, because the attack of one hostile Bedouin tribe prevented him to make documentation and to present to European researchers" proofs about the existence of this unique monument (for more see the chapter „Qaşayr ʿAmra“). From the same reasons,he lost considerable amount of instruments and documentation from his journey into the Syrian desert, when among the lost documentation was for example also detailed plan of ruins of Palmyra itself.

During his further journeys, he improved his ability to make field documentation, both cartographic documentation, and documentation of monuments.



Fig. 22 Scatch map „Aqaba to Maan“, from Musil’s map, NA, MFQ 1/442 001.

The British were especially interested in Musil’s map *Arabia Petraea*. Even before the publication of the maps during the spring of 1906 the British Secretary of State for Foreign Affairs, Sir Edward Grey, turned to Musil with request for help in the determination of the borders between Egypt (administrated by the British) and the Ottoman Empire. Musil met the wishes of the British⁵⁷. The author found above mentioned map evidently related with this event in The National Archives (fond Foreign Office, 1911–1919).

⁵⁷ The secretary of the British Embassy in Vienna, Ernest Scott, wrote on behalf of the ambassador of His Majesty (Sir William Goschen) to Musil on 26th May 1906, that based on the telegram of Lord Cromer, Britain’s agent and consul general in Cairo, lord Cromer received Musil’s list addressed to the Foreign Office in London about Sinai Peninsula and would be most grateful if Musil sent him two proofs of his map, which is currently in print. It would be of need to the Joint Commision of Delimitation. For more see: Veselá- Žďárský 2009, 97-99.

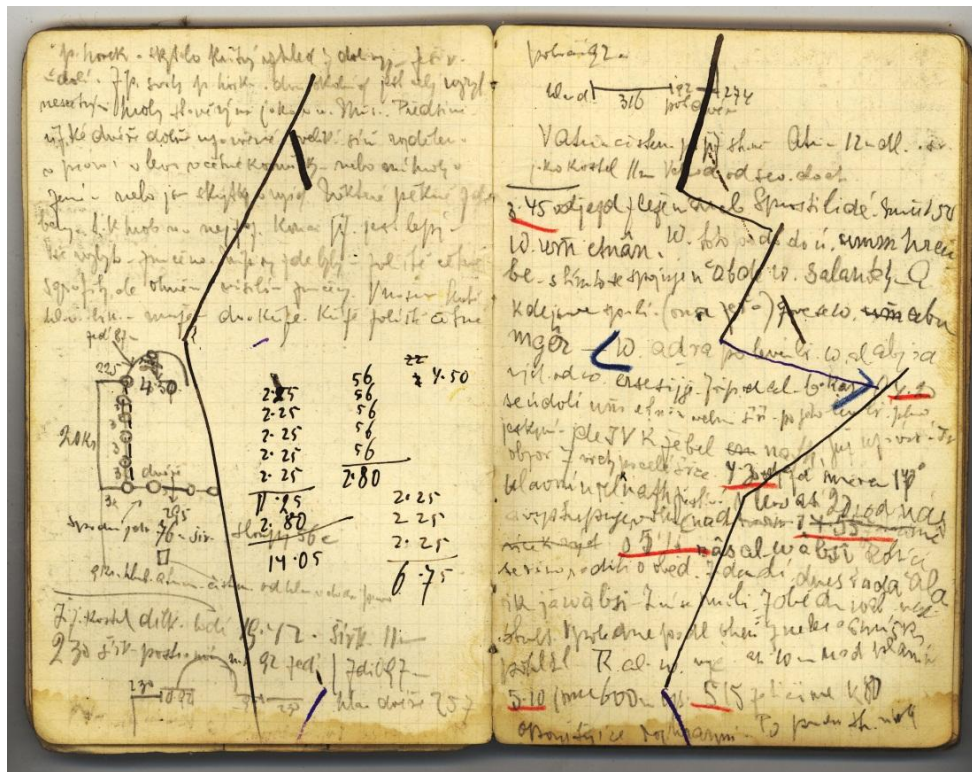


Fig. 23 One of the first Musil's diaries, Musil's papers in the Literary archive of The Museum of Czech Literature, Chateu Stare Hradý, fond of Alois Musil, 2-B.

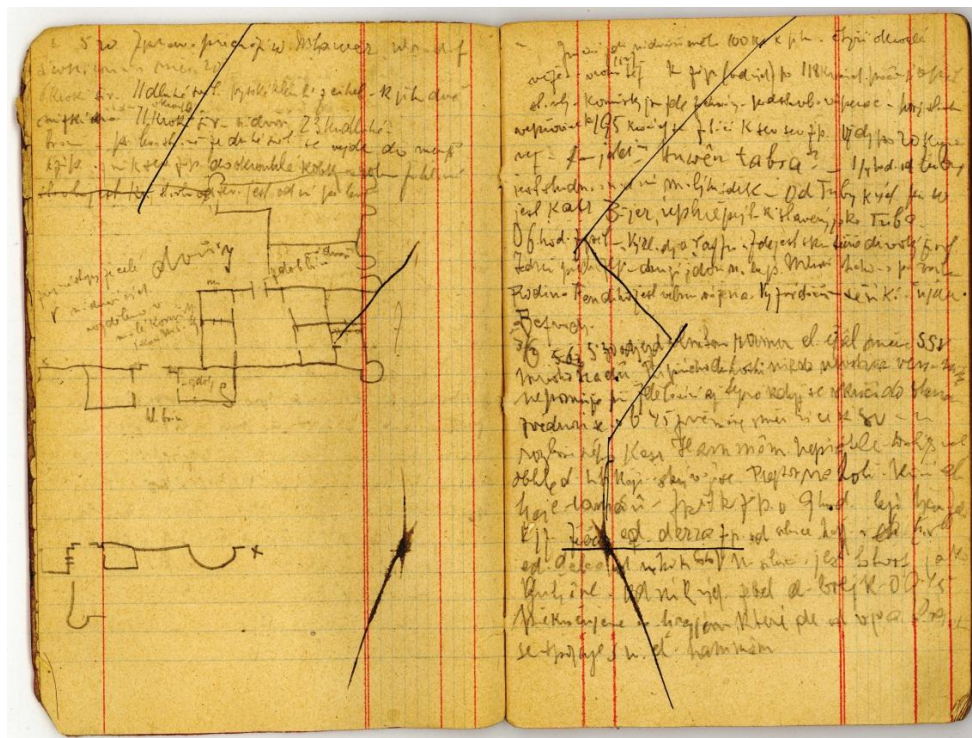


Fig. 24 One of the first Musil's diaries, Musil's papers in the Literary archive of The Museum of Czech Literature, Chateu Stare Hradý, fond of Alois Musil, 2-B.

Gradually improving enabled him not only further study, but also better possibilities of obtaining equipment, because Musil's fame was increasing.

As Musil himself writes in the introduction to *Arabia Petraea*, perfect technical equipment was impossible to take for journeys, because all supplies for work and subsistence were carried by a mule. Therefore, Musil limited himself to the necessities, as was a surveying table, a barometer, by which he determined the height of a locality, and a camera. When he was putting together the map, he worked very resourcefully and dutifully, and he always repeatedly examined everything, and afterwards, he compared the results. Thanks to the support of various institutions he gradually obtained more modern instruments as well as specialists.

In this introduction Musil also describes methods, which he used for recording of topographic names: „Before I started any journey I asked for information about localities, where is water, as well as about the road to them, about valleys, which cross the roads, about ruins, which I could see, and I sketched a map of the territory in question, in order to check the explanation of my guide. I preferred to select for a guide a member of the tribe, on which territory I shall move, and I dismissed him, when I found out, that he is not able to comply perfectly with the task. The topographic nomenclature of the guides was more reliable, when they were in the vicinity of places, where they usually camped“ (Musil 1907b, V-XIV).

Datum: 1908 Mai 16. Musil) Vertikalkreis astronom. Theodolit, Marke 4 1/2'

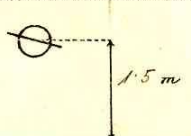






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Fig. 25 Musil's cartographic diaries from 1908, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.

Dr. Emanuel Fait wrote about Musil's methods for obtaining data in 1910. Before Musil left, he assessed location of particular places on a sketch, to which he marked "ruins, springs, mountains and valleys". As guides he hired members of local tribes. To make sure that he got the local names correctly he asked them to repeat it several times or write it down. "Geographical location he assessed by a measuring table and a compass, along with that he used an altitudinal barometer, a thermometer and a camera. The bases for his map were far distinguishable marks, assessed trigonometrically according to [the great map of Palestine published by] Palestine Exploration Fund', from this then were very carefully expanded triangles in the southern direction. Some marks are visible 50-70 km, making the trigonometric calculation much easier. Very difficult was this work in Wadi 'Araba and in the plain of eastern desert. During their travel time, speed and direction were measured..." (Fait 1910, 144pp.; cf. Mžik 1907a, 63)⁵⁸ Fait also states that during his last expedition in

58 On the methods of measuring of monuments, see Musil 1907a, XI.

1902, before publishing the maps, Musil also used two theodolites to ensure correctness (Fait 1910, 145).⁵⁹

Musil was aware of deficiencies in his mapping. He wrote, that especially flat territories were difficult to measure, because there was no foothold in the terrain and Musil was forced to rely on data of guides, what was true especially for the eastern part of the territory mapped in Arabia Petraea. He put the main emphasis on reliable local names, which for him was more important, than the fact where exactly this or that place is situated. It wasn't in his power to measure quite precisely. The most of the plans of ruins was measured with the help of surveying table and outlines were stepped off.

Musil prepared for all his research journeys properly by a detailed study of all available literary sources from Greek, Roman and Arab historians and geographers. In the same way, he proceeded during processing of their results.

4.3 Musil's cooperation with architects and the interest in modern archaeological research

Musil's cooperation with architects and the interest in modern archaeological research Considering the reconstructions of the original appearance of the explored objects, we know that Musil didn't think of himself as an archaeologist or an architect. Therefore he always cooperated with architects and tried to provide them with the most exact field documentation.

59 One of these was lent by Prof. Brünnow, see his letters from 13th June 1902, H 18496/5 and 13th July 1902, H 18496/7. A tripod for the theodolite was for reasons of shortage of time sent to Musil at the Lloyd representative in Trieste. In case of late delivery (along with other things) Musil was to arrange forwarding by Lloyd (letter of 14th July 1902, H 18496/8).

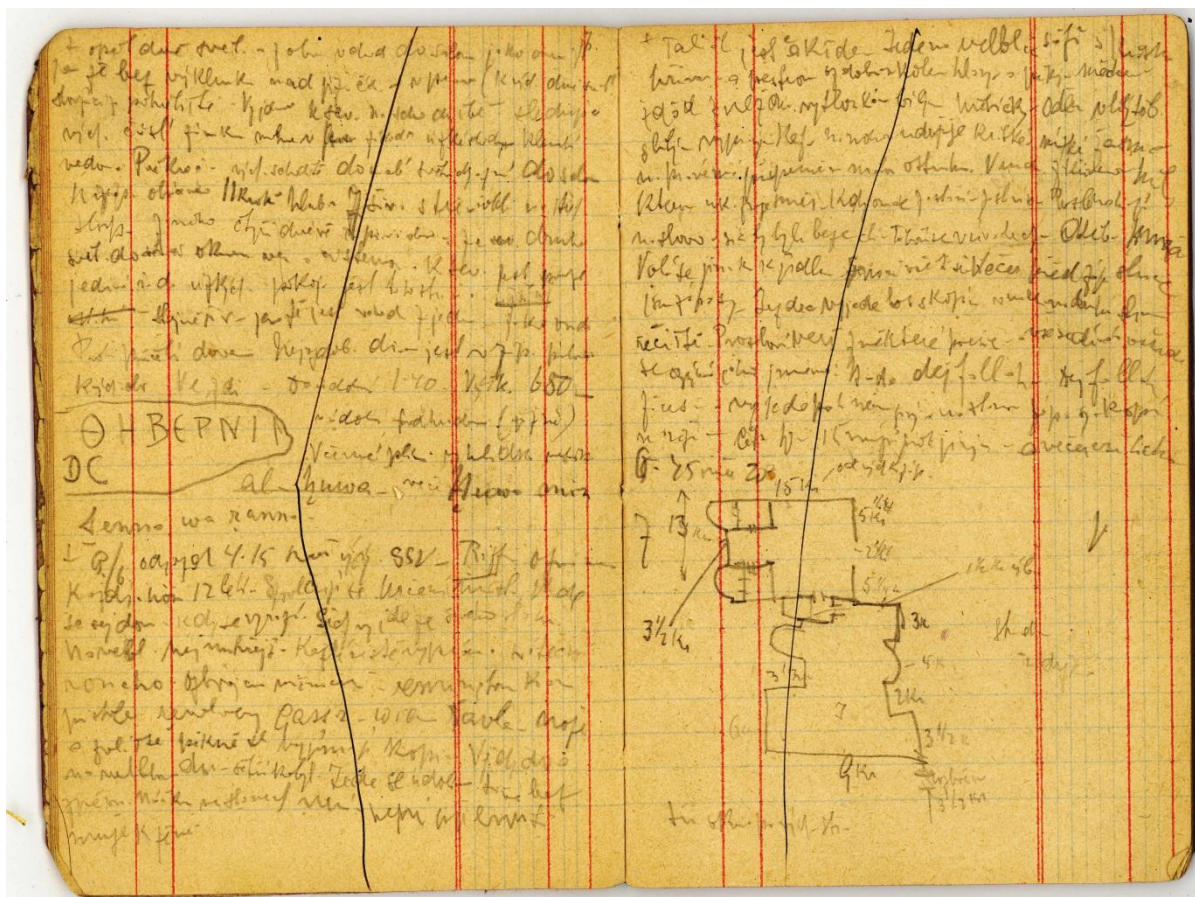


Fig. 26 Probably first sketch of Amra in one of the oldest diaries, Musil's papers in the Literary archive of The Museum of Czech Literature, Chateau Stare Hrad, fond of Alois Musil, 2-B.

The possibilities of obtaining the high-quality field sources were in this regard often limited, primarily because of the effects on exterior conditions caused by the circumstances of exploration in not very safe regions.

When processing plans of Quşayr °Amra, he started working in Olomouc with architect Alois Pallat (Musil 1902b, 348). Pallat's ground plan of Quşayr °Amra, made on the basis of Musil's field sketches, was printed in the report for Imperial Academy of Science in Vienna; (Musil 1902a);

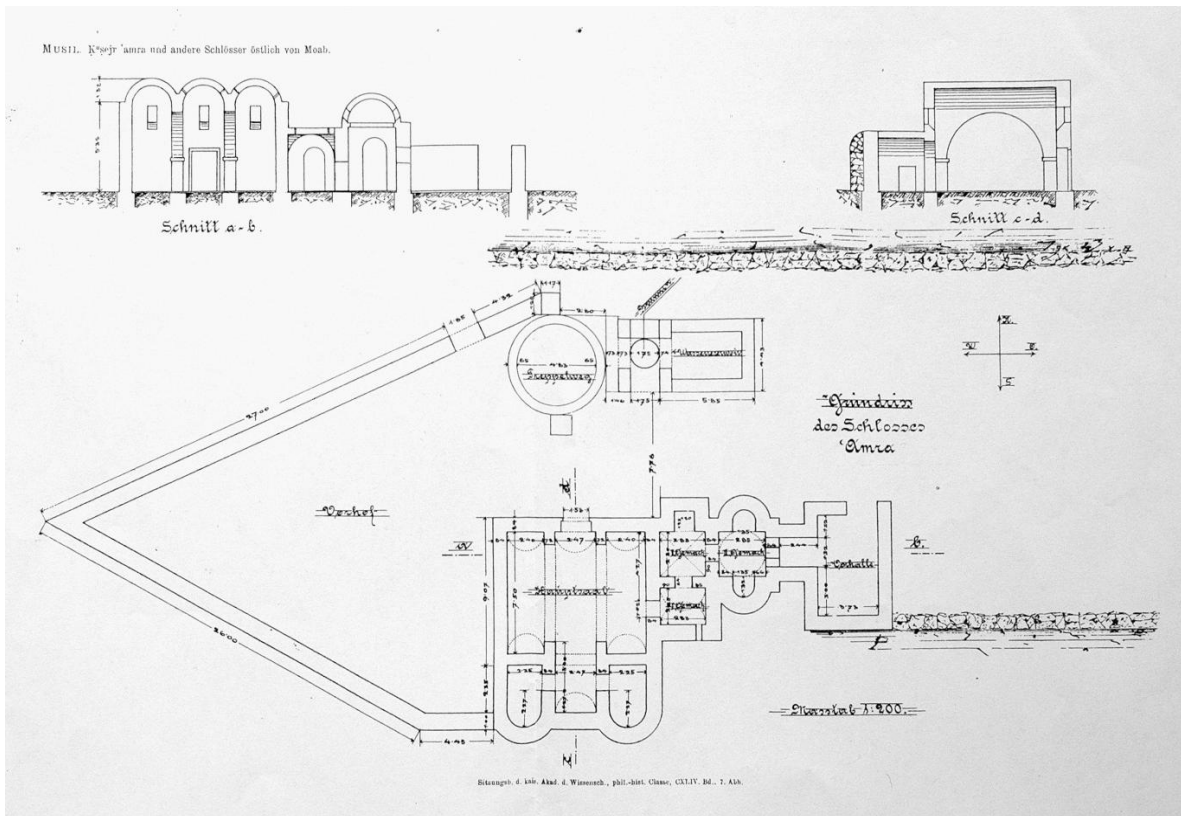


Fig. 27 Pallat's plan of Qusayr 'Amra, published in: Musil 1902b.

Architect Alois Pallat was born 23th of March, 1854, in Krásni in a craftsman's family. After he completed the high school, he studied at the Technical University in Brno and Vienna. Thereafter he took part in water regulation works in Galicia. By 1888 he started working in Olomouc as a geodesist and a construction engineer. Later he planned some large constructions, for example the church and the parish house in Dolní Bečva, the central tobacco warehouse in Olomouc, the School of Economics in Kl. Hradisko. He also worked as a statutory expert of the regional office. He often engaged in lecturing. He was the head of an association of architects in Moravia and Silesia.

In Vienna, he later cooperated with architects Max Kropf and Alfred Castelliz. The architect Max Kropf was born in 1868 in Podmokly in Bohemia. He studied at the Prague Technical School, later German High Technical School. From there he went to Vienna where he studied at the Academy of Fine Arts under Friedrich Schmidt. As an independent architect he worked from 1894.

In 1887 he won several important awards (one in the category „family house“, another in the category „a group of houses“ and one in the the category „ larger family house“ was shared among several architects, of which one was again Kropf). He also obtained a commendation for several important buildings, for example the town hall in Korneuburg.

The plan and the reconstruction of the object al-Ṭūba in the publication *Arabia Petraea* (Musil 1907, 179/ fig. 61; 189/fig. 70) were executed by architect Max Kropf, all the other plans, made according to Musil's photographs and under his guidance, were finished by Alfred Castelliz. Castelliz also revised the architectonic description. The terrain plan was drawn by Rudolf Thomasberger (Musil 1907, xi).

Alfred Castelliz was born in Celje in 1870. He studied at the Academy of Fine Arts in Vienna under Friedrich Schmidt and Otto Wagner. Both of them had an influence on his style during his studies. In 1903, Castelliz was already working as a substitute head of the orphaned school of architecture of Viktor Luntz at the Vienna Academy. He taught at many educational institutions, such as the Vienna State Craft School, until 1924. His winning project for the chapel of Salzburg city cemetery (in 1903) was never realized. In 1912 he published his views on the theory of architecture. Castelliz's work shares Neoclassical undertones with the work of his friend Jože Plečnik.

The reconstruction of al- Ruṣāfa was made by an important Czech architect Antonín Mendl, who had processed all Musil's documentation of this locality (Mendl 1925, introduction) as a part of his habilitation. Musil's documentation of buildings in the Near East was used by Mendl also for his lectures about the history of architecture in the Middle Ages at ČVUT (Mendl 2004, 75).

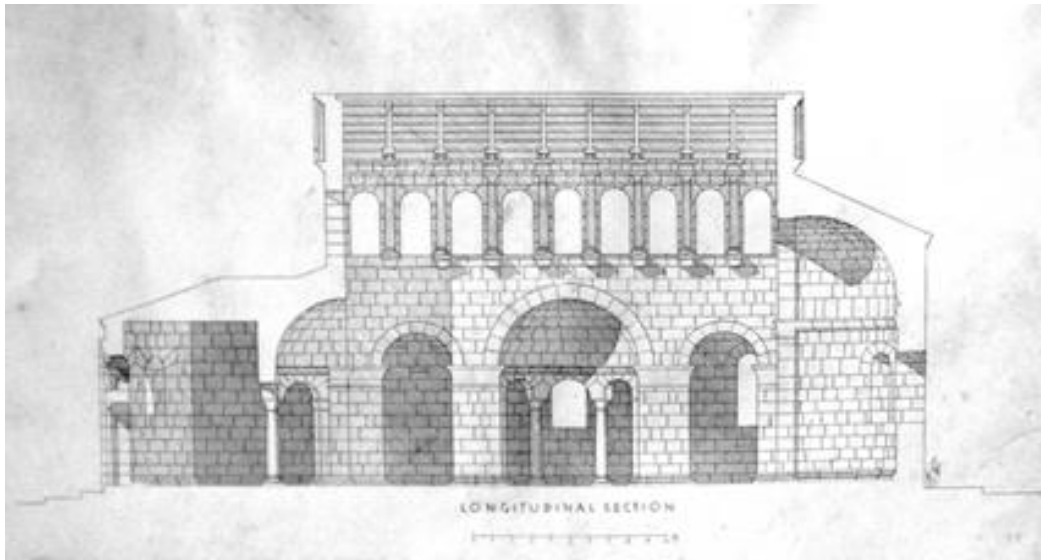


Fig. 28 Mendl's reconstruction of Martyry in al- Ruṣāfa, The National Technical Museum in Praha, fond Mendl Antonin.

Architect Antonin Mendl was born in Ždánice in Moravia. But he worked in Prague. After he completed studies at the Prague Technical School he toured Italy and Scandinavian countries. Among his most important projects are the theatre in Polička, the church in Násedlovice and the Town School in Ždánice. In Prague he designed several functionalist houses and villas. He became a Professor at the Prague Technical School. His habilitation in 1925 was dealing with Resafa and was called “*Resafa, the contribution to the town and sacral construction of the Christian Orient*”. This study was based on Musil's original plane table surveys, photographs, descriptions and related historical data, also collected by Alois Musil. He also used works of *Guyer* (1920) and *Spanner and Guyer* (1926). Mendl in his work on al-Ruṣāfa writes that results of his reconstruction will have to be confirmed by excavations, which at this time were not yet executed (Mendl 1928, 299).

Mendl in his preface to the Czech version of al-Ruṣāfa writes that his interest in Oriental architecture and especially in ancient Christian architecture dates already from the time of his studies at the Technical School. For this reason he made repeated journeys to the Near East (in 1922, 1923 and 1924) and he started to visit the seminar of Professor Alois Musil at the Charles University. Following that, Musil chose him for the cooperation on al-Ruṣāfa. Mendl focused on the analysis of architectonic styles, structural town surveys and he processed the individual monuments (Mendl 1925;

Collection of Antonín Mendl in Národní Technické Muzeum in Prague, 20050113/06/27/LHB-A 17.02.22).

In his lectures and seminars for young students of architecture he later used extensively materials for the reconstruction of Resafa and other monuments from the Near East. This tradition continued for a long time afterwards. Ing. Arch. Milena Hauserová told me that she remembered from the childhood how her mother, who taught at that time the history of architecture at ČVUT, projected ground plans and reconstruction of Christian architecture in the region of Greater Syria. After a reorganization of the archive of ČVUT she showed me remaining small glass plates of these monuments. Unfortunately the great part of the small plates did not survive until the present time. This body of teaching had, according to her, also considerable influence on works of younger generation of architects. In the work of some of them we can see evidently elements originating from ancient Christian monuments in the Near East and a residue of this influence can be found in various parts of Prague.⁶⁰

However, Musil's cooperation with Mendl was not limited to drawing of architectonic plans and reconstruction of monuments documented by Musil in the Near East.

In 1927 Musil asked Mendl to make a design for the family tomb. According to information from Mendl's letter to Musil's personal secretary Anna Blechová, Musil wrote to him from America, where at that time he was preparing for publishing some collected materials in the American Geographic Society, that he wished to realize the tomb as soon as possible (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 19 050/ 1-4).

Musil also asked Mendl in 1934 to design an architectonic project for the construction of his villa in Kosova Hora near Sedlčany. Drafts survived in the archive of the National Technical Museum in Prague (collection of Antonín Mendl).

⁶⁰ For this information I need to thank Ing. Arch. Milena Hauserová.



Fig. 29 Mendl's project of Musil's villa in Kosova Hora, The National Technical Museum in Praha, fond Mendl Antonin.

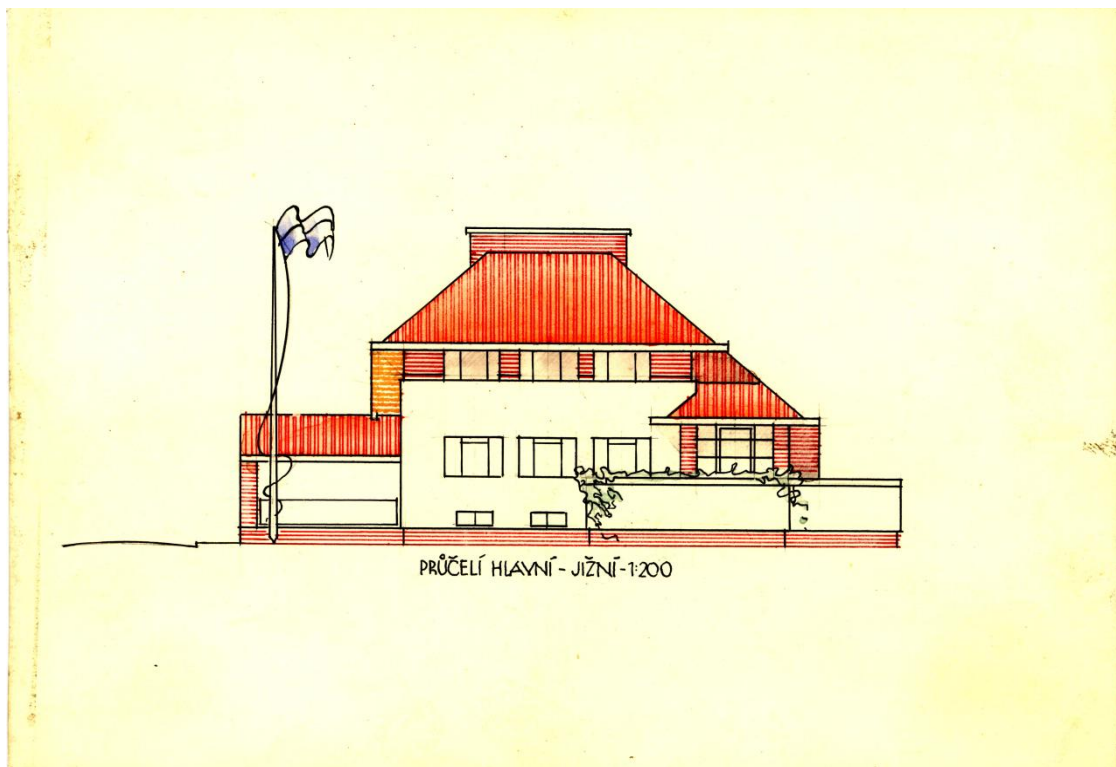


Fig. 30 Mendl's project of Musil's villa in Kosova Hora, The National Technical Museum in Praha, fond Mendl Antonin.

Mendl in this work succeeded in combining a modern approach with the regional architecture and he created, from the architectural point of view, an interesting and timeless work, which was recently published in a series *Zapomenuté skvosty české architektury* (The Forgotten Jewels of the Czech Architecture) in the journal *Dům a zahrada* by an archaeologist Patrik Líbal, who is from the family of architects (Líbal 2010, 2-4).

Although Musil didn't plan any extensive excavations, it is evident that he took a large interest in the most modern archaeological methods of research.



Fig. 31 Collection of Alois Musil in the Museum of Vyskov region, Vyskov.

Musil's interest in the most contemporary trends and methods is evidenced, for instance, by his letter written in London to Professor Lubor Niederle. In this letter he tried to convince him that Bedřich Hrozný should take with him (for the first planned Czechoslovakian expedition) an experienced architect who would be able to check the field research: „Here it must be said that an experienced architect has the most important role during any excavation. If he (Hrozný - the author's note) manages to find such a one, his success may be taken for granted; because even without finding any ancient inscriptions, he will still have a basis for the depiction of ancient buildings.

If he does not find an architect, he will depend only on findings of monuments. If he finds none, he will burn both money and the interest of other people..." (the letter of Alois Musil to Lubor Niederle, London the 23rd of February 1924, Archive of the Academy of science of the Czech republic, further AAV, fond 375 Lubor Niederle, card box 2, file 7; already Sklenář drew attention to this letter, 1989, 380.)

4.4 Quality of Musil's documentation

In the quality of acquired documentation Musil was getting closer to contemporary professional archaeologists, nevertheless, some of Musil's plans, which look on the first sight precise, in the reality, they are more or less inaccurate. . Shelagh Gregory proved it for example on the plans of Khān al-Manqūra, Ḍumayr a Ruwwāfa. These frequent inaccuracies she explained by commonly very unfavorable circumstances, in which Musil worked during his research journeys. They were caused mostly by unstable situation in consequence of fighting among local Bedouin tribes, bad weather, menace of dangerous infectious diseases, and also by lack of time. Some field sketches so remained unfinished because of an attack of a hostile tribe or importunate gendarmes. In cases of some plans, as is Qaṣr al-Ḥayr al-Sharqī, Musil evidently measured only the shorter side and according to it he extrapolated other dimensions into a square ground plan (Gregory 1995, 25–26).

Musil wrote in his introduction to the publication *Arabia Petraea*, that most of the plan of monuments was processed by measuring tables and the outline was measured by stepping off (Musil 1907, xi), and so the results were not quite exact.

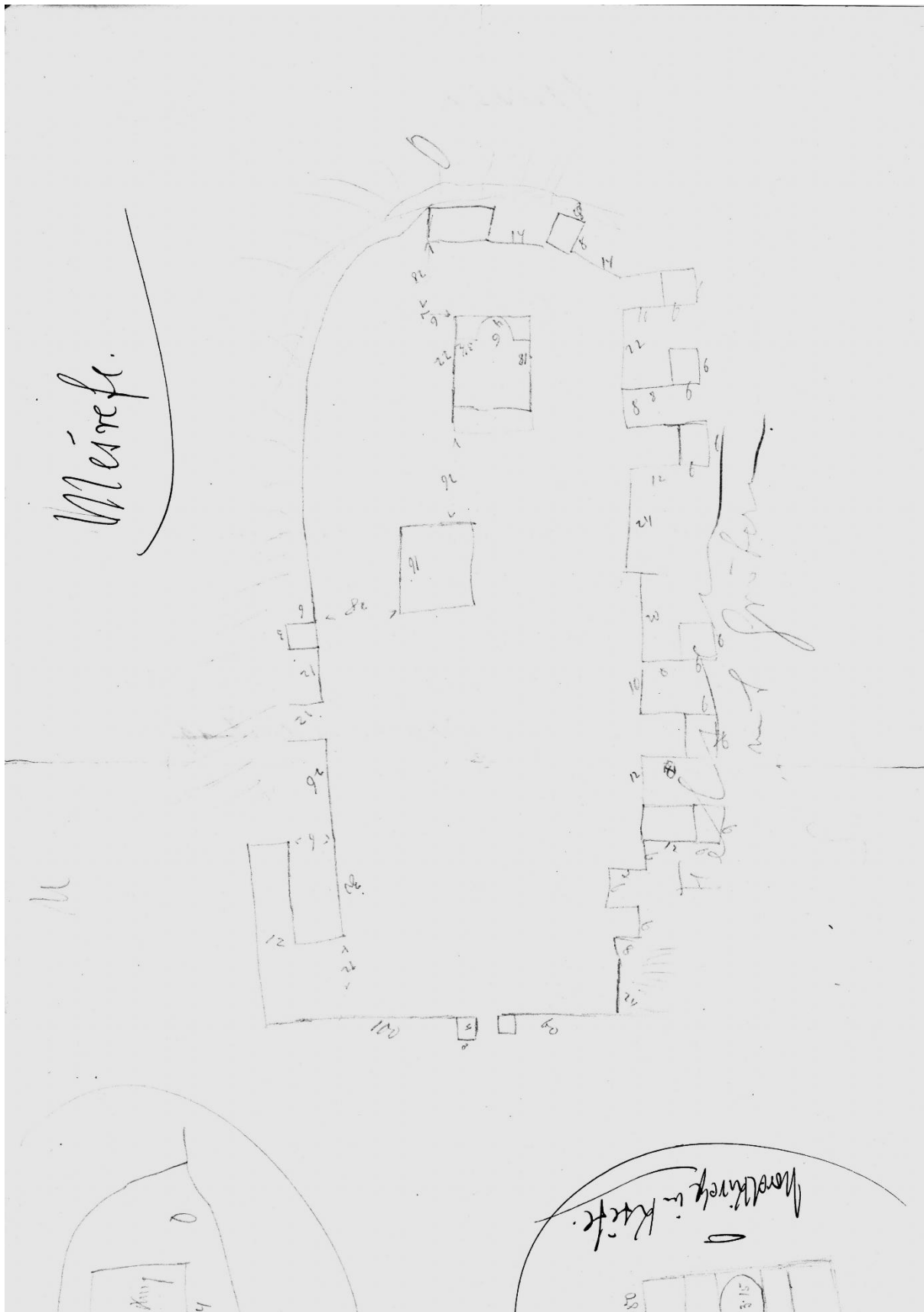


Fig. 32 Collection of Alois Musil in the Museum of Vyskov region, Vyskov.

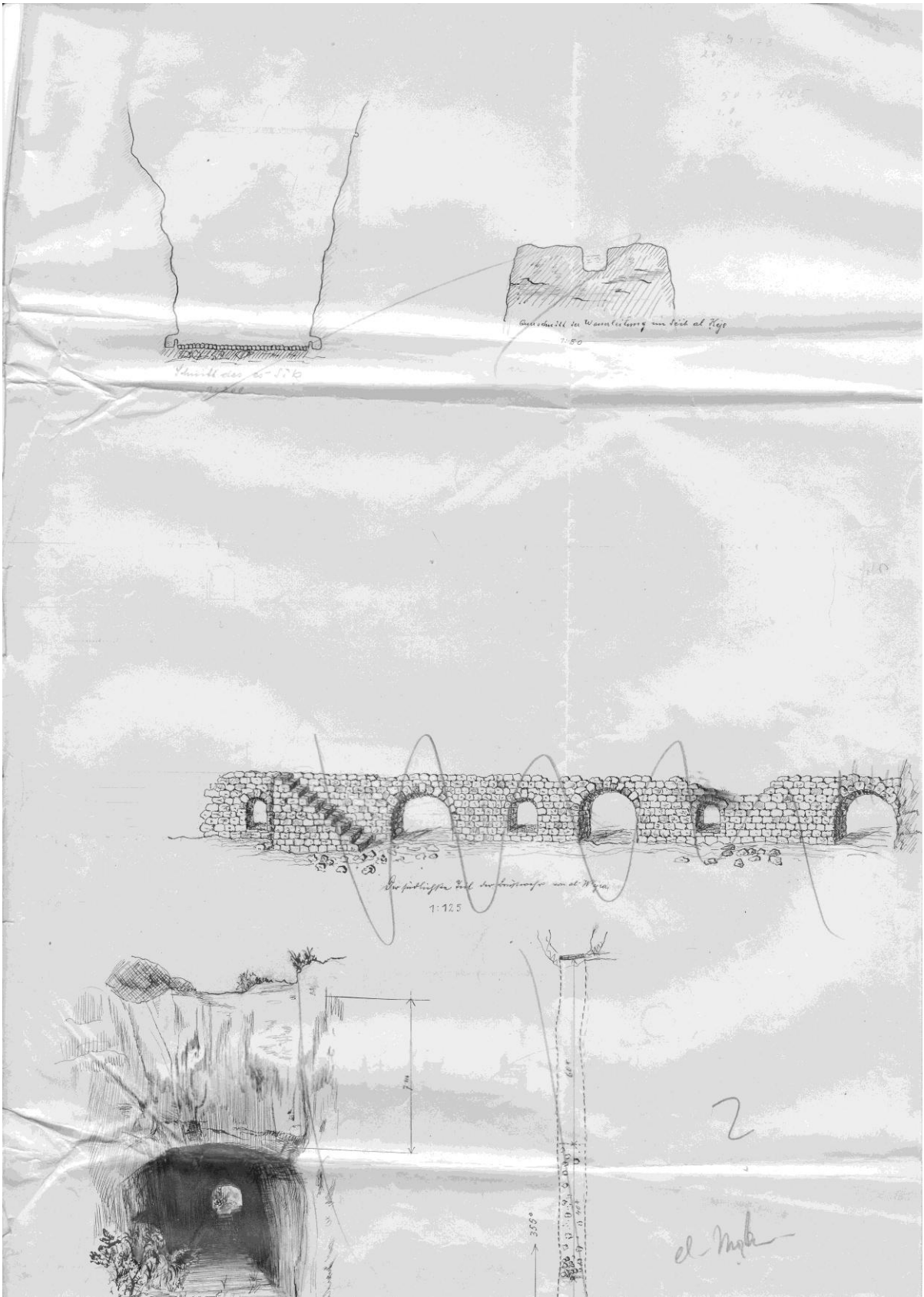


Fig. 33 Collection of Alois Musil in the Museum of Vyskov region, Vyskov.

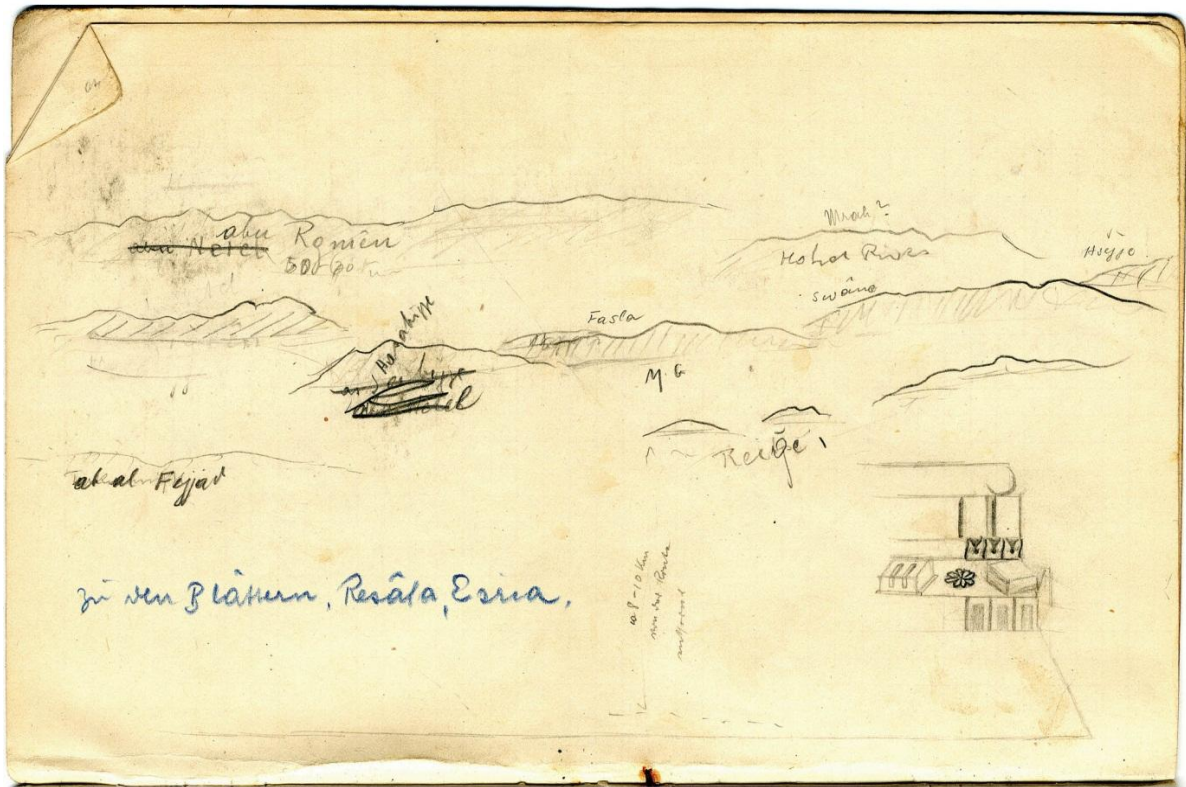


Fig. 34 From Musil's diaries (1908- 1911), Musil's family archive.

Despite above-mentioned imperfections, Musil was sought for not only among his contemporaries, but his plans were also used, including repeated errors by his successors, particularly by Poidebard. As Osbert G. S. Crawford pointed out, several important corrections on the base of aerial photographs in Musil's plans were made by Theodor Wiegand (Crawford 1954, 208).

4.5 Advantages of connections of Musil's archaeological and cartographic research with travelling with Bedouins

The possibilities opened by his knowledge of the language and his life among Bedouins acknowledged already some from his contemporaries. For instance Theodor Nöldeke in the letter, in which he thanks to Musil for the delight, which reading of Musil's work about Quşayr 'Amra provided him, and he writes as well as about gratitude for fresh illustrations from the life of Bedouins. He writes further, that Doughty also made observations, but from the larger part under unfavorable circumstances, and just as Burckhardt and Seetzen, although they were excellent, they didn't master the Arabic language so well as Musil. Euting, unlike Musil, had no experiences from the war campaigns. He thinks, that references to the Old Testament

are interesting (Collection of A. Musil in the Museum of Vyskov region, Vyskov, H 19 124/3).

In addition Professor of Islamic art Robert Hillenbrand stressed Musil's relationship with Bedouins, which was the key for his successes. In an article focused on Middle European research in the Near East at the time of Creswell wrote that Musil's long-term traveling with Bedouin tribes (and especially with Ruwāla) led him into the centre of their society, which had greater influence during the rule of the Umayyads, especially in regions, where the Umayyads had built desert castles. In this sense, he considers Musil as „a travelers in time“. Acquired experiences enabled to Musil better understanding of the inner structure of this society, much better than other historians of art specialized on Umayyad monuments had. Apart from this Musil also acquired invaluable topographic knowledge about a layout of explored objects, what helped him in interpretation of Umayyad desert castles, just as the fact, that as the professional Arabist perfectly managed to learn the old sources (Hillenbrand 1991, 25).



Fig. 35 Collection of Alois Musil in the Museum of Vyskov region, Vyskov.

5 ALOIS MUSIL IN THE FIELD OF ANTHROPOLOGY

Alois Musil, a priest, was considered to be one of the best experts on Arabia at his time. His adventurous personality enabled him to excel in various scientific fields, for example, in cartography, biblical history, archaeology and also in anthropology. He gradually befriended several Bedouin tribes during his journeys in the Near East. He could therefore enter places, which otherwise would be hardly accessible. For example, he made his most important discovery -Qusa'ir 'Amra - during a raid by the Banū Şakhr tribe, in which he took part, when he was searching for new monuments.

This monument was, in his opinion, well-preserved because of the high quality of material used in its construction and its location on a boundary-line of a territory, for which two Bedouin tribes – Banū Şakhr and Rwala - fought for a long time (Drápal 2005, 26). Moreover, Bedouins avoided this monument as they were convinced that it was built by mischievous ghosts and that a dreaded spirit Ghola resided there (Musil 1902b, 346).⁶¹

Czech archaeologist Karel Sklenář described how Alois Musil managed to fuse with Bedouins even with his looks and clothing. This also helped Musil to gain their trust more easily: „with his appearance, black beard and sharply cut face, he looked in a nomadic dress like any other Bedouin. He was able to get acquainted with them, he thought and acted as they did, he even loved them as his brothers... By the way, it seems that with a gun in his hand, sitting on the back of a camel, he felt to be more himself than in front of the altar.

61 Musil presents as the inhabitant „the ghost Rola“, another way of transcription is Ghola. It was probably a demon, a lower class of genie, „changing into animals and monsters“, that means ghl (compare Kropáček 1998, 89).



Fig. 36 Musil in costume of Rwala Bedouins, studio photo, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.

Along with Bedouins he was taking part in everything, that life was bringing, including permanent fights and robbing raids, and he did not consider, if this was in conformity with his status“ (Sklenář 1989, 392-394).



Fig. 37 Bedouins raid, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.

Musil came to the conclusion, that of all tribes, Rwalas are the best in preserving their original customs, he traveled widely in 1908-1909 in inner Arabia. Later, he established a close friendship with the prince Nūrī ibn Sha ʿlān⁶², though this leader accepted him originally with distrust.

Hopeful prospects on exploration of the vast territory of Rwalas he described to Jaroslav Goll directly from the desert: „I am living for weeks in the camp of prince Nūrī eben Šaʿlān, I have 17 camels, a tent, 3 servants. I made friends with a son of the prince – and it can happen that I shall explore whole northern half of Arabia.“ (the letter of Alois Musil to Jaroslav Goll from wādī al-Aṣajfar, from the 10th of October 1908, AAV, fund 289 Jaroslav Goll, cardboard 3, folder 6.)

62 From Nūrī's eulogizing poem about Musil: „If only the Lord of the worlds straightens the way for Mūsā. He certainly will explore for us, what the others druží didn't. He is the sheikh Mūsā, the man, for whom I would give. If only we could soon to gave him welcome here.“ from the Arabic original to Czech translated by Zdeněk Šmíd. (new materials in the inheritance of Alois Musil, MV, 59/2006.)

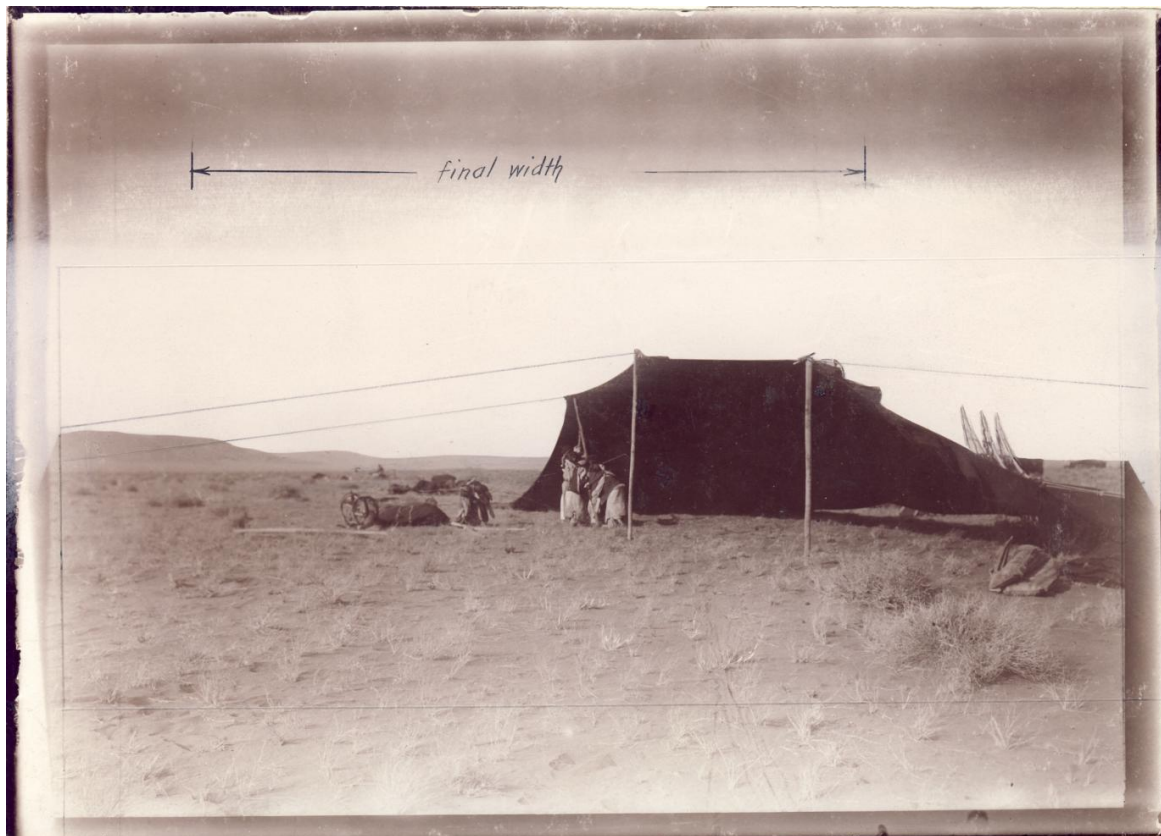


Fig. 38 Collection of Alois Musil in the Museum of Vyskov region, Vyskov.

Later, Musil became one of the two chieftains of the Rwala tribe. Rwala Bedouins called him “Mūsa ar-Rweili”. The friendship of both men increased, when Musil saved Nuri ibn Sha‘lan’s life with the help of his own contacts at the Viennese court (Drápal 2005b, 34).⁶³ Sauer wrote that it became known in all Arabia, that Austrians did not leave their friends in danger after this intervention (Sauer 1969, 255). Musil’s expedition had many tasks. One of them consisted of writing a list of all local tribes, description of their customs and habits and religious, legal and social situation. Another aim of this and of the following expedition was apparently mapping of the territory for Turkish reign and gaining local tribes co-operation with Turkey (Drápal 2005, 32). Obviously even for this reason Musil focuses in his works and reports on the attitude of Bedouins towards Islam: „True Bedouins know only a little

63 An interesting document about the arrest of Nūrī, who was in danger, that Ottoman Turks will hang him, is correspondence of dragomana c. k. consulate in Damascus Chalīl Fattāl with Musil from the September of 1911. Fattāl, who according to words couldn’t help Nūrī in any way, mentioned the possibility of Musil’s intervention in the highest circles. (MV, H 18585)

or nothing about Islam.“ (cit. from Rypka 1938, 15).⁶⁴ In reports to the incoming Austrian minister of foreign affairs baron Burian in 1914 Musil writes that the government can't count on the help of Bedouins during operations in Syria and Red Sea and not even in its campaign to Egypt, because of animosity, which is the consequence of the erroneous politics of Turkey in recent years. Further he writes, that Bedouins do not have an interest in participation in „Holy war“, because they don't have sufficient understanding for Islam (cit. Drápal 2005b, 38-39).

Drápal emphasizes Musil's extraordinary observational talent, as well as his ability to describe noted facts. Rypka from the same reason quoted the review of Musil's four-volumes work *Arabia Petraea*: „...(A. Musil) especially cleverly observes native inhabitants... every clan..., describing their customs and habits, thinking and feeling of the Arabian inhabitants. Extraordinarily rich are their songs lyrics..., he introduces their social and political opinions to readers. Everything, that Musil writes about the religious life of the Bedouins, is very instructive...“ (Rybka 1968, 32).

Musil in his unpublished work about Islam expresses an opinion that Bedouins, similarly to settled population, believe in one omnipresent God. However in contradiction to a settled population, they do not build special buildings for him, don't portray him and don't have any „sacrifices“, because this function is transferable, and they make only small sacrifices, because they believe, that everything comes from God and they would be able to give him only remnants of that which he gives them from his bounty (Musil 1941, 6-9). They believe, that God follows them everywhere, and that they do not need any intermediary between him and themselves. „God is my father; I am his son. Is an intermediary between father and son necessary?“ (discussion between Nūri and Alois Musil, cit. From the unpublished manuscript *From the World of Islam*, Musil 1941, 8).⁶⁵

64 Rypka quotes from: *Almanach der Kais. Akademie*, year 58, 1908, p. 363ff.

65 Discussion between Nūri and Alois Musil (1941, 8). "Status of women was formerly different. Among desert nomads the woman intervened in family, social as well as public matters, she took part in fighting and her word counted. Among residents she could write poetry, study, write, make works of art, she could even lecture on theology. Some women ruled either as mother or as widow. Who oppressed her were not Arabs, but Mongols a Turks converted to Islam." (*ibid.*, 33) To the status of women compare the chapter "The Position and Importance of Women (Lancaster 1981) „The status of a woman used to be different. In the nomad tribes she intervened in family, social and public matters, she took part in combats and her word was heard. She could write poetry,

Musil wrote that the religious situation among Bedouins from the Rwala tribe changed substantially during his travels in the Near East. While during the years of 1908-1909 he rarely met Bedouins who regularly practiced religion, and also he did not see them pray very often, in 1914 the situation was different. He ascribed it to the activities of Nūri's son Nawwāf (Musil 1927, 427).



Fig. 39 In the camp before departure to Petra, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.

study, create writings and artistic objects and she even could lecture on theology. There were many cases when "women ruled either as mothers or widows. The oppressors of women were not Arabs, but muslimized Mongols and Turks." (ibid, 33) Lancaster more recently in the chapter „The position and Importance of Women“ noted: „Women are equal partners“... The apparent inequality is due to the differing nature of the faces of society, public and private. Women are confined to the private sector and are therefore not seen, both literally and figuratively. While this might look like unfair discrimination and the relegation of women to a second-class status, it is, in fact, a measure of their extreme importance to society as a whole: they are simply too valuable and important...“ The importance of women he shows, for example on the right of women to get sustenance and transport to her relatives after the heated battle, which was rarely ignored (Lancaster 1981, 58-59). Also women can act as men if men are not available, like Lancaster shows on the ex. of a mother of one of the sheikhs who ran smuggling in his absence. (Lancaster 1981, 63) As an example of women who apparently entered the public life are cases of women who beat off raiders with tent-poles (Lancaster 1981, 63). „The public and theoretical position is that women are simply there to keep house and provide for children. In reality husbands and wives consult each other and advise each other about mediation, politics and economics“ (Lancaster 1981, 65). „Men and women have different social networks and women are just as well-informed about the issues of the day as men, in fact often better, for they do not have to filter out the public statements that have to be made“ (Lancaster 1981, 65).



Fig. 40 Collection of Alois Musil in the Museum of Vyskov region, Vyskov.

6 ANTHROPOLOGICAL RESEARCHES OF BEDOUINS

Anthropology as an independent scientific discipline in countries of the Near East like Syria, Lebanon, Palestine, Transjordan, Iraq, Arabia and Turkey, did not exist before the Second World War. If there was any attention given to anthropology at some university in these parts of the world, it was usually physical anthropology, especially in relation to problems of racial typology of the Near East (Fenton 1947, 342). Dutch visiting professor Johannes Ariens Kappers at the American university in Beirut (1931) started with scientific studies of the anatomical peculiarities of Bedouin tribes. Professor William M. Shanklin continued in this research and later he published his results (for example Shanklin 1935, 375-390). These measurements were performed on the basis of the anthropological methods of Hrdlička and Wilder. Beside analysing physical parameters, he monitored persons submitted to the analysis of blood samples, prints of thumbs and palms, and of hair samples. Collection of data was rather difficult because of a lack of willingness and natural suspicion of nomads, which increased in the time of dispute of nomadic desert tribes with villagers about tribute. In addition, there was no possibility of comparing the collected data because it was the first research in that region. The analysis of samples of blood groups revealed a considerable prevalence of blood group 0. Results of blood analysis led the authors to the conviction that the monitored group of nomads were related to American Indians and Eskimoes on the basis of a common Eurasian race origin (Shanklin 1935, 381). First paleoserologic researches were performed on Bedouins from the Rwala tribe and these researches were later extended to four other tribes (Banū Şachr, °Aqayydāt, Ḥuwayṭāt, Muwālā). The author divided the monitored tribes into two groups of one Mediterranean race on the basis of physical traits (Shanklin 1953, 134). Cultural anthropology in these regions lagged behind physical anthropology. With regard to the fact that there were no educated specialists on cultural anthropology at the local universities, all knowledge about inhabitants of these regions came from historians and Arabian history was therefore presented from their viewpoint. Folklore studies had certain support at the university in Beirut and rewards for the best collection of original Arabian proverbs stimulated amateurs interested in folklore and collectors of songs. The results of their activities were unfortunately influenced by their lack of professional education - they did not know, what to collect and how, and

how to analyze the acquired material. With the exception of the activities of these collectors and a few studies about village communities from American sociologists, the Near East remained hidden from the view of cultural anthropology; for a long time it was a neglected territory (Fenton 1947, 342). Most travellers and researchers in the Arabian and Syrian deserts were adventurers, linguists or historians. Their collected data about local nomads, including attempts to interpret the meaning of raids for their economic system, were for instance published by John Lewis Burckhardt (Notes on the Bedouins and Wahabys, 1831; Sweet 1965, 1132). Charles Doughty (1936, 391), who stayed among them for a longer period of time, and similarly Alois Musil, was for example also dealing with the phenomena of Bedouin raids and their economic significance. Louise Sweet was interested in this problem in connection with her research of the mechanism of later ecological adaptations, but as she herself proclaimed, „no cultural anthropologist performed his own field research among these Bedouin camel breeders in the North Arabia and all accessible material, which was used as a basis for analysis, came from the observations of merchants, political agents, orientalist, historians, geographers and adventurers“ (Sweet 1965, 67). Publications about Rwala Bedouins by Professor Alois Musil were for a long time the most detailed and systematic studies about this Bedouin tribe of this region (Musil 1928b).

Alois Musil lived for a long time among Bedouin tribes during his exploratory journeys in the Near East. He recognized already during his first journeys that the only possibility to travel relatively safely in these regions and to perform research is to secure the protection of the chieftains of powerful tribes for himself. Because he maintained friendly relations with important Bedouin tribes, he was able to make several significant discoveries, especially in the field of Islamic archaeology and to create exact maps of these territories, which at that time were unknown to Europeans. He later published the results of several months of long ethnographical studies, which he performed from 1908, in one of his monographs under the title *The Manners and Customs of the Rwala Bedouins* in 1928 in New York. The monograph, reflecting Bedouin society as it existed before the First World War, contains observations of natural environment, structure of society, genealogy⁶⁶, dwellings, food, equipment,

66 More recently it was William Lancaster (1981) and Hugh Kennedy (1997) who dealt with genealogy of Ruwāla Bedouins and who examined the question of whether their oral tradition corresponded with written

customs, personal qualities, legal system etc. Musil supported his notions about the religion and lifestyle of Rwalas by examples of oral literary tradition of tales, prayers, proverbs, poetry and songs. The author recorded oral traditions with his own observations, with description of the milieu and occasions when above mentioned tales were recited and with descriptions of everyday life and persons for whom this poetry was recited, and also with local history and description of language peculiarities and the opinions of Bedouins (Musil 1928c).

The way of creation of contemporary poetry, which originates in Bedouin oral tradition, is also represented by the example of a panegyric poem which was composed about him by his educated Bedouin guide who was familiar with literature and did also read the legend of Banū Hilāl. The guide was however later accused by other Bedouins, who were illiterate, that he used unsuitable means of expression which the real Bedouin would never use, and that he lacked the knowledge of poetic language (Musil 1926, 157). Some means of expression were automatically replaced by archaic expressions, which were not used any more, and which Bedouins considered to be more noble and therefore more proper for panegyric poems than means more truthful and exact which were used more often (Musil 1927, 237; Zwettler 1976, 207). Beside his own recorded observations, Alois Musil included photographic documentation and his own drawings of dwellings, armament and domestic animals in the publication.

record and how Bedouins of twentieth century remember and record their genealogies. The purpose of his work was to illuminate a question of relationship between oral tradition and written record in the Early Islamic period.

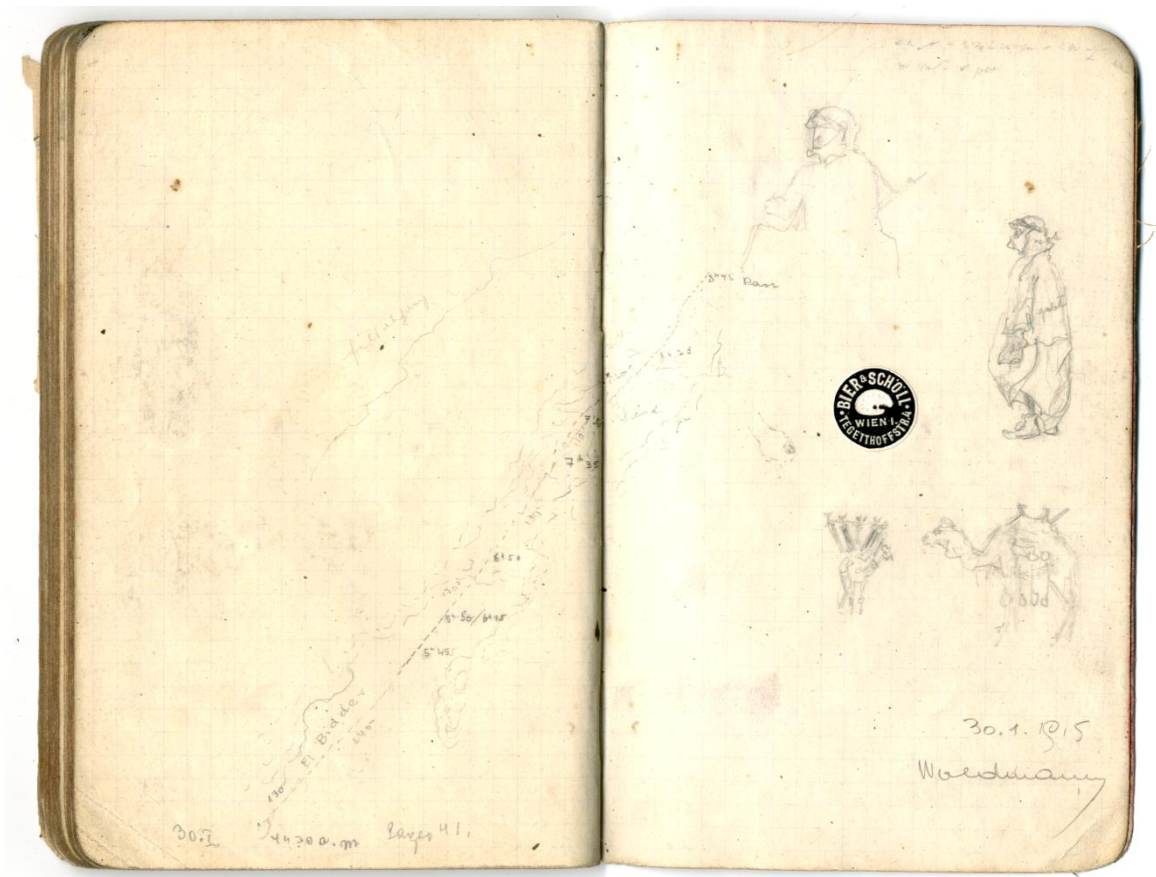


Fig. 41 Sketch of Bedouins and of the camel, Musil's papers, Private archive of Musil's family.

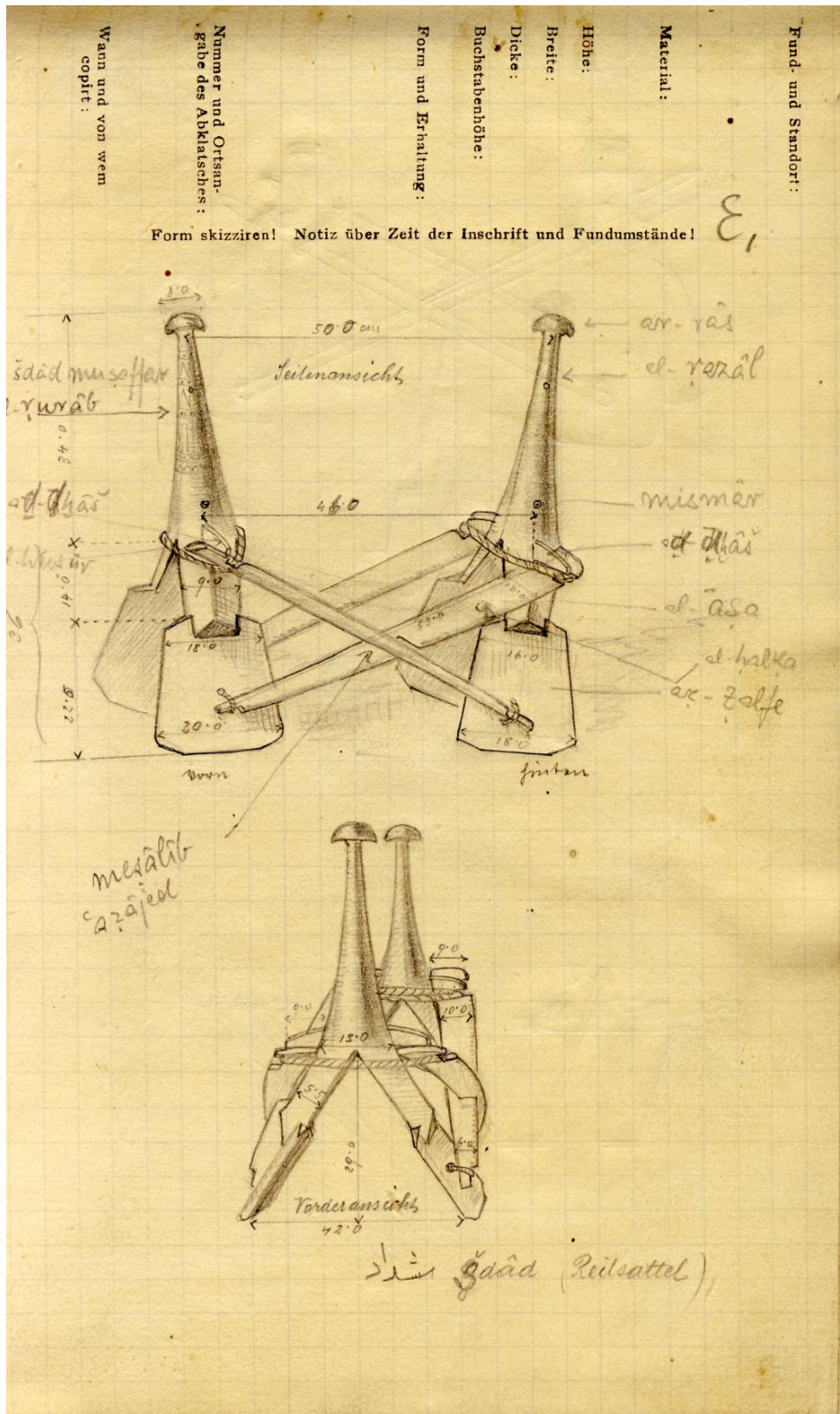


Fig. 42 Musil's diary, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.

Although Michael E. Meeker criticized Musil due to the fact that his work was not supported by any theory and methodology and in this way it was rather a summary of remarkable amount of information arranged according to individual themes in the manner of an encyclopedia, he stated that his monograph was an extraordinary descriptive ethnographical work. The book is also likely the most detailed report about life of mounted camel breeders in the northern Arabia ever written, and so it remains the unique and irreplaceable document about this period (Meeker 2004, 45-46).

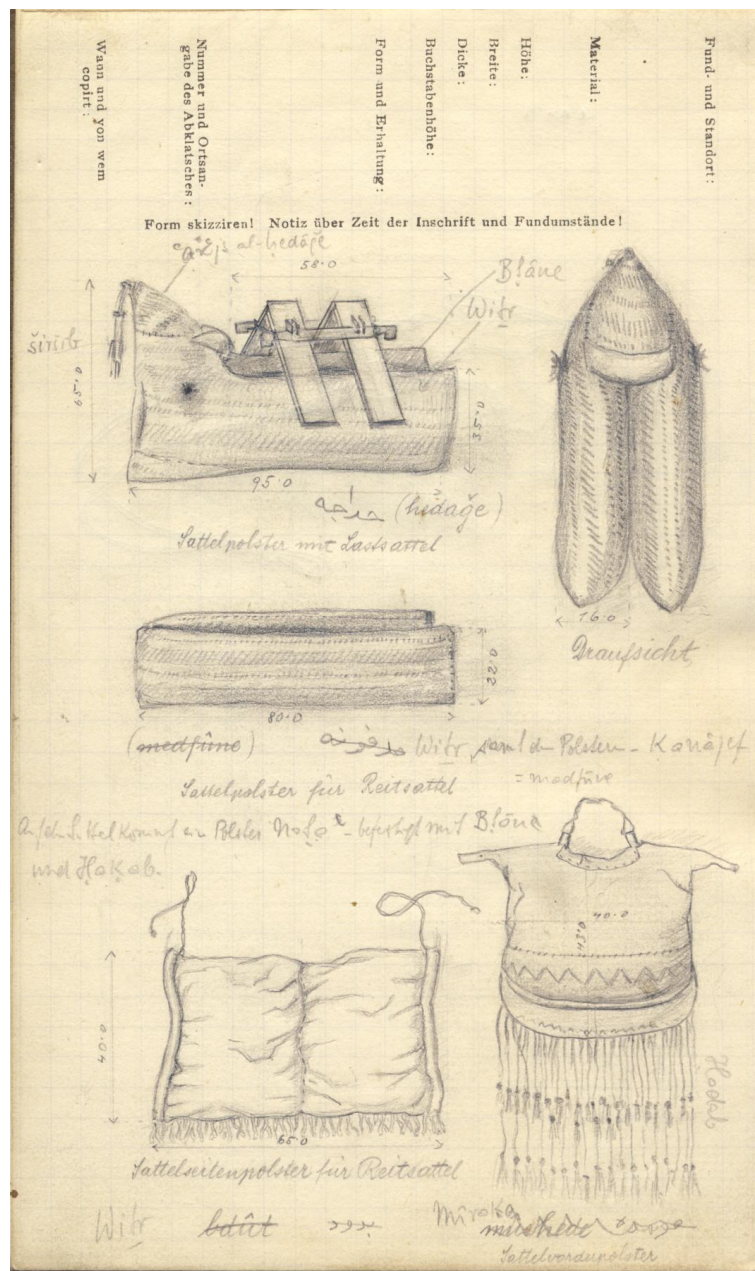


Fig. 43 Musil's diary, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.

Meeker occupied himself also with questions of social structure and genealogy among Bedouins and at the same time with the development of anthropological approach in the research of Bedouin society. He put Musil's mostly descriptive approach in contrast with the approach of anthropologists in the seventies who were omitting the subjective perception of „observed objects“ as they described everything from the „outer“ point of view of an anthropologist. Musil's work, according to him, balanced the omitting of oral „folk“ tradition (Meeker 2004, 46). Apart from the above mentioned monograph, Musil captured his findings about the life of Bedouins also in the most of his other works, both specialized and popular.



Fig. 44 Bedouins camp, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.

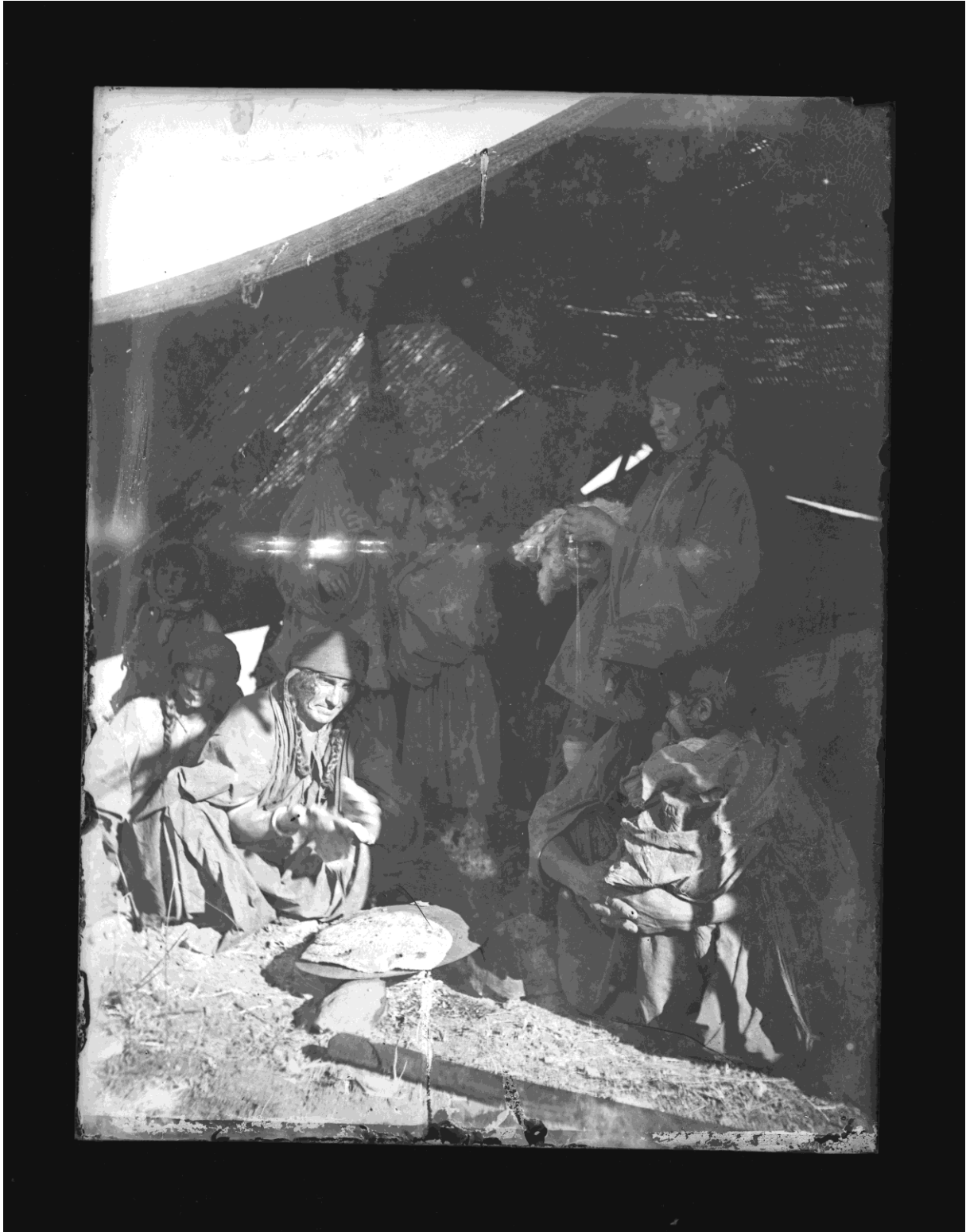


Fig. 45 Photo of Bedouins, Musil's papers, Private archive of Musil's family.



Fig. 46 Bedouins' camp, Musil's papers, Private archive of Musil's family.



Fig. 47 Bedouins camp, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.

After the war, conditions for anthropological research improved. It was possible to study this discipline, especially at the American University in Beirut and at the Arabic University in Damascus (Fenton 1947, 343). New political arrangement of the Near East after the war, including economic and other reforms, also contributed to the increased interest in research of Bedouin tribes. One of the problems in planning of the new arrangement was the question of a future for these nomads and search for a way how to include these groups into newly structured society. It was rather difficult to find a solution because Bedouins did not have any motivation to change their way of life which they considered as an ideal lifestyle for a long time. They considered agriculture, trade, all kinds of crafts as a way of livelihood below their dignity. For them, the desert was not only a place, where they lived, but most of all the guardian of their tradition, which helped them to live in original purity and at the same time separated them from the external „imperfect“ world. Local conditions like lack of water and food, high temperatures and unforgiving terrain, i.e. dangers for „invaders“ from outside world, were allies of the Bedouins (Hitti 1940, 28; Elphinston 1945, 370).



Fig. 48Collection of Alois Musil in the Museum of Vyskov region, Vyskov.**Fig. Collection of Alois Musil in the Museum of Vyskov region, Vyskov.**



Fig. 49: Siesta in a tent, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.

According to the conception of the Bedouins, the Earth had high mountains in every of its four corners, which were far away beyond the horizon. They towered from one half above the ground, from the other half were sunk deeply in the sea. They rose in sharp promontories above ground. Heaven extended above these four main ranges. In rainy season spirits, and God as well, enjoyed staying in the vicinity of the southern range, which lead far into the desert (Musil 1927, 264).

The economics of Bedouins went through certain changes. In initial periods, when these tribes had considerable supremacy, they obtained most of their livelihood and wealth from raids on settled populations who lived on the edge of deserts and made their living mostly from agriculture and pasturage, or from other forms – like collecting fees from them for „protection“. However, according to the opinions of Europeans, who lived among Bedouins for a long time, as for example Musil, raids of these nomads were not motivated only by desire for economic gain, but often rather by a desire for excitement (Elphinston, 1945, 424). Danger was attractive. It is possible to say that it was a kind of sport for them (Musil 1927, 424). From this viewpoint, it would be possible to compare these raids to contemporary extreme sports. On the other hand, Musil recorded also an opinion of a member of the Shammar tribe: „raids are our agriculture“ (Musil 1928b, 10).

Louis Sweet, who occupied herself with the mechanism of raids in Bedouin culture and with their significance in the Bedouin tribal confederation divided them into two groups. The first group represented reciprocal raids, which means raids carried on among more or less equal tribes, where the rules were adjusted by various sanctions and obligations which should ensure as much safety for the Bedouin community as was possible. The second group represented merciless marauding raids which were, according to the author, less bound by conventions and rules and were directed at the communities which were from the social point of view of Bedouins more distant on the basis of different ecological specialization but from the economical point of view lived with them in symbiosis. This type of raids represented for Bedouins an important economical resource, while the mutual raids among Bedouins represented primarily the solution of ecological problem of the desert breeding of camels (incessant searching for new grazing lands and water sources) and they also consolidated mutual relations in the frame of Bedouin community. Both practices assured Bedouins' survival (Sweet 1965, 1146).⁶⁷



Fig. 50 After the raid..., Collection of Alois Musil in the Museum of Vyskov region, Vyskov.

The problem of ecological adaptation of the Bedouins was later researched by Emmanuel Marx. He sees the main reason for using such vast territories and long

⁶⁷ More recently it was the anthropologist Ahmad Hamdan al-Rabaya'a (1974) who was dealing with the question of social-economical relations of Bedouins, with the question of nomadism Jabbur Jebrail (1988), with the ownership in the frame of Bedouin society and especially with the ownership of land as a part of economical system Fawzi Radwan al-Arabi (1989) and others. Palestinian anthropologist Aref Abu-Rabia concentrated in his works on the research of education and social-economical and political relations among Bedouins in the region of Negev (Khalil Nibal Tayseer 2008, 16–17).

regular migration as an effort to adapt themselves to irregular precipitation. In 1977, he writes about the Ruwāla tribe that it has the most extensive range among all Bedouin tribes, which in this case is 800 km. In contrast to other Bedouin tribes in the Negev region, the Ruwāla tribe uses pastures in the entire territory. This requires the establishment of a complex organizational structure. Emmanuel Marx writes on the basis of his calculations, which result from a research of Oppenheim, that the Ruwāla tribe has 35 000 individuals and owns 350 000 camels (Oppenheim 1939-68, 120-122, cit. according to Marx 1977, 347-348, 360). More recently he dealt with pastoralists in Syria and the process of the conservation of wildlife and the role of Bedouins in it (Dawn Chatty, 1998, 2-7).

This author occupied herself also with the question of relations between Bedouin tribes and the state apparatus in Syria. She was dealing mainly with the question of identity of these nomads, their self-perception and significant changes in their life in the last thirty years. She writes: „tribal sheikhs united for several centuries two worlds, accustomed themselves to the life in tents in the desert, but also in cosmopolitan salons of the city elites“ (Chatty 2010, 31). New political arrangements after the world war considerably disrupted customary economical systems, for example by separation of the Syrian part of the Syrian desert from its southern part in Saudi Arabia, which thereby separated Bedouins from their natural economical base and also disrupted their social world (Chatty 2010, 32).

Bedouins had small monetary incomes from animal breeding. They bred mostly camels, but also sheep and goats and, in smaller quantities, horses. Later, poorer Bedouins obtained sustenance from leasing camels and the more affluent tribesmen acted as middlemen who arranged the supply of food or petrol to more remote settlements or towns, for example to Palmyra. After the road safety and the use of cars and planes improved, the raids ceased to be the main source of income for Bedouins. Also, travellers stopped paying fees, with the exception of some companies, which use desert roads regularly (Elphinston 1945, 372).

Economic conditions of relatively autonomous tribal communities started to change drastically beginning in the middle of the 19th century. William Lancaster (1981) dealt in his work with the process of destruction and transformation, using the

example of the tribal alliances of Ruwāla Bedouins. The author spent altogether four years in the course of seven and half years in the various camps of Ruwāla tribes and collected field data. Fieldwork started in the spring of 1972 in Syria. William Lancaster chose the Ruwāla tribe because of its reputation as the „most“ Bedu and also, beside references to the Ruwāla in travellers' reports, because there were two experts who knew them well in the past: Alois Musil and Carl Raswan. Musil was found more useful by Lancaster, who described his work as „scholarly, accurate and sympathetic..., even if not wholly satisfactory from today's anthropological point of view“ (Lancaster 1981, 3-4).

He divided his conclusions into two main parts: „present system“ and „changes and adaptation“. In the sixties, when the Syrian government took away all hired immovables from Bedouins, most members of the Ruwāla tribes stopped breeding camels and found livelihood in small companies which were focused mainly on transportation and trade. Some groups found delight in smuggling of goods across the Syrian border, initially as a retaliation for the sequestration of their land; it also provided them with an alternative source of income, but later it changed to an activity „for those tribesmen who prefer the danger, excitement and profits of smuggling to other more pedestrian occupations“ (Lancaster 1981, 14). As the author notes, his work was based on English pragmatic tradition and was influenced by Barth's work (for example Barth 1967, 661-669; 1972, 207-220)⁶⁸. Unfortunately - according to Sweet - he didn't deal consistently with the analysis of systems, nor with the continuous process of change and adaptation these tribes went through, but rather presents these changes descriptively as a series of various events (Sweet 1983, 212).

Many inhabitants improve their income even now by smuggling larger volumes of goods, and therefore it is probable, that there are also descendants of former nomadic tribes among them. For instance, from an economic research of the market oriented on sanitary ware, which was performed in 2005, it was found among other things, that roughly 10% of imported goods came across the border illegally

68 For example Barth, Frederik. 1961: *Nomads of South Persia*. London; 1967: *On the study of Social Change*. *American Anthropologist*, vol. 69, n. 6, pp. 661-669; 1966: *Models of Social Organization*, Royal Anthropological Institute Occasional Papers, No. 23, London and 1972: *Analytical Dimensions and the Comparison of Social Organizations*, *American Anthropologist*, vol. 74, n. 1-2, 207-220.

(Konvička, T.,- Šedivý K.: report 2005/19340 BSRIA.uk). As was noted by Svend Helms: „Bedouins nowadays do not base their economy on the exploitation of just one resource, but diversify, if they can, in order to include the breeding and rearing of sheeps, goats, and cattle, as well as engaging in agriculture, fishing, smuggling, and other forms of entrepreneurship, legal or not“ (Helms 1990, 10).

The next author, who occupied himself in more detail with the question of nomads and with the process of their settling in regions of Syria and Jordan, was Norman N. Lewis, who also quotes Musil in the connection with Barġas’s plans for the development of agriculture in the region of Palmyra.⁶⁹

From the eighties, when trucks and other types of motor vehicles replaced in transportation camels and enabled Bedouins to enjoy still greater mobility, many of them became still greater nomads than in the past. A new mode of transportation enabled the most of Bedouins to live in a village and yet to retain regular access to the pastures and to the herds (Chatty 2010, 48).



Fig. 51 Today’s Bedouins near of Palmyra. Photo by M. Vesela.

⁶⁹ Barġas was a son of one of the sheikhs from the tribal confederation °Aniza. His plans to change the northwestern region around Palmyra into agricultural land were not realized.(see Lewis 2009, 71)



Fig. 52 Today's camels' breeding, Palmyra region, Photo by Vesela.



Fig. 53 One of the sources of income comes also from sale, Photo by Vesela.

By smuggling larger volume of goods across Syrian borders many descendants of nomadic tribes were able to improve their income. These practices culminated during the war in Iraq. A group of most enterprising Bedouins later invested money, gained by these illegal business deals, into enterprises in the field of tourism: mostly construction or modernization of hotels and restaurants and purchase of more fashionable means of transport for groups of tourists.

Svend Helms and Alison Betts (writing in the above mentioned monograph) also systematically explored the history of Bedouin settlements and their predecessors. Research of the al-Rīsha site, which dates to the Umayyad period with the last traces of settlement from 11th or 12th century, revealed stone buildings which were very similar to settlements in the vicinity in which Rwala Bedouins have lived since 1968. The method of their work, based on modern ethnographic researches, consisted in backward projection of modern Bedouin practices into the practices of the Early Islamic period and in the similarity of modern Bedouin settlements to localities of so called Umayyad desert castles (*quṣūr*).

The authors were later criticized by Alastair Northedge, that they didn't take into consideration the possibility of changes in these practices in the course of several centuries, despite of the fact that we have several such examples at our disposal. One of the differences lies in the fact that contemporary Arab tribes in the Near East live today in houses and receive guests in tents. On the other hand, Umayyads in Amra, where there is only one small residential building, had to live in tents and receive guests in the building. Relatively extensive material dealing with behaviour models of Arabic tribes in the period of Jahiliyya and Early Islam exists in Arabic historical sources which authors of these analyses didn't take into consideration. With regard to the fact that the period of Umayyad khalifs was essentially the period of cultural unification between khalifs and Bedouins, Al-Rīsha could be, on the basis of similar building features, really considered as a part of the net of Umayyad castles, without this being necessarily an autonomous phenomenon (Northedge 1992, 127-128).

Alois Musil used similar methods as Sven Helms and Alison Betts during his interpretation of Umayyad desert castles. He attributed these to the khalifs's nostalgia for a desert life (Musil 1928a, 277). Nevertheless, his method was (apart from the

above mentioned retroactive projection of ethnographic model of Bedouin practices in the early Islamic period) based on multiple historical sources. This was similar to the case of Father Lammens who in his article published in 1910 presented an idea that the reason for establishing the Umayyad castles (quṣūr) could be the Bedouin nostalgia for life in the desert as well as the yearning of khalifs to escape from the plagued cities (Lammens 1910, 91ff). Later this idea was rejected by scholars as too romantic; however, as Northedge writes, Lammens defended his hypothesis by providing many historical sources and it is somewhat impetuous to reject hastily this strongly supported hypothesis (Northedge 2000, 43).

The invaluable significance of Musil's work in the field of anthropology lies mainly in gathering a distinctive amount of material, both in written and photographic form. The description of everyday life of the Rwala Bedouin as well as the considerable accumulation of records of their oral tradition acquire even greater importance in the light of the fact that written sources on this subject were for a long period limited to usually very sparse information from travellers in the Near East. During the process of settlement of these tribes in the second half of the past century most of their traditions became extinct.⁷⁰

70 As *Al-Thawra* (Syrian daily paper) stated two years ago, news about desert nomads appeared only in the works of European travellers and orientalists, of which the best known is Alois Musil, called Músa ar-Rweili. When foreigners lost their political interest in this region, works on these tribes disappeared and it took over 70 years of waiting for a monograph documenting tribes of the Syrian Desert to appear. See *Al-Thawra*, n. 12834, 2005/10/16, URL:<http://thawra.alwehda.gov.sy/_archive.asp?FileName=17968073020051015220414> (accessed 12-10-07).



Fig. 54 Bedouin patriarchs, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.

Ernest Gellner states that Musil's book *Manners and Customs of Rwala Bedouin* is a standard and to this date probably the best ethnography of northern Arabic Bedouins, frequently quoted by later anthropologists (Gellner 1995, 39).

Alois Musil searched for common roots of monotheistic religions in the deserts of the Near East. He himself, being a Catholic priest, was able to accept Bedouins as dissenters and also accepted their different way of living. With his approach to Bedouins he can serve today as an example of co-existence between Christians and Muslims.



Fig. 55 Bedouins' tent near of al-Başîri ruins.



Fig. 56 Today's Bedouin tent (Palmyra region), photo by M. Vesela.



Fig. 57 Interior of the Bedouin tent today (Palmyra region), photo by M. Vesela.



Fig. 58 Morning siesta before the tent (Palmyra region), photo by M. Vesela.



Fig. 59 The Old Bedouin woman, photo by M. Vesela.



Fig. 60 Today's Bedouins near al-Turkmāniyya.



Fig. 61 Today' s Bedouin cemetery in al-Sukkarīyya.Fig. Today' s Bedouin cemetery in al-Sukkarīyya.

7 MUSIL AND KEY ARCHAEOLOGICAL SITES – MUSIL’S THE MOST EXPLORED SITES IN DETAIL

7.1 Quşayr ‘Amra

7.1.1 History of discovery - Musil’s great discovery and initial problems connected with it

Musil’s name will be forever linked with the key site of Quşayr ‘Amra. The discovery of this castle is considered not only as one of the most important of Musil’s archaeological discoveries but at the same time also as one of the most significant discoveries of Islamic archaeology. Quşayr ‘Amra is located (together with several other similar types of buildings) east of Moab, eastward from the old pilgrim road to Mecca (Musil 1902, 23), on the territory of present Jordan. Musil learnt about it for the first time from a Bedouin, when he was most impressed by words about its rich figural decoration, but he didn’t succeed for a long time to visit it because the territory, where this castle was located, was not only threatened by hostile tribes, but also saturated by many superstitious Bedouin legends and for this reason his Bedouin friends were afraid of a local ghost.

The distance of five hours of riding from fortress al-Kḫarāna Musil covered in the company of only one fighter from Banū Şakhr and thus visited the legendary Quşayr ‘Amra.



Fig. 62Qaşayr 'Amra, Private archive of Musil's family.

As he himself wrote in his report for the Czech academy, he didn't anticipated that he would be able to stay there for a longer time, because the very same day he had the scheduled meeting in Qaşr al-Azrak. In this report, which was published in May 1899, Musil writes that Qaşayr 'Amra is in its style similar to Quşūr Tūba, Bājer, al-Mushatta, but differs in building materials. Because of the abundance of harder stone they didn't build here using bricks but red limestone instead. Musil describes how he entered for the first time this castle from the eastern side through the basalt gate. Continuing his description, he writes that the middle nave is wider than both side naves, which are protruding from apse. The vault as well as the walls were decorated by nice fresco paintings. Lateral northern nave was blackened by smoke, but on the vault of the middle nave one could see several heads on the walls and on the promontories two female dancers with a dulcimer and some other musical instrument in their hands. In the vault and in higher places on walls of the southern side nave he noticed abundant occurrence of smaller genre pictures. They represent various crafts

and occupations of local folk. Among scenes he mentions a blacksmith, a locksmith, a loading of the camel, a march of the caravan and other activities. On the lower part of the wall he saw the picture of a massive hunt. In other halls he found the painting of vine on the walls. He writes about the entrance into an adjacent building in the middle of southern side nave. In the small arched space in upper parts he saw three nicely executed portraits and in lower parts of the wall under the garland decoration many domestic animals. In the hall behind entrance he describes the discovery of paintings with half-nude women and several monsters, very similar to Arabian fabulous being Ghūl. In the next hall he describes the painting of a palace in the middle of a grove, in front of which there are three women standing; the middle woman has a child in her arms. He describes also flower decorations, paintings of camels, horses and gazelles. In the last hall he noticed a picture of the zodiac on its vault and flower decoration on the walls. Musil writes, „although the pictures are very finely executed, they are completely preserved, and I was looking forward to two days stay, during which I could depict everything, even perhaps to take off many of them. Although the region is very dangerous, it would be possible to survive one or two days in this strong, almost preserved castle. Unfortunately, we didn't have sufficient supply of water and therefore my guide forced me to follow him and leaving as soon as possible, because the other companions were already disappearing behind the southwestern hills. As soon as we left Quṣayr Amra, two riders on camels emerged and started to chase after us.“ (Musil, 1899, 261). Musil describes how they later joined their group and how not too far from Kasr Azrak larger skirmish took part, in which 13 men were killed and 27 wounded. The group of Bedouins with Musil was forced to flee. Musil adds to this report a surmise that Quṣayr 'Amra was built by the Ghassanids. Due to these circumstances Musil could not return to 'Amra during this expedition but he received the promise of sheikh Banū Sakhr Talāl that he will not allow anybody to enter the castle without Musil's permission (Musil, 1899, 262). In his report to the Imperial Academy, which was published in May 1902, Musil writes: „I presented to the Imperial Academy of Sciences my discovery in a preliminary report about my journeys in Arabia Petraea. In the meeting of the department of history and philosophy, the 11th of January 1899, this report was accepted, but I asked for a postponement of the publication, because I was supposed to get holiday and therefore I hoped to return to the desert“ (Musil, 1902, 336). Later on Musil recalls in his opening

lecture wrongs connected with the discovery of Quṣayr ‘Amra as follows: „Returning after three years of a long sojourn in my homeland, I submitted report about my explorations in Prague and in Vienna, which was supported. In the Academy of Vienna my discovery of Quṣayr ‘Amra was declared a scientific delusion. The famous expert, professor Karabacek, asserted that it was absolutely impossible for the first successors of the prophet Muhammad to decorate their summer residence with paintings and to allow to be portrayed. According to his opinion this defies the laws of Islam and there is no mention in the whole Arabic literature about something like that. Because Quṣayr ‘Amra was scientifically impossible, it wasn’t discovered by scientific research, but by imagination. Thereby I was accused of deception. I wasn’t able to defend myself. Nobody believed my detailed descriptions and I had no photographs. I accompanied at that time a robber expedition and in the castle we were assaulted, my companion was shot dead and I was on the run with his corpse, so that his family could bury him. And this discovery was proclaimed a deception...” (Musil, 1921, 218; Drápal 2005, 22).

As it is apparent from Musil’s quotations mentioned above, his original version is rather different from his later published recollections. In this and in several other cases it seems that Musil retrospectively adjusted them according to his needs. In above mentioned published lecture he states, for example, that his party was assaulted directly in the castle, his companion was shot dead and he didn’t have any photographs of the castle. But in the report from 1899 he writes that they escaped with his companion, they joined their group and the skirmish happened only after several hours at the spring Azrak. Taken into consideration that in his archive one photograph of Quṣayr ‘Amra’s exterior from 1898 survived (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 19 535/3-09) together with drawings of Amra according to Musil’s photographs and published by Lammens (Lammens, 1898, 630-637), it is evident that Musil had in mind the non-existence of photographs of Quṣayr ‘Amra’s interior and not photographs of the exterior of the castle.

Musil greatly suffered from distrust with which he met among experts. For this reason he decided to organize another expedition to Quṣayr ‘Amra, from which he could bring back enough of trustworthy documentation. Finding money for another expedition was rather difficult because of the previous conflict with the Viennese

Academy in connection with suspicion of misappropriation of the part of money allotted to Musil for purchase of antiques. Musil used part of the money designated for this purpose for necessary travel expenses, something that especially professor Müller didn't like (Reich 1930, 50-51). Before he succeeded in obtaining money for another expedition, he departed for research in the libraries of London, Cambridge, Berlin and Vienna, in order to study available literature and he also attempted to find references to this building. Ministerial councillor dr.L.Beck von Mannagetta, officer of the theological faculties in the department of teaching, arranged for Musil's vacation for the year 1899-1900 and he secured support of 600 guildens for his study tour across Europe. In London, Musil studied among other things vast collection in the British Museum, in Cambridge he extensively drew from well-equipped university library and in Berlin he attended university lectures of excellent professors like F. Delitzsch, E. Sachau, H. Winkler, H. Gunkel and others. In Vienna, he studied, apart from other things, cartography at the Military Geographical Institute (Drápal 2005, 23).

Musil comments later on his study tour across Europe in the daily newspaper Hlas, which published serialization of his description of the journey to the Near East, realized in 1900, in the form of letters sent by him: „After exhausting work in the British Museum in London, at the Cambridge University, in Berlin's museums and libraries, I arrived at solving many historical-exegetic mysteries and sometimes also at results which are entirely or partly inconsistent with present opinions“. ⁷¹

Musil didn't get financial aid for the new expedition from the Viennese Academy of Science, with the exception of money provided by professor Müller for the purpose of purchasing a fotografic apparatus, which would enable him to make the photographs of Quşayr 'Amra's inner decoration. Professor Müller wanted through this contribution to secure a potential share of the Viennese Academy in the discovery of Quşayr 'Amra, provided it really existed. In May 1900 Musil set off again to the territory east of the Dead Sea. He was accompanied by three gendarmes assigned to him by the Turkish government.

⁷¹ In: Hlas 25.05.1901

From the 6th till the 14th of July Musil worked in Quṣayr ‘Amra, where he made many photographs, the plan of the castle and its environs, the copies of the writings and he also thoroughly described the most preserved murals.

The acquired material made a great impression on experts after his return to Europe. Musil writes: „In 1899 and 1900 I worked in Cambridge, London and Berlin and I was incessantly worried about the former disgrace, which affected my scientific work. In the summer of 1900 I travelled again to the Orient, arrived to Quṣayr ‘Amra once more, and brought from there 110 photographs of paintings. They finally started to believe me. The delusion became the reality, but my esteem for the infallible judgment of the most renowned experts suffered considerably“ (Musil 1921, 218). Note: in another publication Musil states that he brought from Quṣayr ‘Amra 120 photographs (Musil 1932, 279). The Viennese academy, by now aware of the importance of this discovery, established after his return the North Arabian commission composed of its best specialists. With the ample help of some members of this commission and with the financial assistance of the Austrian aristocracy and later also of the bankers, Musil returned in the beginning of April 1901 to the Near East. His main target was first of all Quṣayr ‘Amra and several other castles. Musil was this time accompanied by academic painter O. L. Mielich, an expert on oriental art, whose task was to provide the most exact copies of murals in the castle. Musil and the painter worked in Quṣayr ‘Amra from the 25th of May till the 11th of June. Members of the tribe Banū Ṣakhr protected them and at the same time transported from the great distance water, which was necessary for cleaning the murals. Musil describes how the others prepared needed tools, how much time they spent on assembling suspended scaffold and ladders, which they made from terebint branches (Musil 1932, 294). Musil also describes how they economized on water, which was indispensable for the needs of the documentation. Musil rationed out also water for drinking, only the painter could take as much water as he needed (Musil, 1932, 301).

During this visit in 1901 frescoes were greatly damaged. Musil describes how they, together with Mielich, cleansed the paintings and removed patina from them by means of various acids, in order for the paintings to be better visible: „By this treatment the colours appeared more clearly, but some particles fell down and the paintings were disappearing. The painting opposite the one we had taken from the

wall, disappeared entirely. As we intended to take that with us too, we had plastered canvass over it, cut the canvass in sections and by rapping the plaster had tried to get the picture off the stone of the wall. Unable to separate it, however, as our escorts urged us to hurry along, we had to leave the work unfinished, with the canvass still over the picture. The unusual sight of the surface plastered over with canvass puzzled the Bedouin herdsmen, who poked off the canvas with their daggers and lances and thus destroyed the entire painting. I should now have like to study the Arabic and Greek writings under the pictures of the individual rulers, but the most important parts had crumbled and fallen out. Also, the main writings suffered a lot by copious wash in 1901, and yet I wanted to photograph it, but it was not easy. The arch with the writings is over 3 metres above the ground in the niche, in which there are no windows, and because the room itself is very dark, it was not possible to photograph the writing by the theodolite from the ground. Therefore, we had to build a base from stones about 2 meters high, on which I placed the apparatus and the writing were photographed gradually in parts. Because the script is small and I was taking pictures from the distance of 1.5 metre, I had to move the apparatus and take aim always very precisely which was very difficult to do from the moving stones. Regrettably, this exhaustive and rather dangerous work was all in vain because, as I found out after my return to the homeland, not even one of the photographs was successful“ (Musil 1929, 286).

The Quṣayr ‘Amra paintings suffered great damage. In the year 1901 we had to remove the patina, clean the paintings, and wash and daub them with various chemicals. Through this process the colours had been temporarily refreshed, but the particles of the paint were falling off and the pictures were vanishing. The painting opposite the one we had taken from the wall had disappeared. Intending to take that with us too, we had plastered canvas over it, cut the canvas in sections and by rapping the plaster we had tried to get the picture off the stone of the wall. Unable to separate it, however, as our escorts urged us to hurry along, we had to leave the work unfinished, with the canvass still over the picture. The unusual sight of the surface plastered over with canvas puzzled the Bedouin herdsmen, who poked off the canvas with their daggers and lances and thus destroyed the entire painting. I should now have like to study the Arabic and Greek inscriptions under the pictures of the individual rulers, but the most important parts had crumbled and fallen off. The principal

inscription suffered a good deal from the washing of 1901 and yet I wanted to photograph it (Musil 1927, 343; Musil 1929, 286).

The painter, together with Musil, had removed above-mentioned part of fresco depicting a full-length female figure and some other parts. Mielich sold some of these fragments to the Kaiser-Friedrich-Museum in Berlin in 1908 (for ex. Musil 1907/1, 96,98; Bauer 1989, 63; Vibert-Guigue 1997; Fowden 2004, 12). This action of Mielich made Musil very angry and it ended in a court case in 1910.

Musil in his explanations of the process with painter Mielich describes in brief his discovery of Quṣayr ‘Amra: how he made the photographic documentation in 1900 and also their journey in 1901, when Mielich’s task was colouring copies of the frescoes. He writes that this expedition was financed by the Imperial Academy of Science and by various art associations and by some sponsors. Musil states as well as that he took care of tools, food, chemicals, negotiation with Quṣayr ‘Amra’s owners Banū Ṣaḥr in order to get permission for taking off the picture, which was taken care of by Mielich. Musil secured the transport of the picture from Quṣayr ‘Amra via Mādabā to Jerusalem, where he paid for it to Hāyel in the Austrian hospice in the presence of witnesses. He writes: “for the picture of the lady 2 napoleons = 40 frs, for taking off the fragment 20 frs, for damaged picture of the lady 40 frs.” He states also that he secured the transport from Jerusalem to Jaffa and that he made arrangements for not opening the boxes with pictures, because otherwise they would be confiscated. In Vienna Mielich gave order to transport the pictures to his flat for the reasons of research. The woman, who restored them, was also paid from the funds of the expedition. According to Musil, Mielich thought about the sale of the paintings already before this time, but Musil was refusing the idea for the reason that “*Kuṣejr ‘Amra*” was not yet published. After “*Kuṣejr ‘Amra*” was published, Mielich arranged in Vienna for the exhibition. In 1908 Musil set forth on another expedition. In the same year he learnt that Mielich sold the pictures to Berlin. In the same document Musil also states that he paid for one fragment with a Greek writing one napoleon = 20 frs (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 19 502).

Elsewhere Musil describes his findings about the destruction of the frescoes during his third visit in 1901: “Curious Hāyel wanted to know what exactly is painted

on the walls. He was not able to recognize the pictures. I showed him several times a painted camel or horse. He begged like a child for explanations of pictures in Quṣayr ‘Amra. Therefore, I took a longer stick and showed them to him... As soon as Bachīt came back, he didn’t even allow him to drink his tea. He at once led him away and started to explain to him the examined picture and he did it so thoroughly that the colour chipped off. “What a pity that I don’t have a lance!” The pictures displayed numerous cuts and cracks, an evident proof that others also used lances for showing the pictures. There were many writings on the walls. They mostly came from vagrant traders, blacksmiths and inhabitants of Hauran. These inhabitants carried away from here as well the marble slabs, serving as panelling not only for the walls of the main room, but also for the walls of adjacent rooms...” (Musil 1932, 296)

After discovery of Quṣayr ‘Amra and other castles to the east of Moab, Musil published in 1902 a shorter study “Kuṣejr ‘Amra” und andere Schlösser östlich von Moab” (Musil 1902 a, 1-51) with plans of the castle and its environs in scale of 1:10000 and of the building itself in scale of 1:200, which was made by the architect A. Pallat from Olomouc. The plan was drawn up on the basis of Musil’s field measurements (Musil 1902 a, 47). The same year this modified report was published in Czech in the bulletin of the Czech Academy of the emperor Franz Josef under the title “Kuṣejr ‘Amra” (Musil 1902 b, 325-349). Musil was emphasizing in his reports that they are parts of the works about the toponomy of Arabia Petrea, in this case focused exclusively on the castles to the east of Moab region, more exactly to the east of the pilgrim road to Mecca. Musil states that he found the first mention about Quṣayr ‘Amra in Turkish-Arabic travelogue literature from the second half of the 17th century, when it was recorded by H. Mehmed and H. Halfa, who heard about the castle, but personally never visited it. Musil also found mentions from European travellers Seetzen, Burkhardt and Gray Hill (see chapter „Transfer to Université St. Joseph“), who heard about the castle, but did not visit it, and also their data about location did not agree with reality (Musil 1902 b, 23-24). Musil ascribed good condition of the castle for one thing to favourable location on the boundary of two hostile tribes and for another to the fear of Bedouins of a fabulous being called Ghūl and evil spirits inhabiting the castle. For this reason, castle’s graffiti were produced only by gypsies and blacksmiths who went by. Musil writes that this time the work was going well.

When almost everything was finished and only a few photographs and examination of the nearest surroundings remained to be done „the bugbear started to rage, although not in the castle, but in the heads of my guides...“ The third day, toward the evening, they started to insist fiercely on departure from this dreadful place and we had willy-nilly to obey them and to abandon the castle the very same evening (Musil 1902 b, 346). Musil here also quotes architect ing. A. Pallat: „ Quşayr ‘Amra, already on the first sight, appears to experts as well as laymen as a monumental building; this impression still increases because of the location of the castle, albeit not due to the height, dominating the surroundings. Nevertheless, it is suitably chosen with regard to conditions of communication, hydrography and terrain, and also the building material as well as external type and area are favourable. This all makes the impression that the force of will, wise use of building materials and consistency of execution was employed and reckoned for long ages.“ (Musil 1902 b, 348). Both reports contain relatively detailed description of frescoes with notes, which were partly damaged.

7.1.2 Musil’s description of Quşayr ‘Amra

According to the plan of the castle drawn up by ing. Pallat on the basis of Musil’s data, Quşayr ‘Amra consists of the main rectangular building with the longitudinal axis from north to south. The largest length of the building is 12.92 meters and the largest width is 10.39 meters. The outer masonry is 0.84 meter thick and is chiseled out from roughly-hewn stone and masoned in layers with hewn stones 50-60 centimeters high, connected with high-quality mortar. The main building is adjoined by two semicircular annexes in the form of apses with the walls of the same thickness, adjacent symmetrically to the middle axis. The width of the main hall is equal to the the front, which is 7.5 meters high. The thickness of inner walls is 73 centimeters. On the middle axis leading from the courtyard there is on the northern side a gate made from dark basalt, whose dimensions are 1.55 by 2.44 meters. Alois Musil states that the floor was paved with cut marble slabs, just as the columns, to the height of one meter and the walls to the height of 80 centimeters. The holes are still visible where the slabs were fastened. The main hall is divided into three parts by two arched panels employing pillars in three parts covered by triple barrel vaults from hewn stones. In the southern part the perimeter walls extend to the arch of the vault and every section

of the vault has the gable window of the dimensions 45 by 90 centimeters. The western windward side is windowless. The vault itself has no upper masonry, the outer surface is cemented. On the boundary between the wall and the vault there are oblique openings intended for ventilation, made from the burnt clay. Simple pillars without heads have only right-angled slabs. The height from the base of the vault in the main hall is 5.35 meters. The eastern wing adjacent to the main building has the square ground plan and is transversely divided into two parts with the width of 2.83 meters. These spaces terminate in the vault with lunettes. Farther to the east there is an adjacent square room with the length of the inner wall of 2.85 meters, which has on both sides semicircular apses and niches. This part also terminates in the vault which begins above the cornice and ends by window openings. The vault is separated from the wall by a segmented moulding. Adjacent to this room is an open corridor, with the width of 1.32 meter, and an open entrance hall of the square ground plan with doorway on the northern side.

To the north of it, at the distance of 7.76 meters, there is a well enclosed by a construction on the square ground plan with masoned cistern for water, which is 5.25 meters wide and 4.43 meters deep. External height of the wall enclosing the cistern is 3.2 meters, inner depth of the cemented cistern is 1.05 meter. On the walls on outer side (height of 1.85 meter), there are three round openings for draining of water. On the western side there is an adjacent circular well (with a diameter of 1.76 m and which is 11.12 meters deep). At the depth of 6.61 meters there is a well carved into limestone rock, remains of which measure 4.51 meters, and which is masoned by quarried stones. Musil states that the well was, by this time, already not in use and was filled with water. On the western side, there was a water pump in the form of masoned square pillar with the cross-section of 1.17 by 1.32 m. Musil (and Pallat) assumed that there must have been a lever and a circular trajectory for animal propulsion, located in the court, which had diameter 4.83 meters. Peripheral walls, made from the uneven quarried stones, are one meter wide and protrude from the west side under a sharp angle of 54 degrees 30 minutes in the western direction on one side of the pump and on another side from the western apse. These walls compose three-sided courtyard with the main entrance on the northern side. The wall of the uneven quarried stone is one meter wide. (Musil 1902 b, 348-349). The inner spaces are richly decorated by

frescoes, which depict plants, animals and men. Musil describes in detail particular themes already in the article from 1902 about Quşayr ‘Amra (Musil 1902 b, 348-349).

7.1.3 Monumental publication about Quşayr ‘Amra from 1907

At the beginning of 1907 Musil’s monumental work „*Kuṣejr ‘Amra*“ was published in two volumes. Müller comments on the preparation of luxurious edition of this book in his letter from the 1st of May 1906 as follows: „splend work, even too gorgeous, because the format will be for a common reader an obstacle and for the buyer the price is too high“ (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 19 088/7).

The first volume contains texts by the group of authors – D. H. Müller, Alois Musil, M. Kropf, A. L. Melich, J. Pollak, F. R. Wickhoff, J. von Karabacek. Musil wrote for the first volume an introductory chapter, in which he describes the discovery of Quşayr ‘Amra, the process of acquiring documentation, the topography and the history of the territory in which Quşayr ‘Amra was located. His travelogue narrative is focused to the large extent on ethnographic observations and archaeology. Subsequent chapters deal with architectonic character of the building, frescoes and chemical analysis of paints. In concluding chapter the Orientalist Karabacek tries to establish the date of this building. The first part of the publication contains altogether 98 photographs, of which 29 photographs display Bedouins, 2 photographs show empty landscape, 1 photograph a Roman milestone, 1 photograph the seat of the Catholic mission, 37 photographs show the buildings (mostly of the Umayyad castles), 27 photographs show the details of buildings and only one photograph presents Quşayr ‘Amra murals. Beside these photographs, the first volume contains also one black and white drawing of a fresco drawn by Mielich, 13 drawings of the profiles of building (again mostly of the Umayyad castles), 19 ground plans or plans of the castle with the environs and 5 drawings of various details.

The second volume contain 41 coloured sheets, with dimensions 31.5 by 41.5 centimeters. The coloured sheets by Mielich depict the architectonical appearance and paintings in the interior. The monumental work in two volumes raised immediately considerable attention after its publication in the academic world and was extensively reviewed. Following Berchem’s review, an interesting incident happened.

Max von Berchem writes to Musil, thanks him for the offer to send the whole work *Arabia Petraea* for the review, accepts his offer, but he claims he can't make the review of *Kušejr 'Amra* for Figaro, because he has no contacts with this paper. He is offering instead the review of this work in the *Journal Asiatique* or the *Journal des Savants*, alternatively in the *Revue archéologique* (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 457/1). On the 2nd of December 1907 he informs him again that he would like to conflate the review of *Arabia Petraea* in the *Journal des Savants* with the appraisal of *Kušejr 'Amra*, because the last mentioned work elicited larger response, and the isolated review of the *Arabia Petraea* might, because of this fact, not receive a due attention. (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 457/5). When Berchem received a negative answer, from Viennese printing office, to his request for sending him a copy for the review from the 7th of January 1907, with the explanation that the number of copies for reviews was already exhausted and one copy was already sent to Paris, as requested by Musil, to one scholar, Berchem felt offended and informed Musil that he is withdrawing his review of *Kušejr 'Amra* (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 457/7). In the following letter he thanks for the intervention of Court Councillor Gangelbauer and expresses hope that Musil will succeed in solving the problem with *Kušejr 'Amra* before he sets out on his next journey. (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 457/8). Therefore it can be assumed that he obtained the copy for the review after all. He published the review under the title *Aux Pays de Moab et d'Edom* in the *Journal des Savants* in 1909 (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 19 538/32). The majority of other reviews on *Kušejr 'Amra* and *Arabia Petraea* was published in German speaking countries.

7.1.4 The documentation and problems of the publication

Mielich's facsimiles, prepared later in his studio, were pronounced to be inadequate in the same work (Wickhoff 2007/1, 203-207; Creswell 1989, 109; Fowden 2004, 16). They were based on the Mielich's field documentation and on his as well as Musil's photographs from all Musil's previous trips to Quşayr 'Amra. Garth Fowden raised the question why the facsimiles were not supplemented by the publication of wider range of photographs. Then he expressed an opinion that this probably happened

for the reason that the frescoes were barely legible. In his note he mentions Musil's photographic archive held by Regional Museum in Vyškov in the Czech Republic (Fowden 2004, 17, note 34).

In fact Musil published a total of only 10 photographs of the Quşayr 'Amra's interior. Apart from this, in the archives there are at the present time 20 unpublished photographs of the interior and 1 photograph of the exterior.⁷² The portion of these photographs is in some places overexposed due to the fact that Musil was taking the pictures against the light coming inside through the small window and, apart from some exceptions, the frescoes are barely visible also owing to patina, or also as a consequence of reaction of the acid used by Musil and Mielich during cleaning the pictures. Outside of that, the photographs also display various visitor's graffiti. Unfortunately, it is also not clear from which expedition the photographs originate. Some of them could be identified on the basis of a new documentation in *Claude Vibert- Guigue* (2007). For more see the attachment in the database.

Musil, in his report to Müller for the Nestler's commission from the 23rd of January, states that after the expedition in 1901 he gave all photographic material to Mielich and took over the sketches of the plans (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 19 092/2).

From the letter sent by the Institut Graphische Lehr-und-Versuchsanstalt on the 5th of January 1901, we learn that Musil returned 2 lenses (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 378/1). Judging from one of his other letters I can determine that one of them was a lens of the Zeiss wide-angle orthostigmat type, which he borrowed for the expedition to Arabia (the letter from the 19th of May 1903, Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 378/3). Several years later, the same institution (in the year when Musil published his crucial works, including „*Kušejr 'Amra*“ states that „large number of finished negatives together with original negatives and a collection of paper copies of Musil's

72 Musil's papers in the Literary Archive of The Museum of the Czech Literature, Chateau Stare Hradky, are yet unprocessed. The archive is for this reason mostly inaccessible and at the present time is inaccessible also because of moving of the depository; remaining photographs of Quşayr 'Amra are located in Collection of Alois Musil in the Museum of Vyškov region, Vyškov.

photographs from Arabia are prepared in the office to be handed over“ (the letter from the 5th of February 1907, Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 378/5). With regard to the photographic apparatus for photodocumentation of Quşayr ‘Amra, Mielich asks in his letter to Musil, whether he has the camera 9 by 12 and he asks him to take it with him because Mielich has only one (the letter from the 29th of March 1901, Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 19 055/4).

In any case, we cannot learn even from the correspondence how many photographs of the Quşayr ‘Amra’ s interior Musil exactly made successfully and what happened to them. From various letters it does not follow whether the photographs, which he lent to some researchers for the purpose of identifying particular paintings, were either copies or the originals. In Musil’s inheritance or in the family collection, not a large number of the photographs from Quşayr ‘Amra’s interior was found.

One question remains: how many of the photographs (mentioned by Musil and made in the summer of 1900, when he departed according to his own words again for the Orient and when he visited once more the Quşayr ‘Amra and brought from there 110 photographs of the paintings), were really from Quşayr ‘Amra (Musil 1921, 218), particularly from the Amra’s interior, and how many of them were successfully developed?

It would be interesting to know whether those pictures which were usable were sold by Mielich, as the case may be, or whether they ended up in his estate (which was not found yet), so that they could be examined.

Mielich, apart from above-mentioned facsimiles, drew more pictures of Quşayr ‘Amra, obviously in an effort to gain some financial profit, as he always complained about his financial situation. For example, in the letter to Musil from the 18th of February 1902, he writes: „To pay is not the habit of the Academy“ (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 19 057/8). One of the pictures of

Quşayr ‘Amra, which he painted after his return from the journey in 1901, executed as an oil painting on the canvas, depicts the Quşayr ‘Amra’s interior.⁷³

Musil’s dispute with Mielich over selling of frescoes was in all probability only the culmination of previous conflicts due to Mielich’s effort to gain financially as much as he could from the previous visit of Amra, when he accompanied Musil. In the letter from Olomouc (the 21st of September 1903) angry Musil writes to Karabacek about his visit to the Mielich’s Viennese atelier, where he saw how Mielich was making, on the basis of his (Musil’s) photodocumentation, the paintings of Quşayr ‘Amra, in order to sell them. Musil wants to prevent Mielich resolutely from selling of these paintings. He emphasizes that the field documentation was financed by the money of the Academy and various sponsors (Österreichische Nationalbibliothek-Handschriftenabteilung/ Nachlaß Karabacek 560/5-10). Mielich’s painting style, in any case, satisfied at least a part of Viennese academics. Or as Court Councillor David Heinrich Müller, who was the professor at Viennese university and at the same time the chairman of the North Arabian commission of the Imperial Academy in Vienna, wrote in the letter from the 15th of December 1901 to Musil: „Today members of the commission of the Academy in Vienna, which consisted of chairman Suess, secretary Karabacek, Court Councillor Wickhoff, prof.Riegl and prof.Müller visited painter Mielich, examined his sketches and were surprised and astonished by highly interesting, artistically coloured and historically very valuable pictures. Müller congratulates Musil on behalf of himself and the commission for Mielich’s great results. Principally it was Musil’s merit because he discovered the castle. They are all happy with the choice of Mielich, it couldn’t be more fortunate...“ (Collection of Alois Musil in the Museum of the Vyškov region, Vyškov, H 19 084/11). Critical opinions about Mielich’s inaccurate depiction came only later in the connection with the confusions about reading of writings and identification of characters (see for example some quoted letters in the next chapter). Apart from several mentioned photographs of

73 Collection of the Belvedere, the painting of Quşayr ‘Amra made by Alphons Leopold Mielich after Musil’s and Mielich’s stay in Arabia Petraea – Das Schloß Qusair ‘Amra, 1901, oil on canvas, 68 x 114.5 cm : A.L.Mielich, Wien, Österreichische Galerie Belvedere, Inv.-Nr. 3640). The painting is in the depot and so unfortunately it is not possible for external visitors to see it. Sabine Grabner published a short article about this painting in the catalogue: Erika Mayr-Oehring(Hg.), Orient. Österreichische Malerei zwischen 1848 und 1914, Ausst.-Kat. Residenzgalerie Salzburg, Salzburg 1997, 184-186.

Quşayr ‘Amra, one sketch was preserved in the archives in Musil’s undated diary. It can date from the first visit of Quşayr ‘Amra. Unfortunately, the entries, made by a pencil, are not always clearly legible (Fig. 23, Collection of Alois Musil in the Literary Archive of the Museum of the Czech Literature, Chateau Staré Hradý, B 2- 151).

One sketch of a detail from Quşayr ‘Amra is preserved in the archive of Academy of Science in Vienna, including the layout of some characters on one sheet of a graph paper. It is obviously Mielich’s sketch, which was drawn up on the basis of the field documentation during the expedition to Quşayr ‘Amra in 1901, see database (Archiv der Österreichischen Akademie der Wissenschaften, Wien).

7.1.5 Chronology of Quşayr ‘Amra and the initial problems with its dating

The effort of the Viennese and other academics to date the frescoes was based primarily on Mielich’s not quite exact drawings and photographs from Musil’s expeditions. Although Musil, according to his own words, made in Quşayr ‘Amra a great amount of photographs, due to the negligible number of published photographs as well as fractional number of photographs remaining at the present time in Musil’s inheritance, we are not able to assess exactly to which extent these scientists had high-quality sources for research in the field of art history. Nevertheless, it is possible to assume that they were considerably limited by probably not very high quality of this documentation and references to the often unpublished reproductions. Also some of the letters testify to this fact: their authors propose better ways of attaining satisfactory photographic results.

For instance, Max von Berchem writes in December 1907 to Musil that he would like to meet him in person in order to talk about Quşayr ‘Amra. He would like to question Musil about one point: whether on one of the large paintings showing rulers he should consider two figures on the right, for purely compositional reasons, also as portraits. However, his speculation on this point must remain a mere conjecture as there are no writings on the subject and for this reason he asks Musil whether he didn’t see some traces of writings and whether Musil believes that a new inspection of these heads could bring some new light on this matter (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 19 457/6). In one of the following letters from

the 20th of May 1908 he urges Musil that if he will have the opportunity to visit Quşayr ‘Amra again, it would be enormously interesting to make good photographic pictures (with the magnesium lighting) of the semicircular writing above the sitting ruler and also of the two figures to the right from Negus⁷⁴, especially if it should be possible to read something above them (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 457/9).⁷⁵

Two years previously Rudolf E. Brünnow questioned Mielich’s transcriptions on the basis of one of the former Musil’s observations and recommended to Musil to return to Quşayr ‘Amra and to make not only proper photographs of the writings, but also to inspect them closely from a ladder. He also surmised that Mustain, as a prince, restored originally the Ghassanid castle and inscribed there his texts (the letter from 24. ledna 1905, Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 497/14). Disputes about the origin of Quşayr ‘Amra among scholars continued unceasingly. Rudolf E. Brünnow, on the 11th of April 1907, again urges Musil to take without delay photographs of the writings once more and examine them. He offers to lend theodolites and photographic apparatuses and proposes to Musil a visit in Bonn in order to choose the apparatuses and practicable cases for them (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 498/14).

In one of the later letters, professor Rudolf E. Brünnow suggests to Musil to take the photographs of the paintings in Quşayr ‘Amra, which are higher, from a ladder, and he offers him the light folding library ladder and the telephoto lens (the letter from the 30th of April 1907, Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 499/2). In the next letter, he announces that Musil will get the camera and the theodolite very soon (the letter from the 8th of May 1907, Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 499/3). Together with the letter from the 26th of June 1907, he sent beside the volcanic dust from Jabal Says, which Musil should have for examination, also a small photographic apparatus (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 499/8). In

74 Negus was Aksumite ruler

75 Garth Fowden compares Musil’s photographs of Quşayr ‘Amra’s with the photodocumentation of dr. Georg Sobernheim, who in 1899 made beautiful photographs with the help of a long exposure and magnesium lighting in the cave of three brothers in Palmyra (Fowden 2004, 17).

January 1908 he asks whether the ladder already arrived. At the same time he requests 4 missing fragments of the writing from Qaṣr al- Ḥallābāt, at other time he asks Musil to rewrite them again (the letter from the 12th of January 1907, Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 499/16).

Dr. Joseph Strzygowski writes, in the letter from the 3rd of October 1906, to Musil about the origin of Qaṣayr ‘Amra the following: „Neither ‘Amra nor Mushatta have anything in common with Byzantine period“ (Collection of A.Musil in the Museum of Vyškov region, Vyškov, H 19 330/7).

In the publication itself Alois Riegl dated the origin of the frescoes at the very latest in the 5th century on the basis of the method which was strictly artistic and historical. From the point of view of the stylistic development, Wickhoff assigned the frescoes to the late period of the Byzantine art (Wickhoff, 1907, 205). Joseph Karabacek, in the same publication, dated frescoes in Amra to the middle of the ninth century A.D. (Karabacek 1907,215, 223), but his estimate was based on rather fanciful hypotheses (Bauer 1989, 66; Fowden 2004, 20).

Musil in his report from 1902 also contemplates the origin of the buildings: „During the whole last two years, particularly during the quiet nights, when I rode on the horse or on the lightfooted camel heading into the unknown, my spirit was preoccupied with the question of when and by whom these castles were built? Whoever answers precisely this question, assuming that Qaṣayr ‘Amra is a unique object in the history of art with its magic beauty and decorations of Greek-Kufic writings, will inaugurate a new epoch in our opinions. Al-Tūbā and the other castles have so much to offer that certainly much literature will be spawned by their discovery, and then their origin, significance and purpose will be clarified. Thus I would like to point out for all future researchers that all castles, mentioned so far, are situated in the middle of pasturages and therefore, in a proper season of the year, are regularly visited by Bedouins. As long as only al-Mushatta was known and not all the other castles built in the same style, the conjecture that it was the Persians who laid the basis to this remarkable architecture (albeit unfinished), was admissible. Since they couldn't complete even al-Mushatta, it is even less likely that they would be able, during their short sojourn in Syria, to erect also Qaṣayr ‘Amra, Qaṣr al-Tūbā, Qaṣr

Bāyir and Qaṣr al-Muwaqqar. Similarly, I can't agree with the view that the founders of these buildings were ancient Romans, or as the case may be, the Byzantine rulers. For their frontier strongholds from Damascus to the Red Sea comprise practically a chain between cultivated land and wasteland, far to the west from all mentioned castles, some of which are situated deep in the desert. Also it is necessary to take into consideration that 'Amra, al-Tūbā and al-Muwaqqar were absolutely unsuitable for defence. When I consider that these castles are in the middle of the pastures and when I think through also their unusual ornamentation and architecture (and it is impossible not to see Persian-Greek influence here), I can't get rid of the following idea: it is most probable that these buildings were built by powerful princes Beni Ghāssan, who possessed a high culture, were in contact with Constantinople and Persia, and who already in their homeland, Hadramaut, had tendency to build castles, and who were not able to live without free and clear air of the desert. But I wasn't able to submit the scientific proof so far" (Musil 1902b, 347-348). The opinion that these buildings are the work of the Ghassanids was voiced already about four years before Musil by a teacher at the *Université St. Joseph* Henri Lammens (1898, 635) in his article, which was published shortly before Musil's first visit of 'Amra in al-Mashriq.

Musil's assumption that the founders of the building were the Ghassanids appears repeatedly in his correspondence. For example, the letter by Müller from the 15th of December 1901 (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 19 084/11) included another letter which was sent to Müller by Brünnow. Brünnow thanks for highly interesting treatise by Musil, for which he expresses his respect and he also praises Musil as a bold explorer and discoverer, and then he writes that Wādī, „Radaf“, where the „castle Tubis“ is located, is mentioned by Burckhardt, and the castle itself by Gray Hill in *Quarterly Statern*. He expresses his pleasure that Musil ascribes the building to the Ghassanids. He writes that also Tristram Landorf in Moab points to a possibility that al-Mushatta was the work of the Ghassanids, but he rejects it. Brünnow states that he himself defended this view in *Mitt.u.Nachr.* in 1895 (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 19 084/12). Very interesting is also the correspondence with members of the Viennese Academy about the origin of 'Amra and other known Umayyad castles, which clarifies many approaches to these problems.

David Heinrich Müller writes in the letter to Musil from the 28th of March 1904 that the question of the writings was solved by the man of extensive knowledge and considerably authority. Inspired by Musil's exposition, he re-examined the question and concluded that the evidence for the late origin is not sufficient. He elects to stay in the background but he will pay attention to the publications about Quṣayr 'Amra, to ensure that there are no errors in it. He promises to Musil that he will personally supervise the reproduction of the drawings of Mielich's table with the writing... He also found the similarity between the script from the writing in Quṣayr 'Amra and the writing found in the photographs; but he can't find the relevant text in the Koran which would corroborate these words and therefore he asks Musil to tell him... (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 19 087/1).

In the following letter Müller compliments Musil for his attempt to decipher the writings and adds that he was not able to read it himself (the letter from the 14th of April 1904, Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 19 087/2). Professor Rudolf E. Brünnow in his letter from the 19th of December 1904 finds it interesting that Musil ascribes the building to the Ghassanids and asks him if he could mention it in his supplement (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 497/9). Five days later he writes again: „ (he) is awed and in astonishment and he understands that Musil risked his life in order to discover 'Amra, and continues to state that Greek and Arabic scripts are not compatible with the Abbasids, to whom Karabacek ascribes 'Amra, and adds that Musil made the most remarkable discovery since rediscovery of Petra by Burkhardt, and further adds that in many respects Musil's discovery is even more remarkable (the letter from the 24th of December 1904, Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 497/11).

In 1905 Musil proposed in his report to the Viennese Nordarabische Kommission that the building was built in the first half of the 8th century and ascribed it to Umayyad prince al- Walīd. He assumed that al- Walīd lived at Quṣayr 'Amra and that he ordered building of a residential house few hundred meters away from the bath-house (Musil 1905, 45). About his shift of origin of Quṣayr 'Amra, al- Mushatta and at- Tūbā from the Ghassanids period to unspecified caliphs, Musil later briefly informed Court Counciller Karabacek in a letter sent from Olomouc the 7th of

February 1905 (Österreichische Nationalbibliothek-Handschriftenabteilung/ Nachlaß Karabacek 560/6-3).

From the correspondence it is apparent that the printing of the publication was delayed also because of the diverse opinions about the origin of Quşayr ‘Amra. The development of views with regard to the origin and the function is interestingly treated in the correspondence between Musil and Nöldeke. University professor Theodor Nöldeke, who published later in March 1907 the appraisal under the title *Desert Castle* (Nöldeke 1907) in *Neue Freie Presse*, writes to Musil about one and half year earlier that regarding the architecture, he does not feel he is competent enough, but he is interested in the historic significance of these buildings, and continues in the following way: „the assumption that they were not completed because of the invasion of the Persians sounds probable“ (the letter from the 31th of October 1905, Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 19 124/3).

In his next letter one month later the debate on the origin continues. Nöldeke admits that the castles appear to him more and more mysterious. Bath-house facilities in Quşayr ‘Amra fulfil, according to his opinion, such function and if they were found in a city they could be easily called a bath-house, but in the desert they had to have a function of the residential buildings. The bath-house was for Muslims more important than for Christians and pagans, and therefore it seems that they were built during the rule of the Abbasids. He believes that al-Mushatta is older than ‘Amra, and he has no doubt that it is the work of the Ghassanids (the letter from the 29th of November 1905, Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 19 124/4). In December he writes to Musil that he hopes that the mystery surrounding the castles will be solved still during his lifetime. If the writings in ‘Amra are as old as the building, then they have to be of Muslim origin. He believes that they might have been built by some Abbasid prince of the period, when this region was not so affected by various disturbances (the letter from the 11th of December 1905, Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 19 124/5). In February 1906 he replies to Musil that Musil’s opinion about the origin of the castles as the Ghassanid and the Umayyad work he now considers as probable and he only regrets that all writings and pictures from ‘Amra are not at his disposal. He considers it correct that Musil is dealing more extensively with Walid II., because the lifestyle, which this

nomad pursued, took place just in such castles. Apart from perennial comments about prepared publications, Nöldeke allows himself a sardonic remark about Court Councillor Karabacek. He writes that he understands why Karabacek is not able to complete the proofreading. „When will he finally finish it? How long is the world going to wait for his publication about papyrus!“ (the letter from the 13th of February 1906, Collection of A.Musil in the Museum of Vyškov region, Vyškov, H 19 124/8).

On the 23rd of June 1905, the date of the funeral of Alois Riegl, who participated in preparation of the publication about Quşayr ‘Amra and the preface to this publication, Müller announces to Musil that Riegl takes over from Wickhof (Collection of A.Musil in the Museum of Vyškov region, Vyškov, H 19 088/7). In the letter from the 11th of August 1906 Müller writes about continuing controversies regarding the determination of the correct dating: „This dispute has to end with a compromise. Whoever accepts the reasons of the other participants as convincing, will have to climb down. Both opinions cannot coexist... the copy of the writing has to be shown with a greater plausibility“ (Collection of A.Musil in the Museum of Vyškov region, Vyškov, H 19 088/16). No less interesting is the postscript in the same letter: he asks Musil to tell him everything he knows about relationship between Riegl and Wickhof. In the subsequent letter Müller defends himself against wrong interpretation of words and explains that by a „compromise“ he had in mind the scientific disagreement (Collection of A.Musil in the Museum of Vyškov region, Vyškov, H 19 088/17).

University professor C.H.Becker in his letter from the 22nd of August 1906 writes that he is pleased by the fact that Musil ascribes the castles to the Umayyad period, because nobody is more competent in this matter than Musil (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 451). In another letter he informs Musil that as far as the reading of the writings is concerned they didn't make any progress, while in the bilinguis they determined the middle figure, thanks to Nöldeke, as Chosroa and the figure to his right as El Nağashi (Negus). He continues by stating that Musil's opinion, namely that it is not a text but the writing belonging to the figures, is correct. The inspection of the tables leads Becker to opine in favour of the earlier origin, as these paintings cannot be accepted as belonging to the Abbasid period, and at the same time they are not earlier than the 5th-6th century A.D. He

writes that the writings should be paleographically assessed, despite of their very bad condition. They remind him the text of 'Abd al-Malik in the Omar's mosque. He states that the practice of bilingualism was common during the Ghassanid and Umayyad rule but because the writing is obviously Muslim, it must be from the era of the Umayyads (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 451/8).

In April professor Rudolf E. Brünnow writes to Musil from Bonn and informs him that Littmann now interprets the writing belonging to al-Walīd ibn Yazīd, which is fine, but to this reading he contrasts the fact of the short rule of this caliph (Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 499/1).

In the publication *Kuṣejr 'Amra* itself it was already obvious that Musil had no doubts about the establishment of this building, although Musil doesn't allude to this fact too much (Musil 1907, 158). According to Garth Fowden, Musil „was unwilling to cross swords publicly with Karabacek“ (Fowden 2004, 21). Becker's letter to Musil also testifies to this. In the letter, which was sent already in December 1906, he writes that regarding the origin of the building he agrees with Musil and if Karabacek ascribes the construction of the building to prince Ahmed, he is wrong once again, just as it happened several times in his scientific career before. And he adds that he understands why Musil expresses himself cautiously in the historical part. Nevertheless, he is convinced that the critical reviews will defend Musil unequivocally against Karabacek (the letter from the 27th of December 1906; Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 451/6). About the situation in the contemporary academic community and the dispute over the origin of Quṣayr 'Amra there is also a testimony in other letters. Court Councillor and director of the Court Library Joseph Ritter von Karabacek himself states his reasons for dating the origin of 'Amra in several letters sent to Musil. For example, in the letter from the 16th of April 1902 he writes to Musil that he trusts him about his discovery, about the ownership of the castle and about its founder: „It was the prince Ahmad, who ascended to the throne in 862 as the caliph al-Mustain.“ Karabacek, apart from stating the date of construction, adds also the correct hypothesis about the function of the building when he states that the palace was in fact the spa which, of course, according to his opinion,

should belong to already standing castle (Collection of A.Musil in the Museum of Vyškov region, Vyškov, H 18 897/11).

In the subsequent letter Karabacek writes that he needs to repeat that Musil's discovery of Quşayr 'Amra was excellent piece of work, and as he said already before, if the paintings in 'Amra came into existence in the Muslim period, Musil's discovery represents a new epoch in the cultural history, and that is now confirmed (the letter from the 21th of April 1902, Collection of A.Musil in the Museum of Vyškov region, Vyškov, H 18 897/12).

In the letter from the 14th of July 1906 Karabacek writes to Musil that this day, when Musil brought him his own copy of the bilingual writing from the table 26 from *Kuşejr 'Amra*, he considers a very happy day. He explains the method on the basis of which he succeeded in unravelling the writing as that of Kajsar, the Byzantine emperor, empress Theodora (842-855) and Negus. He continues that the data agree with that assumption, which is what he wrote in his academic lecture in 1903, when he dated the building into years 855-862 and ascribed it to prince Ahmed, who ascended to the throne in 862 (Collection of A.Musil in the Museum of Vyškov region, Vyškov, H 18 901/4). In the next letter he continues to complement and correct the reading of the bilingual writing and comes to the conclusion that the reading Kajsar and Theodora is certain also according to Wessely (the letter from the 17th of July, Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 901/6).

Musil writes to Karabacek about possible interpretations of paintings and writings in Quşayr 'Amra in more detail on the 18th and the 19th of July, when he tries to explain him the unreliability of the copies of the writings and paintings. He also mentions another problem, namely that the part of originals in Quşayr 'Amra was covered by patina and that they lacked the proper chemicals for removing it (Österreichische Nationalbibliothek-Handschriftenabteilung/Nachlaß, Karabacek 560/10/7-8). At the end of July Karabacek informs Musil that the fragment from 'Amra is in his possession and that Mielich and Wessely studied it (the letter from the 31th of July 1906, Collection of A.Musil in the Museum of Vyškov region, Vyškov, H 18 901/8). In August he writes to Musil that he didn't see the work of Mielich nor Wickhof because he wants to complete his work without any influences and only when

he will have finished it, he will compare all the results (the letter from the 11th of August 1906, Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 901/10).

In January, he announces to Musil that Wickhoff read his proofreads about Amra and wrote him later an acid letter, from which Karabacek concludes that he didn't read his work properly, because otherwise he could not have to come to such incorrect notions (the letter from the 17th of January 1907, Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 902/1). Immediately the following day he writes to Musil again that he will not change anything in his work because the part about the castles he compiled after a thorough investigation and in order to defy all doubters he inserted two little words (the letter from the 18th of January 1907, Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 902/2). The next day he writes to Musil again that he was taken by surprise by the report about Wickhof's condition and he would like to know what disconcerted him about the work of K.? „This is the curse of the evil deed: many cooks put too much salt into the soup“ (the letter from the 19th of January 1907, Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 902/4).

In the following correspondence we discover that Karabacek sent according to his wish the separate part of his contribution about Amra to Strzygowski in Graz (the letter from the 15th of February 1907, Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 902/6). Two weeks later Josef Ritter von Karabacek warns Musil against reading of the writing Qayşar, Roderic and Chosroes, Negus, because, according to Karabacek, for historical reasons this reading is impossible. „Poor Roderic!“ and he adds that if Musil wants to hold on to this reading, he will need to have in the picture two emperors! (the letter from the 1th of March 1907, Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 902/7). In September 1907 he writes that he received the day before the appraisal of Kuşejr 'Amra by Strzygowsky. „What a disappointment! Only clichés,“ and he adds that he will force Strzygowsky to provide proofs for his assertions, which only display historical ignorance... (the letter from the 9th of September 1907, Collection of A. Musil in the Museum of Vyškov region, Vyškov, H 18 902/16).

After the book was published, most of the scientists agreed that the °Amra was built for an Arab Muslim patron, but there were disputes over which of the members of the Umayyad family was the real author of this building: either al-Walīd, or some other late member of the Umayyad dynasty? For more recent information about the origin of Quṣayr ‘Amra see for example Northedge (2000, 58) and Gennegund (2001, 9); see more in the chapter Modern explorations in Quṣayr ‘Amra.

In May 2012 a conservation team working to save the frescoes of Quṣayr ‘Amra uncovered an ancient inscription definitely tying the pleasure palace to an Umayyad prince. According to the World Monument Fund, conservationists have revealed an Arabic writing reading “Oh God! Make Walīd Bin Yazīd virtuous”.

The experts working for World Monument Fund suppose that the absence of phrases such as “Servant of God” and “Prince of Believers”, traditional titles that preceded any mention of the Umayyad caliphs, serves as proof that the hunting lodge was constructed while Walīd II was still a prince, placing its construction during the early half of the reign of Caliph Hishām bin ‘Abd Al- Malik, who ruled between 725 and 743 AD.⁷⁶

7.1.6 Modern explorations in Quṣayr ‘Amra - Researchers in Quṣayr ‘Amra after Musil

Another good quality photographs and a comment regarding Quṣayr °Amra came from Fathers Antonin Jaussen and Raphaël Savignac from the École Biblique en Jerusalem. They published the results from the expeditions to Amra, which they visited repeatedly in 1909, 1911 and 1912 in the third volume *Mission Archéologique en Arabie: Les châteaux arabes de Qeseir ‘Amra, Harâneh et Tuba* (Jaussen-Savignac 1922/III). Garth Fowden reminds us of the animosity between members of École Biblique and Musil (after his changeover to Université de St. Joseph in Beirut) which endured and was reflected in the criticism of these scholars of Musil’s discoveries, including Quṣayr ‘Amra. Both these explorers belittled dangerous circumstances in which Musil performed the research and, also in the connection with the frescoes, they

⁷⁶ The informations were published in the article “Landmark discovery’ unlocks secrets of early Islamic art” by Luck Taylor in The Jordan Times on 27th May 2012, as a result of his interview with Gaetano Palumbo, a program director of WMF for North Africa, the Middle East and Central Asia.

objected against his attempt to carry away everything. Nevertheless, they were compelled to state that to the Musil's description of Qaşayr 'Amra there was nothing to add and that many of the most important frescoes were almost impossible to photograph (Fowden 2004, 18-19). Mentioning the bad habit of carrying away everything, they alluded to the fact that Musil and Mielich took several frescoes to Europe. This from the present point of view deplorable deed of course happened only too often in the period when stealing and relocation of historical objects was not unusual. They didn't succeed in taking down and transport everything they originally intended to. The marks of damage from these unsuccessful attempts are in Qaşayr 'Amra still visible. The question is, what would remain from the decoration in Qaşayr 'Amra, if all of their attempts were successful. It is possible that they would try to transport from there everything that „looked good“ and what they would be able to carry. Fortunately, in the end the transported part of frescoes represented only tiny percentage of all decorations.

Qaşr al-Mushatta suffered much more because sultan Abdulhamit II ordered removal of almost all decorations and he donated them to emperor Wilhelm II for the Berlin Museum. Nevertheless, it is possible to talk about some luck because the ruins served after the war as a quarry and nobody knows what would happen with the objects of art (Sklenář 1989, 394). Similar frescoes from 'Amra, which ended in the Museum in Berlin, are significant now for the analysis done by restorers because they were the only ones, which were not subjected to following destruction and to previous not always too considerate restoring interventions.

Gertruda Bell visited Qaşayr 'Amra on the 2nd of January 1914. Nevertheless, according to an entry in her diary it did not make a huge impression on her and about the decoration in the interior she did not make any mention at all: “I changed camels with Ibrahim and rode on with °Ali getting to 'Amra about 2pm. It lies delightfully in the valley bed over which there are scattered (?)butm.I made photographs till 4pm - badly I fear. The dome is on pendentives. Both these and the cross vault are constructed like the Ukhaidir [Ukhaydir] counterparts, with a bracket of horizontal

stones cut to the shape of bricks. No bricks here. All the vaults constructed of thin brick-like stones. Wonderful sunset. This was the first really warm day”.⁷⁷

In the photographic archive of Gertruda Bell on the internet there are altogether 8 photographs of the interior of Quşayr ‘Amra⁷⁸, collected during her trip. Several pictures portray also the frescoes and there are 5 photographs of the exterior of Quşayr ‘Amra⁷⁹. Among other explorers who visited Amra was also Sir Aurel Stein: „...nothing was to be seen now on the walls of the central hall“ (Stein 1985, 285; Fowden 2004, 19). K.A.Creswell thoroughly described this castle in part 1 of the first edition of his monumental *Early Muslim Architecture* (Creswell 1932; Fowden 2004, 26). He visited Qusayr Amra in 1919 or 1920, as an inspector of monuments for the British military authorities in Syria and Palestine. Herzfeld published article on ‘Amra in the first edition of „*The Encyklopaedia of Islam*“ (1913-1938). In 1954 Oleg Grabar defended his dissertation for Princeton University with the title „Ceremonial and art at the Umayyad court“ and visited Quşayr ‘Amra for the first time. The same year he published article „The paintings of the six kings at Qusayr ‘Amrah“ (Grabar 1954). For the 60th anniversary of the monumental publication about Quşayr ‘Amra A.Breycha-Vauthier published the article about Quşayr ‘Amra. The author believes that Musil probably, due to the lack of time and the lack of technical possibilities, did not explore the paintings in two of the darkest chambers. The author also describes the catastrophic damage of the frescoes and the remaining scenes he regards as almost indistinct. The most damaged were the scenes in the main hall. The author reports how Musil described the change of the state of Quşayr ‘Amra’s interior and exterior during his repeated visits in 1908. He ascribes it partially to the cleaning of frescoes in 1901 (see above), and partially to the fact that Bedouins, with researchers present, ceased to fear the ghosts and damaged the paintings with lances. Subsequent damage to the paintings he ascribed to the fact that during the first world war English Colonel Lawrence camped in the castle with his Arabic troops (Brejcha-Vaultier 1967, 37-38, Drápal 2005, 28). T. E. Lawrence writes: «In the afternoon, tired, we came to kuşejr ‘Amra, the hunting castle Harita, protector of poets... Buton took the staff into its cool

77 Bell, *Arabian Diaries* 154 (www.gerty.ncl.ac.uk)

78 Gertruda Bell Photographic Archive (www.gerty.ncl.ac.uk) y 67-72, y 75, y 523

79 Gertruda Bell Photographic Archive(www.gerty.ncl.ac.uk) x 008, y73-74,y 76, y 524

and dim hall and we laid down and puzzled over the worn frescoes of the wall, with more laughter than moral profit. Some men found shelter in other rooms... (Lawrence 1935, 283).

A. Breycha-Vauthier describes the condition of the castle Amra in the year 1966, when he visited it. He says that the only protection against any damage was the gate and one watchman (Breycha-Vauthier 1966, Drápal 2005, 28). On the occasion of 100th anniversary of Musil's birth, an article was published by B. Procházka: "*Cesta za Kusejr Amrou*" (The Journey to Quşayr 'Amra), where the author describes the visit of this castle in the company of the director of historic preservation office in Jordan (Procházka 1968/29).

7.1.7 Restoring interventions

From 1971 to 1974 a Spanish team cleaned and conserved the frescoes and the team did also some excavation in order to find out how the hydraulic system of the baths worked. Oleg Grabar visited Amra with a photographer in 1974. They spent a week in Quşayr 'Amra and they made there a number of excellent photographs of the newly restored frescoes. In 1975 Martin Almagro with a team of authors published „*Quşayr 'Amra: Residencia y baños omeyas en el desierto de Jordania*“, a summary description of the complex and its decorations. They published also some clear photographs but they never published photographs of any fresco before or during restoration. As Garth Fowden writes in his publication, „this was intended only as a forerunner of a fuller account, which has not appeared so far“ (Fowden 2004,27). In 1978 F. Zayadin published a study only ten pages in extent about frescoes in Quşayr 'Amra (Zayadine 1978, 19-29). Later it became clear that the Spanish team led by Martin Almagro not only cleaned the frescoes but that they also rather unhappily interfered with them.

7.1.8 Other publications about Quşayr 'Amra

In 1989 the Franco-Jordanian team under the direction of Gazi Bisheh of the Jordanian Department of Antiquities and Claude Vibert-Guigue of the Institut Français d'Archeologie du Proche-Orient began to work on the production of full-size tracings of everything visible on the walls onto transparent sheets of plastic. These sheets were

then photographed at one quarter of the original size. The project was finished in 1995. In this way, a precise record of not just frescoes themselves, but also of all the damaged areas and numerous graffiti was produced. Thanks to this work everybody would know that quite frequent and extensive repairing occurred, rather obviously especially in the main hall, where figures have been resketched. Moreover, the writings have been substantially retouched which made them illegible or of doubtful quality for interpretation.

Architect Thierry Morin also contributed to the topographic knowledge of this site and created the plan of surroundings of the access to Quṣayr ‘Amra. Beside that he co-operated in the examination of the hydraulic structures and reconstruction of saqīyya (Vibert-Guigue-Bisheh 2007, 14; Bisheh-Morin-Vibert Guigue 1997).

The publication of Franco-Jordanian team was issued in 2007 in Beirut, exactly one hundred years after Musil’s publication Quṣayr ‘Amra, as a result of the close co-operation between the Department of Antiquities of Jordan and the Institut français du Proche-Orient. This was the first of the series of scientific publications entitled „Jordanian Archeology“. The publication contains a catalogue of pictures, Musil’s, Almagro’s and Helms’s plans of the site. Almagro’s plan is complemented by Thierry Morin’s and it contains also a supplement by Dennis Genequand (Vibert-Guigue-Bisheh 2007). Apart from this there are plans depicting hypotheses of constructions of the spa building and adjacent structures. There are also the photographs of exact model of the spa building with descriptions of the interior. In 1996 Antonio Almagro, the son of Martin Almagro, returned to Amra with a team from the University of Granada and „derestored“ 18 square meters of frescoes in the alcove of the hall. This team cleaned and removed partly extensive retouching (Vibert-Guigue 2006, 2.310 -13; Fowden 2004,29).

Another publication about Quṣayr ‘Amra by Gary Fowden was issued three years earlier, in 2004. His book was based first of all on literary accounts and evidence collected from poetry and it contained also a chapter on Alois Musil with the title „Musil’s Fairytale Castle“.

7.1.9 Recent researches in Quṣayr ‘Amra

With the exception of a short exploration of Quṣayr ‘Amra by Dennis Gennequand in the summer of 2001, executed within the framework of the archaeological project „*Implantation umayyades de Syrie et de Jordanie*“, which focused on issues of relations among Umayyad localities and on economic and environmental aspects of the structure of population among Umayyad foundations (41-132 HD/661-750 AC), in essence, all recent activities are focused only on the research of the spa building, primarily its decoration, alternatively on the structures immediately adjacent to this building. Dennis Gennequand in the preface of his report about this research states that while the review of aerial photographs did not contribute really anything new, the more detailed field research of the sites led to two important discoveries. One of them was made in the vicinity of Quṣayr ‘Amra, where the foundations of a mosque were found (Gennequand 2001,4). Previously it was assumed that Quṣayr ‘Amra was missing both a mosque and a residential building – both of which are usually the basic components of Umayyad castles. It was ascribed to the fact that Quṣayr ‘Amra was never completed or that there were never any visitors who would stay in the palace, preferring their tents. It is possible, too, that the founder of the building lost interest in this project after the completion of the first phase. Bisheh believed that Quṣayr ‘Amra was dependent on Qaṣr al- Kharāna, 15 km away from it. Almagro’s team, in their publication of 1974, speculated that the castle was a small, poorly preserved building at the distance of 200 meters from the bath house. Nevertheless, this building, in comparison with the most other Umayyad castles, differs in that this one is only one simple object (Northedge, 2000, 53).

The plan of this castle by Alois Musil was in existence (Musil 1907a, fig. 96, 1907b). This plan is according to the statement of Dennis Gennequand more complete (Gennequand 2001, 5). Another plan, which was made approximately 70 years later by Almagro’s Spanish expedition (Almagro et al. 1975), was later (1995 and 1996) supplemented by Thierry Morin. Dennis Gennequand stated that from the enclosure there remained only small pieces of masonry and a small part of what Musil interpreted as a „road“; this was confirmed by the plan of the Spanish expedition. It was a block of masonry wedged between two shells made from roughly-hewn big

stones whose function is not known. In any case, according to Gennequand it was not a road or a supporting system of sewage, as was suggested previously.

The author also stated that the placement of buildings to the north of the spa fits the Musil's plan. However, it is not possible to verify some data in their plans, primarily because of previous agricultural activities.

The tower discovered by Musil, which was interpreted by Sauvaget as the foundation of the minaret, was also the object of research. Masonry was on average one meter thick, the entryway was oriented in southern direction and from the debris it seems evident that there was not enough material for a tower, but rather enough for a building of the square ground plan with the side length of 6.80 meters, more likely wider than higher. Findings of shards from the surface survey revealed the presence of pre-Islamic settlement from the Iron Age and from the Roman period. A new voluminous cistern seriously disrupted a larger part of the surface of the Umayyad settlement. Quarries depicted in the Musil's plan were confirmed. The remains of a small residential building were also damaged by bulldozers.

The most significant discovery of this expedition was a mosque at the distance of approximately 20 meters to the south of the small residential building. The building was constructed using the double-surface masonry made from the local firm limestone. The wall of qibla is preserved for the whole length of 9.45 meters, the wall at the eastern side is preserved only to the length of 3 meters and the western wall is preserved only in the southwestern corner. "The most important element for the identification of the building as a mosque was mihrab whose characteristic form and orientation does not leave any doubt about its function. The concave mihrab (the length of 145 centimeters and the depth of 135 centimeters) is placed in the middle of kibla and protrudes in the outside direction. The orientation is the same as that of the Umayyad mosques in this region (Gennequand 2001,7). Although the date of origin cannot be definitely confirmed, the author is convinced that it is logical to ascribe it to the Umayyad foundations. The author brings to the attention the fact that a similar layout, where a small residential building and a mosque are distant from the spa building, can be found also in Qaṣr al-Hallābat and al-Qaṣṭal. He also points out that in the surroundings of the mosque there was not a large amount of debris, which together

with the fact that the material from other buildings was not collected up and recycled, evokes a surmise that the construction was not completed. The construction was abandoned at the time when only the first phase of the building was finished. Unfinished mosque (or possibly the existence of mussala), is also evidenced in the layout of the locality with the absence of the castle (Gennequand 2001, 8-9).

Small residence near the mosque cannot be compared with other Umayyad castles. Similarly, just as with the other earliest Umayyad sites, the audience hall (majlis) was built first, and only then the remaining infrastructures (Northedge 2000, 52-53; Gennequand 2001, 9). Quṣayr ‘Amra was probably built by Sulaymān (96/715-99/717), who was crown prince during the rule of al-Walīd. When ‘Abd al-Malik became the caliph, he lost the interest in this project (Northedge 2000, 53; 58; Gennequand 2001, 9).

7.1.10 Present project of reconstruction and research in Quṣayr ‘Amra

The newest project is the conservation of the Umayyad site of Quṣayr ‘Amra. This is a collaborative project of the Department of Antiquities of the Hashemite Kingdom of Jordan, the Italian Istituto Superiore per la Conservazione ed il Restaurazione, and the World Monument Fund, which aims to conserve both the exterior and interior mural paintings.⁸⁰ In the spring of 2009 two missions were conducted and samples of the exterior mortars and of those below the paint layers were analyzed in Italy. In 2010, two more missions were conducted to complete the sampling and the analyses of pigments and of the products applied on the surface of the paintings in previous conservation efforts. In January 2011, the conservation team provided training for Jordanian conservators in lime mortar preparation, wall conservation, and mural painting conservation techniques. Two field campaigns followed to conduct high-resolution photography using normal, infrared, and ultraviolet light, in order to provide a record of the building’s condition before the

80 The project is raising the interest of many scholars and organizations that have conducted studies of the building and its art, and collaborations have been established with the Ecole Normale Supérieure and the CNRS in France, the Institut Français du Proche Orient (IFPO) in Jordan, the Spanish Archaeological mission in Jordan, the Pergamon Museum and the Rathgen laboratories in Berlin, Germany, as well as with a number of institutions holding early images of Qusayr ‘Amra, which have generously provided the use of these historic photographs for study purposes (<http://www.wmf.org/project/qusayr-amra>).

conservation intervention. The photography was also used to conduct a thermal analysis of the building in order to identify the positions of stone blocks under painted layers with the hope of identifying the causes of detachments of these layers from the walls. Other activities included consolidation of the exterior of the building, especially where the base of the walls and the top of the vaults showed substantial loss of mortar, resulting in dangerous water infiltration. New windows and coverings on ceiling openings were installed to prevent water and animals from getting into the building.⁸¹

In March 2012 the last workshop so far was organized in Amman. Chiara Arrighi informed all participants about new discoveries. Many areas of several restored surfaces in the audience hall confirmed the assumptions of some restorers⁸² about numerous overpainting of original damaged paintings according to fantastic preconceptions of restorers from Almagro's team.⁸³

7.2 Al-Ruṣāfa

Al- Ruṣāfa, otherwise called also Sergiupolis or town of St. Sergius, is located in the Syrian desert about 25 km southward of Euphrates. The nearest larger city is Raqqa.

81 “The present intervention has studied methods of the protective layers applied on the paintings in the past, which are causing the progressive yellowing of the painted surfaces. A team of Italian conservators painstakingly removed thick layers of shellac from the surface of one of the mural paintings. This material was applied in the 1970s as a protective layer. The shellac had degraded, leaving only a shiny yellowish hue on the paintings, which also suffered from the impermeability of this substance, causing the detachments of the paint layers from their base. The deep cleaning conducted during this test revealed not only a rich colour palette where blue, orange, red, and yellow prevail, but also previously unknown details, which are bound to change the interpretation of the painting and our understanding of Umayyad art.

The project is also studying the context of the building, since this was not an isolated structure in the Jordanian badiya, but part of a complex that included a qaṣr, now in ruins, and several ancillary structures, including two deep wells - saqiyya and perhaps a paradeisos, a garden irrigated by the waters of the nearby wadi through a system of dams and canals. At the same time efforts will be made to improve the visitor experience through better public presentation and work will be done to reduce the constant threat of vandalism and graffiti. A site management plan will address the issues of protection of this monuments and its archaeological context” (<http://www.wmf.org/project/qusayr-amra>).

82 “The frescoes were restored by the Spanish expedition in the seventies, but its intervention is a sin against the elementary expert knowledge. Massive repairing by overpainting of original paintings and retouches, tracing of contours of the figures, terrible ochre paint, overlapping the masonry as well as unsealed plaster, fixages on the surface of the paint creating glossy, uncleaned painting – all this proves the old truth that poor restoring practices damage the paintings more than flow of time...” (Martin Pavala, magazine VELbloud 1/2010). The author of the article is a restorer.

83 Chiara Arrighi - oral communication during the International Workshop on conservation and management at Qusayr ‘Amra World Heritage Site, Hashemite Kingdom of Jordan March 14-15, 2012).

7.2.1 History of the site

Musil wrote that origin of the town is very problematic. As late as at the end of the 17th century, Al-Ruṣāfa was rediscovered by chance. Since the beginning of the 20th century efforts have been made to record and describe the remaining buildings (Herzfeld and Sarre 1920; Spanner and Guyer 1926).

Although Al-Ruṣāfa is associated with Byzantine period, we have documented references of this site already from former periods, both in Assyrian texts and in the Bible. Roman emperor Diocletian built here a frontier fortress against the threat of Sassanid Empire. So called „Strata Diokleciana“ named after this ruler led from Sūra (present-day Al-Mansūra) across Al-Ruṣāfa, Palmyra and Ḍumayr to Damascus. In the Byzantine period this site gained importance especially thanks to the spreading of cult of Christian martyr Sergius, who was tortured to death here during the rule of Diocletian. Byzantine emperor Anastasius I (491- 518) officially renamed the town to Sergiopolis and he built the great basilica, cisterns and he also improved ramparts (Ross 1999, 207). Starting in the 5th century, the town was the seat of the diocese. In the 6th century, during the rule of Justinian, walls were considerably rebuilt, so that the town could better defend itself against the threat from Persian Empire, and the town acquired noticeable military character. The town later resisted for a long time Persian raids, but during the campaign of Khusraw II it was plundered (Musil 1928, 262-266). In 636 it was submitted to Arabian supremacy. During the Umayyad dynasty Ruṣāfa became a favourite place of caliph Hishām ibn ‘Abd al- Malik (724-743), who repaired it and built his palace close to the walls. He was also a supposed instigator of the construction of the Great Mosque, affiliated with the basilica. Inside, the fortifications were interconnected with basilica A in two places (Sack-Gussone 2005, 51). When in 750 Ruṣāfa was captured by the Abbasids, it suffered substantial damage by the victorious army, which also destroyed the tomb of Hishām ibn ‘Abd al-Malik. The largest damage Ruṣāfa ever suffered occurred at the end of the 8th century as a result of an earthquake. The settlement kept uneasily surviving up to the 13th century; however, during the Mongol raids in the 13th and the 14th centuries there remained very little to plunder (Ross 1999, 208). The site is opened to public and apart from the fortifications, the most structures recorded by Musil are still visible together with foundations of objects uncovered during later excavations.

7.2.2 Survey, documentation and publications of A. Musil

A. Musil, together with R. Thomasberger, made the basic ground plan already during his first visit of this site in 1908. During his second visit in 1912, when he was here together with prince Sixt of Bourbon, he spent almost three days there. They did more measuring, specified and supplemented the original plans of the town and its environs, they prepared sketches of some buildings and individual ornaments and they also made the photographic documentation of these objects. Unfortunately, the results of work done during the both expeditions were completely lost less than one month later (with the exception of several sketches and some entries in diaries) when the expedition was assaulted and robbed by Bedouin tribe Shāmmar (Musil 1928, 166).

Nevertheless, Ruṣāfa is on the basis of published works (outside of Quṣayr °Amra) the most documented and the best processed site which Musil investigated. Considerable merit needs to be given in this respect to Antonín Mendl, doctor of science, engineer and architect, who co-operated with Musil and was from 1924 commissioned by ČVUT to lecture about the architecture of the Middle Ages. At the same institution he later successfully defended his work of habilitation on the topic of Ruṣāfa's reconstruction. He realized his reconstruction mainly on the basis of archaeological materials collected during Musil's journeys, supplemented by results of works by German travellers S. Guyer and H. Spanner, published in Berlin (Guyer 1920; Spanner-Guyer 1926). All conclusions found in the mentioned publications were based on both historical reports and their own explorations of this site, but without archaeological excavations (Mendl 1926, 299).

He published the first attempt of reconstruction in Bohemia by his own print run already in 1925 under the title *Resáfa - příspěvek k městskému a sakrálnímu stavebnictví křesťanského Orientu*. Text was supplemented by 50 drawings and photographs. This study was issued as a part of a larger prepared publication (Mendl-Musil 1925; Mendl 2004?).

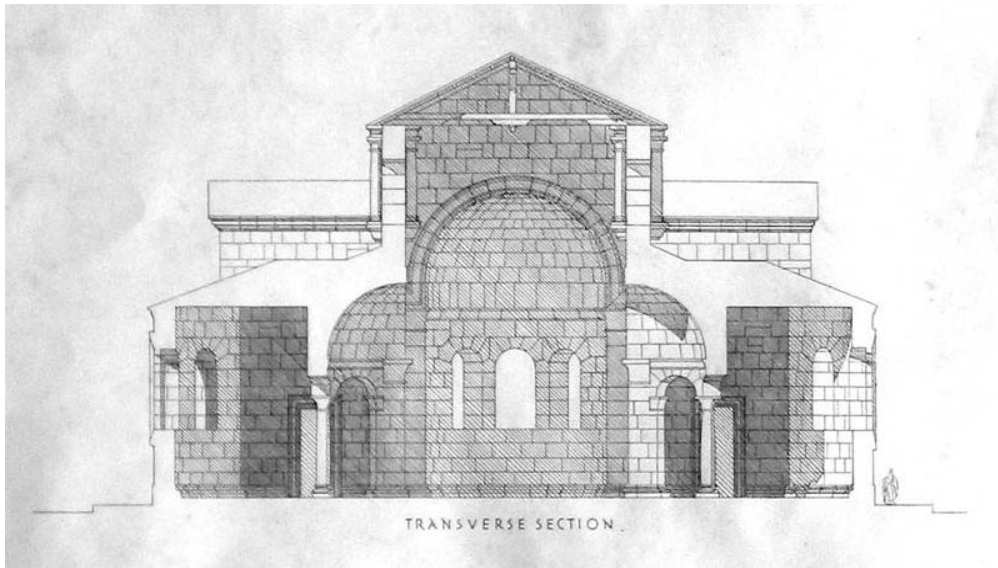


Fig. 63 Mendl's reconstruction of Martyry in Al- Ruṣāfa, The National Technical Museum in Prague, fond Mendl Antonin.

Musil published results of his work on this site for the first time in his book *Palmyrena*, which was issued in 1928 in New York. Apart from the description of his work on documentation, history of the site, plans and photographs, the book contains also enumeration of hardships complicating their scientific activities, of which the worst were numerous robberies. One of them, less serious, happened during Musil's stay in Ruṣāfa, but catastrophic consequences resulted later on from the robbery in Mesopotamia (see above). The text is supplemented by 38 Musil's photographs, published in the English version of Mendl's work of habilitation, printed in the appendix, two plans and one drawing of the detail from the eastern gate and one drawing of column head in the church. The plans included in the main part of the book plot ground plans of three of the four city gates, one corner bullwark's tower and the ground plan of the mausoleum. Overall plan, the ground plan of martyrium, southern church, Alamandarus's church and basilica of St Sergius are printed together with Mendl's reconstructions in his work of habilitation in the appendix of *Palmyrena* (Musil 1928, 155- 211 a 299- 326).

7.2.3 Description of the site according to Musil

The site of approximately square ground plan, oriented according to cardinal points, is along all its length enclosed by a wall. A. Musil reports in *Palmyrena* the length on the northern side of 577 meters, on the eastern side 361 meters, on southern

side 591 meters and on the western side 417 meters. The fortification is multi-leveled, and reinforced with massive prismatic defensive tower in each corner. The fortification is at all cardinal points interrupted by a gate. Upper level of the wall forms a pass-through gallery with arched openings towards the city. Loopholes in the walls are situated regularly according to the axis of the arches (Musil 1928, 155-156; Mendl-Musil 1925, 9, 14). According to Musil, the walls were built by Justinian only after the completion of the construction of Ruṣāfa's churches (Mendl-Musil 1925, 14). A. Musil describes as the most preserved gate the northern one, which he ascribed (together with A. Mendl) to the Byzantine period. They differ from similar ancient gates in that the considerable part of the gate is jugged forward in front of the walls out of the city which is with respect to the defence of the city disadvantageous. Nevertheless, this disadvantage was compensated by considerable number of loopholes, distributed along the whole length of the walls. The gate itself consisted of three parts: propugnacula and two tower-like lateral spaces. With regard to the ground plan of these towers, Musil disagreed with the opinion of E. Herzfeld. According to Musil, they ended by a semi-circle but Herzfeld opined that they ended in a right-angle (Mendl-Musil 1925, 17). Musil didn't have enough time for excavation to uncover the base of the gate. Herzfeld, on the contrary, stated on the basis of his own research that judging from the profile it was of the Attic type (Mendl-Musil 1925, 20). Guyer, on the basis of parallel comparisons, excluded the possibility that the gate was built already in a pre-Justinian period, and he dated its origin to before the 6th century. Musil did not deal in his historical paper with the question of its origin. Apart from photographs of this northern gate, Musil made also photographs of the eastern gate, but not those of the less sumptuous gates on the western and the southern sides (Mendl-Musil 1925, 21). Musil documented also the existence of another buildings *intra muros* before Herzfeld and Sarre (Mendl-Musil 1925, 25; Guyer 1920).

Musil wrote that inside the city there were visible remains of ruins of three Christian churches and several residential buildings. Musil also mentioned that among Muslim buildings there was a still partly visible mosque east of the martyrium. He added that it looked as if it had been vaulted and the roof and parts of the upper walls have fallen in. The débris inside were according to his description up to two meters high.

In addition, he identified the main north-south street which was at the time of Sarre's and Herzfeld's visit already nonidentifiable. Even Guyer did not mention not only this street, but neither triumphal arches and the church with five naves. According to Musil, the street was 28 meters wide, leading from the northern gate to the southern gate and lined through the whole length by arcades. Residential houses were separated from the street by 1.8 meter wide sidewalk. On the basis of planned network of streets, city gates, fortifications and water pipelines, A.Mendl dated the time of origin to the period of Roman empire (Mendl-Musil 1925,11; Musil 1928, 156). In Ruşāfa there was found a large number of cisterns. Musil says that, for the most part, there were two or three together, they were 4 meters deep and in the vault they had small circular opening serving for drawing of water. The space between walled-up southern gate and the southern wall was converted into a small cistern with vault, resting on five brick pillars. Musil found the largest cisterns in the southwestern part of the city, the oldest in the northern part. These cisterns were filled by water from the square pond with the length of each side of 160 steps and the thickness of wall 80 centimeters. From there the water was drained by a channel into the wall moat which was 5 meters wide. (Mendl-Musil 1925, 12). Later explorations confirmed that the largest found cistern was 58 meters long, 21.5 meters wide, 13 meters deep and its total capacity was 15000 cubic meters (Ross 1999, 209).

7.2.3.1 Basilica of St Sergius with three naves

The southeastern part of the city possesses the most preserved ruins. These are remains of the basilica with three naves and a semi-circled apse. A.Musil drew on the basis of his own measuring its ground plan and he also provided the photodocumentation. A.Mendl divided, according to this documentation, the construction of the building into three different stages. During the first stage, the church space was divided into three naves. To the eastern part adjoins the semi-circled apse, which opens directly into the main church nave. *Prothesis* and *diakonikon* with three-axis arcade open into adjacent naves. Regarding their typical disposition, A. Mendl classified this basilica among Middle-Syrian basilicas of the 4-6th century. Three thick belts protruding from both walls of central nave converge on the heads of cruciform columns of the main arcade. Among main columns in each nave there are six windows. Column heads bear supports for truss purlin, which is according to

Mendl typical for Central Syria (Mendl-Musil 1925, 30). Mendl assumed that transverse belts between individual pillars dividing church space converged on the heads of support of cruciform pillars at the top of ledge and supported their reverse side of the truss construction above the main nave.

In the second stage, every part of the vault of the main arcade in the central nave was divided by two smaller belts into two axes, both in the direction of lateral naves and in the space of vestibule, and the vestibule itself was divided by transverse walls into three spaces (Mendl-Musil 1925, 31). The apse was illuminated by three windows at the height of ground floor and by two windows above the vault abutment of the cornice which Mendl regarded as of later origin. Adjacent rooms of the apse had three-levels.

Guyer on the basis of exactly dated analogies from the Central Syria, as for instance the Turmanian basilica, dated this building to the 6th century (Guyer 1920). This dating agrees with the Musil's dating, determined on the basis of comparisons of historical texts (Musil 1928, 265; Mendl-Musil 1925, 41). In the third and the last building stage, massive outside supports were built (Mendl-Musil 1925, 27 a 41). In 1977 an inscription was revealed here, on the basis of which the basilica was renamed the St. Cross basilica. In the northern atrium of the church German archaeologists found a small treasure chest with various religious vessels which were originally votive gifts to St. Sergius, deposited here before the Mongol raid (Ross 1999, 209). Ulbert states that the original construction of the cathedral occurred shortly after the foundation, and that means still in the 6th century. It was considerably damaged by an earthquake. His explorations also showed that one of the adjacent buildings was in all probability the bishop's seat. Archaeological research revealed also foundation of a mosque, directly adjoined to this basilica, which was according to historical reports built by caliph Hishām, although he ordered to build for himself a palatial complex outside of the walls. The mosque was in two places connected by doors with the basilica. On the west side this complex was adjoined, in compliance with the Umayyad tradition, with a bazaar, which included systematically distributed uniform shops (Ulbert 2005, 113-114). Later on, inner yards of these houses built from bricks were also used. In the yards remains of craft establishments were found, such as smitheries,

dye-houses, metalwork shops etc. (Eismann Stefan: *Resafa - Pilger und Händler in der Syrischen Wüste*. In *Archeologie in Deutschland das Magazin*. Wx. Theiss).

7.2.3.2 Basilica with five naves

A basilica with five naves, which Guyer didn't mention in his work, was located, according to Musil, to the north of the southern gate, to the south from the basilica with three naves, and to the east of the main street on the flat ceiling of cisterns or cellars. On the eastern side it was finished by decorative apses. In the time of Musil's visit there was only the southern part of the main apse, two apses more to the south and 15 meters high tower. Stone masonry was preserved up to height of 46-54 cm (Mendl-Musil 1925, 41). Windows were furnished with bars. Musil estimated the original height of the tower as 25 meters. On the basis of his own measuring A. Musil made a ground plan of this building as well as an overall ground plan of ruins and a detailed ground plan of the main apse and a lateral apse (Mendl-Musil 1925, 42). The existence of this basilica was confirmed by H.Spanner who in 1926 published a report about it. However, without an archaeological exploration it was not possible to produce reconstruction of its form. Ross on the basis of later researches stated that originally Roman-Byzantine basilica with three naves was probably extended during Justinian's reign by the fourth nave on the southern side and by the wide vestibule or narthexon the western side. There was a chapel in the main eastern apse where the remains of St Sergius were most probably deposited (Ross 1999, 209).

7.2.3.3 Martyrion or the central church

Not far from the northern gate to the south there was an atrium building. The entrance led through a triumphal arch and the atrium itself was constructed from 22 columns made of porphyry. At the time of Musil's visit only the eastern part was preserved. Mendl states, on the basis of the ground plan made by Musil, that this was a combination of a lengthways type of construction with a central building. Rectangular main apse was closed on the eastern side by little narrower semi-circled apse; somewhat smaller apses are situated also on other three sides. Lateral naves line up this building along the whole circumference (Mendl-Musil 1925, 44). Two small apses have also both lateral rooms of the main apse. The most of the apses were originally decorated by mosaics. Along both sides of the apse was a staircase of the width of the

wall (according to Musil, a dimension of width and height was 25 cm (Mendl-Musil 1925, 45)). Guyer, not finding any detritus from vaults or rims (*lisière*) excludes the possibility of vaulting in lateral naves of apses (Mendl-Musil 1925, 47).

7.2.3.4 The church extra muros

Musil discovered in front of the northern city gate well preserved remains of a building of the central importance. The ground plan of this building, preserved in Musil's diary, shows the construction of a rectangular type. The interior was divided into the church vestibule, the church itself which was further divided by four cross-pillars, and the choir part. However, Guyer and Musil disagreed on the question of roofing. According to Musil, the central part was roofed by a dome resting on pendentives, but Guyer, on the basis of Herzfeld's drawing and the fact that no vaulted debris were found, came to the conclusion that there was a wooden roof as it was used with tents. Mendl, on the basis of space composition and technical possibilities, inclined rather to Musil's opinion. Spanner also held the same opinion on the basis of his own survey (Musil 1925, 326; Spanner-Guyer 1926, 44). Starting with the fact that the building is located in the middle of the cemetery, he came to the conclusion that it was a tomb. This type of building Guyer dated to the 9th century, and found column heads, according to the typology of the column heads from Mesopotamia, to the 6th century (Mendl-Musil 1925, 51, 53). He also placed an inscription between small windows in the apse within the rule of Al-Munzir, and that means between 569-582. For Guyer, the contradictions between this type of building, characteristic for the 9th century, and above mentioned findings were explained by the fact that this type of construction started developing already in antiquity and continued throughout old Christian period until the 9th century, when it reached its climax (Mendl-Musil 1925, 59).

7.2.4 Significance of the site

Ruṣāfa was originally situated on an important communication and also a commercial road. At the present time it lies in the desert, quite outside of any main road. A. Mendl emphasized its significance for the history of architecture. This site was considered as an important proof of developmental line in architecture mainly because of the lack of any later reconstructions. A. Mendl stated as reasons for the

site's preservation the interruption of construction activity in consequence of Arabic occupation, as well as the fact that the site ceased to exist not long after it (Mendl-Musil 1925,7). Mendl, apart from the reconstruction of selected buildings themselves, also dealt with questions of a date of origin of the old Christian art and of its influence on the genesis and development of the West European art of the Middle Ages.

Musil, following strictly written sources, failed to ascertain the exact time of the origin of Ruṣāfa. However, on the grounds of available information he assumed that it was originally built as a fortified camp for the Assyrian army and a seat of an Assyrian governor at the location of the original fortified settlement. The walls were according to Musil built by Justinian only after the construction of Ruṣāfa's churches (Mendl-Musil 1925, 14). The cause of the downfall of this site he saw in the diversion of commercial routes at the time of Muslim occupation (Mendl-Musil 1925, 9).

Shelagh Gregory stated that the date of surviving remains is not clear, but the irregular street plan and positioning of the four main gates suggest that the walls were built after the town had been already developed (Gregory 1995, 180).

7.2.5 Revisional explorations and new projects

Extensive archaeological explorations were executed beginning in 1952 by Berlin Archaeological Institut DAI under Johannes Kollwitz. Work was interrupted in 1965 until 1975, when it was renewed under the leadership of Thilo Ulbert (Ulbert 2005, 111-113).

The research was divided into two projects. The first project was dealing with the exploration of *Limes Romanus*, the second was oriented on remains of Umayyad palaces outside of city walls.

City walls were minutely documented already by architect Walter Krnapp during the previous survey. During researches after 1975 a system of water management of this site in the antiquity was explored. Researches confirmed the existence of four large basilicas on this site. All these buildings were built in a relatively short time during the first half of the 6th century. Shortly after completion, the cathedrals suffered considerable damage by an earthquake in the 6th century.

During explorations, the large pavilion in the palace compound to the south of the city was also examined (Ulbert 1993) together with the Ghassanid construction of ruler al-Munzir of the 6th century (Ulbert 2005, 111-113). Sack also published his research of the large mosque inside the city walls (Sack 1996). Total results of the exploration of Umayyad castles were not yet published, with the exception of one of the three castles, which was issued in 1957 (Otto-Dorn 1957, quoted by Northedge 2000). Substantial part of previously not recorded structures was not revealed not before aerial photographing and underground structures were found with the help of modern geophysical methods. The palace of caliph Hishām was for the first time completely examined and, thanks to new methods, all structures were documented (Sack-Becker 1999, 282; Sack-Gussone 2005, 55).

Mendl's overall plan of fortification, drawn on the basis of Musil's field documentation, was relatively accurate. Musil's reported length of individual walls of fortification is little different from the length reported by Shelagh Gregory. While Musil stated the length of the northern wall of fortification as 577 metres, the length of the eastern wall as 361 metres, the southern wall as 591 metres and the western wall as 417 metres, Shelagh Gregory reported lengths of the inner sides thusly: north 536 m, east 350 m, south 549 m and west 411 m.

Musil described relatively exactly also the course of the supporting walls of the two basilicas inside the fortification. Later researches considerably refined the description of the third church. Musil documented not even one of the neighbouring residential buildings as dating back to the Islamic period. His documentation of some elevated structures, which were destroyed before the modern exploration could be executed, is very valuable.

8 MUSIL AND THE Umayyad CASTLES

8.1 Phenomenon of the Umayyad castles

The first Umayyad castles were discovered by European scholars and scientists at the end of the 19th century and at the beginning of the 20th century. The Umayyad castles are generally also called “desert castles”.

The first discovered Umayyad castle was al-Mushatta in Jordan in 1840. Nevertheless, the confirmation of the correct date of its origin had to wait until much later. Among the first monographs focused on the Umayyad castles was “*Kuṣejr ‘Amra*” of Alois Musil in 1907 (Musil 1907). After that, the publications about Tūbā, ‘Amra and Kharāna by Jaussen and Savignac were issued (Jaussen-Savignac 1922).

The phenomenon of „desert castles“ appeared shortly after Islamic conquests under the rule of the Umayyad dynasty (41/661-60/750), when a number of monuments of this type was built by newly arriving people in steppe regions in the Middle East (al-bādia).

The first more systematic archaeological researches of this type were executed by the thirties of the 20th century. At the present time, we know of about thirty of these complexes. Usually there is a grouping of one or more castles, containing a reception hall, a mosque, a bath and different hydraulic and agricultural installations; the castle itself consists of a residential building and a central court.

Initially there was a controversy about the date of their origin, about which there is today already no doubt (see the chapter about the origin of Quṣayr ‘Amra), but their function is the object of discussions until now.

Moreover some of these complexes, alternatively the localities belonging to their hinterland, were for a long time erroneously dated, usually to the Roman period. This was the case with localities where no excavations were performed (Gennequand 2006, Gennequand 2010, 18).

8.2 The development of the hypotheses about the function of the Umayyad castles from Musil up to the present

The ambiguity about the function of the phenomenon called “desert castles” is persisting already for a long time. The first hypotheses were proposed by Alois Musil, Max von Berchem and Henri Lammens. Alois Musil ascribed the foundation of the Umayyad castles to a nostalgia of the caliphs for the life in the desert already in his work *Kuṣejr ‘Amra* (Musil 1907). His method consisted, apart from other things, in the reverse projection of the ethnographic model of Bedouin practices into early Islamic period, but it was primarily based on numerous historical sources.

Similar procedure was adopted by a priest Henri Lammens, the erstwhile teacher of Musil from the Université St. Joseph in Beirut. He presented, in his article published in 1910, the idea that the reason for the establishment of the Umayyad castles could be Bedouin nostalgia for the life in the desert, the endeavour to purify the Arabic language and the preservation of customs and habits in their original, pure form, similar to the endeavour of the caliphs to escape from cities infested by the plague (Lammens 1910, 91-92).

Musil returned more extensively to his hypothesis about the Umayyad castles in his book *Palmyrena*, in one of the six volumes published by the American Geographical Society. In this period he commented in the preface to the Lammens’ article and about his contribution to the knowledge of the Umayyad castles thus: “Lammens treats the same subject in his article „*La Bâdia et la Hîra sous les Omayyades*“, although he contributes nothing new. However, in as much as he shows there a desire to correct some of my statements or, at least, to alter them, I have thought it incumbent on me once again to outline briefly my ideas on the subject. The members of the Umayyad dynasty did not like to live in large towns and whenever possible settled in the country” (Musil 1928a, 277). Musil wrote that some members of the Umayyad family lived constantly in the countryside and came to Damascus just for short sojourns, while others went to the country either in summer or whenever contagious diseases broke out in Damascus or other large towns. He further states that the members of the Umayyad family kept clear of Damascus mainly in summer, as the

fever there was then at its height and, according to ibn Battūta, the pestilence gained most ground in Damascus during summer (Musil 1928a).

Musil thereafter compared data from the historical sources with his observations from his sojourn in the Near East. He wrote that the climate of Damascus has not changed at all since the 8th century and so it can be speculated that at the beginning of summer those, who were able to travel, would leave the city and would be moving to the country and their cottages or hamlets. They would be staying there then over the entire summer until the autumn. Some wealthy people were leaving for Lebanon or Antilebanon. Large Bedouin tribes encamped in the fields south and east of Damascus, where they were selling camels and home products and buying grain and clothing from the end of June until the end of August. Then they were leaving for inner desert again (Musil 1928a, 279). Musil opposes, among other things, the opinion of Lammens who formerly argued against Musil's opinion published in *Kuṣejr 'Amra* (1907). Lammens at that time criticized Musil's assertion that the Umayyads resided in the country also in summer because, according to Lammens, they could not select possibly a worse time of the year (Lammens 1910, 99, note 5). Musil contradicts him in a short essay with the title "*The Country residences of the Omayyads*" published in the appendix to *Palmyrena*, not only by quoting historical sources but also by pointing out the fact that "Lammens is unfamiliar with the climate and habits of the people of Syria"(Musil 1928a, 279).

Musil thereafter argues against Lammens about locating some other Umayyad castles on the basis of historical sources, and against Lammens' argumentation regarding their locations. Using the example of al-Muwwakar Musil says that in the paragraph which Lammens quotes in order to support his assertion (Lammens 1910, 103, note 2; Abu-l-Faraġ, *Arāni*: Būlāk 1285 A. H. vol 13, 165-166, according to Musil 1928a, 283), the quoted *locus* does not exist at all. Musil thereafter continues: "He writes (Lammens, 1910, 108, note 8) that Yazid ⁸⁴ had various buildings put up around the manor at al-Muwaqqar, and refers to *Abu-al-Faraġ* (*Arāni*: Būlāk 1285 A. H. vol. 13, 161; quote according to Musil 1928a, 283), but in this passage this place is not mentioned at all" (Musil 1928a, 283). Accusing him of poor familiarity with the

84 Yazid II (see Musil 1928a, 283).

pronunciation of Bedouin Arabic, Musil explains also some other Lammens' reflections which he regards as erroneous.

For example, in the case of al-Mushatta Musil writes that “this manor Lammens (1910, 102) would also like to identify as one of the country seats of the Umayyad caliphs. His principal argument for this assertion is its location on the Roman *limes*, where the Bedouins are said to like to stay in winter” (Musil 1928a, 283-284). According to Musil, Lammens derives the name of *al-Mshatta* from the word “*mšattâ*” (winter camp), which according to Lammens is the way Bedouin pronounce the correct word “*mašttâ*”. This Musil regards as another evidence of Lammens' unfamiliarity with the language of the Bedouins, their customs and practices, because as he states: “not a single tribe of Bedouins calls a winter camp *mašttâ* “ and “not a single Beduin tribe was ever seen wintering along the line of the inner Roman border, or *limes interior*, on which al-Mushatta lies “(Musil 1928a, 284). Musil presents as his proof his explorations of the Bedouin practices, in this case for example movements of Banū Saḥr during the seasons of the year. The discussed territory in the Near East at the time belonged just to this tribe when he was there. In support of his claim, Musil also states that in winter months there are not too many wild animals in Palmyrena or Moab regions. “During the times of the Umayyads the situation was certainly no different from what it is now; consequently, when the caliphs wanted to amuse themselves by hunting in their country seats, they would have to remain there during the summer and autumn” (Musil 1928a, 284).

It is apparent not only for the above mentioned reasons that Musil had, unlikemost of the academics, the advantage of assured familiarity with the environment in which these Umayyad castles were located and with local geographical facts, but that he also possessed a good knowledge of local inhabitants, especially Bedouins. All this, together with a good knowledge of written sources, he managed to use in the academic debates in support of his claims. Regarding the construction of the Umayyad castles, Musil states that the Umayyads lived partly in tents and he supports the claim with many historical examples from the written sources. He writes that although the caliphs, while in the country, also lived in solid buildings which they called *qaṣr*, it doesn't mean that these residential buildings or manors were never surrounded by tents (Musil 1907, vol.1, str. 144; *Palmyrena* 1928a, 287- 288).

Musil subsequently writes that “the Umayyads were not Bedouins but descendants of settlers from Mecca who put up separate lodges at their country seats in order to avoid offering personal hospitality”. Musil also states that “Lammens (1910, 108) insists that these lodging places, or hostels, were not tents but permanent buildings with walls” (Musil 1928a, 289). According to Musil, however, the sources, which Lammens presents, do not support such information and the word *bejt*, which Lammens according to Musil interpreted from some passages in the historical sources as a permanent building, means in fact (in these cases) the “tent”. For the support of this hypothesis Musil presents several examples from the historical sources. In another place Musil writes: “The manors, which the Lahm kings occupied, were decorated with pictures closely resembling those at Quṣayr ‘Amra” (Musil 1928a, 289). “The customs of the Lahm kings were undoubtedly the same as those of the Ghassanids and were imitated by the Ummayyads, who likewise had the rooms of their country seats decorated with pictures” (Musil 1928a, 290).

Max von Berchem wrote in the same vein as Musil and Lammens in his first hypothesis, namely that the most of the Umayyads were Arabs from the ancient times, lovers of horsemanship, hunting, wine, poetry, singing and women, more because of necessity than because of their disposition. He wrote about Musil that he showed us the Arabs of the desert who were rather descendants of the Ghassanids than the successors of the Byzantine emperors. The most of them led seminomadic life. Otherwise would hardly establish his dynasty, whose members “in the spirit” of the atavistic behaviour of the Bedouins were neglecting the capital of the Empire and were permanently moving their residences... (Berchem 1909, 306 -307).

Later the hypothesis of these researchers, based on the nostalgia of Bedouins for the desert, the hedonistic way of life including hunting, poetry, drinking rituals and bodily pleasures, was rejected as too romantic. Nevertheless, as Northedge writes, Lammens for example alludes (in defence of his hypothesis) to numerous historical sources and it would be unwise to refuse rashly a hypothesis which is considerably supported by historical sources (Northedge 2000, 43).

Another hypothesis about the function of these objects came from French Orientalist Jean Sauvaget. He believed that these building complexes were the centres

of extensive agricultural production, on the model of Roman country “Villas,” existing in the western part of the Roman Empire.

Sauvaget was the first scientist dealing with the Umayyad castles and he based his hypothesis more seriously on the archaeological sources. In several articles from 1939 he was dealing with the Umayyad seats (Sauvaget 1939,a,b,c). Nevertheless, his contribution *Châteaux umayyades de Syrie*, focused on Arab colonisation during the 1st and the 2nd century of the *hijra*, was published by Madame J. Sourdel Tomin only in 1967. Sauvaget was dealing in this article with the relation between the Umayyad castles and the affiliated structures of the agricultural production. This researcher was also the first who considered the Umayyad castles not only from the point of view of the castles themselves, but also from the function of the castles in their relation to their hinterland.

Unfortunately, this article, which was published only after the death of Jean Sauvaget, was corrected only partially and as it was based on historical sources some author’s arguments remained not sufficiently elaborated (Sauvaget 1967; Northedge 2004, 14; Gennequand 2010, 20). Jean Sauvaget used in his articles the results of archaeological explorations from several of these sites. Apart from this, he also pointed to the fact that historical sources are often misleading. In the case of the sources related to the Umayyad castles, the majority of written sources originates already from the period of the Abbasid caliphate and, as a result, in the description of the Umayyad dynasty negative evaluations prevail (Gennequand 2010, 19). Alastair Northedge remarked on this hypothesis that these complexes were found predominantly in regions which were not in general too suitable for agriculture (Northedge 1992, 51; Gennequand 2010, 20).

Some other hypotheses ascribed to these Umayyad castles political roles. The first advocate of this notion was Oleg Grabar (1978, 155-156). H. Gaube, in his synthesis called *Die Einigewirtschaftliche und Syrischen Wüstenschlösser. Einige wirtschaftliche und politische Gesichtspunkte zu ihrer Entstehung* came up with a more developed hypothesis based also on the political interpretation of these seats. He emphasized the significance of these seats in relation to large Arab tribes in Syria which represented the main support of the Umayyad caliphate (Gaube 1979). Also

Sven Helms was later dealing with the relation between leading representatives of the tribes and ruling representatives of the dynasty and he based his conclusions mostly on anthropological methods (Helms 1990, 1991). G. R. King was dealing with the relation between these seats and the communications leading through Bilād al-Shām to other parts of Arabia (King 1989c, King 1992, 370, 373,375).

Oleg Grabar believed that some of these Umayyad castles were real caravanserais (Grabar 1978,29-33). The latest works oriented on the archaeological explorations of the Umayyad castles were produced by Dennis Gennequand who apart from the extensive exploration of qasr al-Her al-Sharki was predominantly dealing with the relation among these Umayyad castles and their wider hinterland, and also with the question of the continuity and the discontinuity of the seats between antiquity and the Umayyad period and with the change of the inner structure in the antiquity and in the early Islamic period (for example Gennequand 2002, 2004, 2006a, 2006b, 2010).

According to Gennequand, these aristocratic Umayyad seats served predominantly three functions and these functions were in some cases balanced, while in other cases some of them prevailed or even played the sole role. It was the political function which enabled mutual communication among leading representatives of the large tribes and the ruling dynasty, the economical function which enabled the diversification of incomes and last but not least the residential function which all these aristocratic Umayyad foundations shared. After the collapse of the Umayyad dynasty these seats suffered a fast decline and moreover, with the new Abbasid dynasty, which had the main seat in Baghdād, had lost its significance, with the exception of several prosperous seats (Gennequand 2010, 344-345).

9 MUSIL AND THE EXPLORATION OF ROMAN *LIMES*

One of the Musil's aims was a specification of border Roman *limes* in the Syrian desert and a documentation of fortifications. He explored the region of Syrian desert around Palmyra in 1908, 1912 and 1915. On the basis of inspected sources from classical and Middle Ages periods he tried to identify classical localities and to compare them with present-day localities. The most of his own explorations, supplemented by new findings from classical texts, he published in *Palmyrena*. Explorations of Roman roads in the region of historical Moab and Edom were summarized in the publication *Arabia Petraea*, which was issued in three-volumes (Musil 1907-1908). Drápal quotes a contemporary review, published in 1908 in Vienna in *Almanach der K. Akademie*, of this publication, in which the author praised Musil for the correct identification of the most Roman military roads and stations (quoted by Drápal 2005, 29).

René Dussaud corrected on the basis of new findings printed in *Palmyrena* the route of the Roman road and the location of several Roman stations in his work *Topographie historique de la Syrie antique et médiévale* (Dussaud 1927). According to Dussaud, the most important changes in the course of route were caused by transfers of locality of Akarib, distant 18 km from Salamīyya and Ukayribāt, which lies about 45 km in southeastern direction from Salamīyya. These localities were formerly incorrectly identified by Professor Hartmann. Musil corrected the location of Occariba and the central Putea he identified with Biyār Ğahār. Dussaud on the contrary assumes that both Musil and Hartmann were mistaken about the route of the first section of „Strata Diokleciana“ and incorrectly positioned localities of Ğahār and Kara. He also considers as incorrect Musil's identification of the locality Medera with Dumāyr. Fallacious is according to Dussaud also Musil's identification of the fortress Danaba with al-Basiri. On the other hand, Musil was first to correctly identify al-Chulle between al-Ruṣāfa and Oriza or Tadjjiba (Dussaud 1929, 53-55, 57-58).

Next considerable improvement of „*Limes Romanus*“ was made possible by the aerial archaeology, which started to develop as a new archaeological discipline after the First World War. French researcher Antoine Poidebard worked in regions of Syria and Jordan, originally exploiting this new method. He published the results of his own

aerial survey in the book *La Trace de Rome dans Le désert de Syrie* (Poidebard 1934, for more details see the chapter „The origins of aerial archaeology in the Near East“).

Several more significant corrections in Musil's plans on the basis of aerial photographs were made, for instance, already by Theodor Wiegand (Crawford 1954, 208).

Some localities regarded by Musil as Roman fortresses proved to be (after implementation of modern exploration from an earlier period) mostly from the Umayyad period. For example, Musil incorrectly identified Qaṣr al-Ḥayr al-Sharqī and some other localities as Roman stations, although an Arabic inscription on the cistern indicated a possibility of a later construction in the Middle Ages.

From 1992 till 1996 the exploration was executed in several Roman stations on the border of the Syrian desert under the aegis of „The *Limes* Project“. Its result will be a comparative study of the architecture of Roman fortresses in Syria, based on archaeological researches, findings of organizational structure of Roman fortification and a comparison of the eastern and the western „limit“ (Konrad 2001).

More recently Thomas Bauzou (for instance 1989) engaged in the exploration and the specification of Roman *limes* in the Near East; there is also Shelagh Gregory, who pointed out further inaccuracies in Musil's plans, for example in the case of al-Mankūra, Ḍumayr, Ruwwāfa a Qaṣr al- Hayr al- Sharqī, where Musil evidently measured only the shorter side and accordingly extrapolated dimensions into a square (Gregory 1995, 25-26).

Above mentioned researcher also made more systematic surveys of the earlier scholars; this can be considered as a usable source of information for research of Roman *limes*, outside of the work of Domaszewski, Butler and also Musil. Nevertheless, as she writes further, although his plans give the impression of being accurate, they vary in fact from unreliable to totally inaccurate, even if they seem to provide details and many dimensions, like for example in cases of al-Manqūra and Ḍumayr.

Musil's plan of a simple building of the temple at Ruwwāfa Parr is characterized as completely inaccurate, but she attributed it to the adverse conditions,

like problems with local Bedouins, weather and ill health and above all lack of time, which was necessary for more exact measurement. Gregory states that for instance at Khān al -Shamāt he spent 1 hour 12 minutes, at al-Manqūra - a site extending over half a kilometre - he spent 2 and half hours, at al-Hallābāt he stayed for 1 and half hours; meanwhile he was attacked by a hostile Bedouin tribe, and in al-Basiri he didn't finished his plan due to the unruly soldiery (for more, see these sites in the database). At Qaṣr al- Hayr, it is obvious that he extrapolated a square plan (Musil 1928, fig. 16; Gregory 1995, 26). In spite of these inaccuracies, Crow prefers Musil's plan of Ḍumayr to that of Domaszewski (quoted from Gregory 1995, 26).

Musil's successors, especially Poidebard, have often not been aware of the drawbacks of Musil's plans. The discrepancies are also noticeable between the Musil's plan of Nessana and the one of Woolley-Lawrence. Another scholar complained that Musil's description and plane of Hazeva diverged in some important details, such as the size, given in the text as 120 paces square, while shown on the plan as cca 80 m square.

Brimer in 1983 compared Woolley and Lawrence's plan of Shivta with Musil's plan, and Gregory compared also their plans of Kurnūb/Memphis (Woolley and Lawrence 1914, 17; Gregory 1995, 26; fig. 2.6) and she commented that the plans of Woolley-Lawrence are much more like plans made by professional archaeologists, while Musil was rather a good collector of folk songs. Musil's plans were accompanied by "an invaluable source of photographs, many showing buildings or features of building already by now gone" (Gregory 1995, 27). From some of the Poidebard's plans it is evident that he adhered more to Musil's plans than to his own survey, alternatively to his aerial photographs (for more details see the chapter „The origins of aerial archaeology in the Near East“).

The evident dependence of Poidebard's plans on Musil's is apparent especially in the case of al-Basiri, Khān al-Shamāt and Manqūra (for more details see the database). Shelagh Gregory also summarizes general problems found in acquired documentation of individual researchers in various periods. The main source of difficulties in documentation of travelers in the nineteenth and early twentieth centuries she saw in the overconfidence of some scholars as well as in their belief in

Roman „squareness“ (i.e. rectangularity). This led to the bias that if a structure was Roman it had to be square, and vice versa, if the plan was square, it had to be Roman construction. Many of the plans drawn under the influence of the „squareness“ theory were made with only few measurements or even just by pacing off one side and then the full plan was extrapolated later. It can be observed in Butler’s notes. Moreover, in the plans of the earlier explorers, the tumbled rectangular corners and towers were often interpreted as round.

„Speaking in general... plans vary from generally reliable approximation, albeit with serious errors of detail (for ex. Butler, Brünnow and Domaszewski), to the totally unreliable (e.g. Musil, Glueck)“ (Gregory 1995, 21).

Another problem was a persistent notion that any extensive occupation of the desert fringe areas was brought to an abrupt end by Arab conquest. Shelagh Gregory ascribes to this fact many fallacious identifications of early Islamic buildings as Roman „castella“. Among examples of such incorrectly dated localities are, for instance, al-Qaṣṭal in Jordan, assumed by Domaszewski to be Roman. Later excavation finally proved its origin to belong to the Islamic period.

In a similar way, the locality Jabal Says, identified by Musil correctly by the toponym „Usays“, and situated 105 km southeast of Damascus was on the foot of a volcano, where according to al-Tabari large estates and many reservoirs built by al-Walīd I were located (Musil 1928, 282, 293). This site was later classified by Poidebard as Roman, but „post-Diocletian“ (Poidebard 1934, 51f; Gregory 1995, 183). Later the dating was determined as early Islamic period by Klaus Brisch, and afterwards (in 2002) the site was excavated by the Orient Department of the German Archaeological Institute (www.dainst.org/print.php?id=2908/12/2/2005). According to Alastair Northedge, Jabal Says is a typical example of a classical complex belonging into the group which is generally called „Umayyad castles“ (Northedge 2000, 40).

Another example is Qaṣr al-Ḥayr al-Sharqī. Musil identified this locality as a Roman fortress Adada (Musil 1928, 233). The smaller of the two „square“ enclosures he described as „Persian“, larger enclosure as „unquestionably of Roman origin“ (Musil 1928, 77). Poidebard dated it to the end of the sixth century. After excavation between 1964-1972, it was interpreted according to Creswell (for not a very good

reason) as caravanserai (1969, 528). The latest exploration of Denis Gennequand proved that it is an Umayyad castle. Denis Gennequand repeatedly pointed out the incorrect identification of some sites which Musil and his contemporaries considered to be Roman, and often even as „undoubtedly Roman“ (for example Gennequand 2006, Gennequand 2010, 18). The most of the incorrectly identified sites (by Musil and Musil’s contemporaries) originated, in fact, in the Umayyad period.

10 THE ARCHEOLOGICAL DATABASE - ITS STRUCTURE AND DESCRIPTION

The author started to process database of archaeological sites for her thesis. Later, she also obtained support of the Czech Science Foundation on this project and she processed it together with an electronic database of the documents of Alois Musil in a project named „Research and processing of papers of Alois Musil, electronic database of documents and database of archaeological sites“.

The archeologic database has the purpose to collect Musil's data about individual sites and to compare it with the documentation of his contemporaries and simultaneously with results of revised researches and to evaluate both the quality of Musil's documentation and interpretation of monuments on this basis in relation to his contemporaries and to data obtained by a modern field prospection. It should also enable the comparison to ascertain if Musil dated and interpreted correctly individual objects. Results should show in which extent the quality of Musil's documentation depended on his possibilities to spend sufficient time in the site and which other factors of making documentation influenced its quality.

Current data used in the database in the contrast to the original intention do not contain all sites recorded by Musil, but their selection was narrowed for the purposes of this doctoral thesis with regard to the region, primarily from reasons of author's existing possibilities of their reconnaissance in the field for the purpose of making comparative data (primarily in the region of Syria and especially in the region by Musil documented sites mentioned in his publication *Palmyrena* (Musil 1928). Further the selection was especially focused on the sites, to which exists the most of Musil's documentation (plans, photographs, description, diaries) and simultaneously to which comparative data from modern field researches were available to the author. It enables to analyze Musil's documentation and interpretations. The selection of sites was further chosen with regard to the focus of this work. Primarily the sites were picked out, which were interpreted as Umayyad castles situated in al-Bādiya. These are the castles, which were defined as such by Musil himself, and also the sites, which Musil classified otherwise (usually as ancient forts), but later it was found out, that they

belong to the category of Umayyad castles. Moreover, there were included some ancient sites, which enable interesting comparisons with revised researches.

The comparison of descriptions, documentation and interpretations from Musil and his contemporaries is briefly evaluated at individual sites according to possibilities in the column „notes-discussion“.

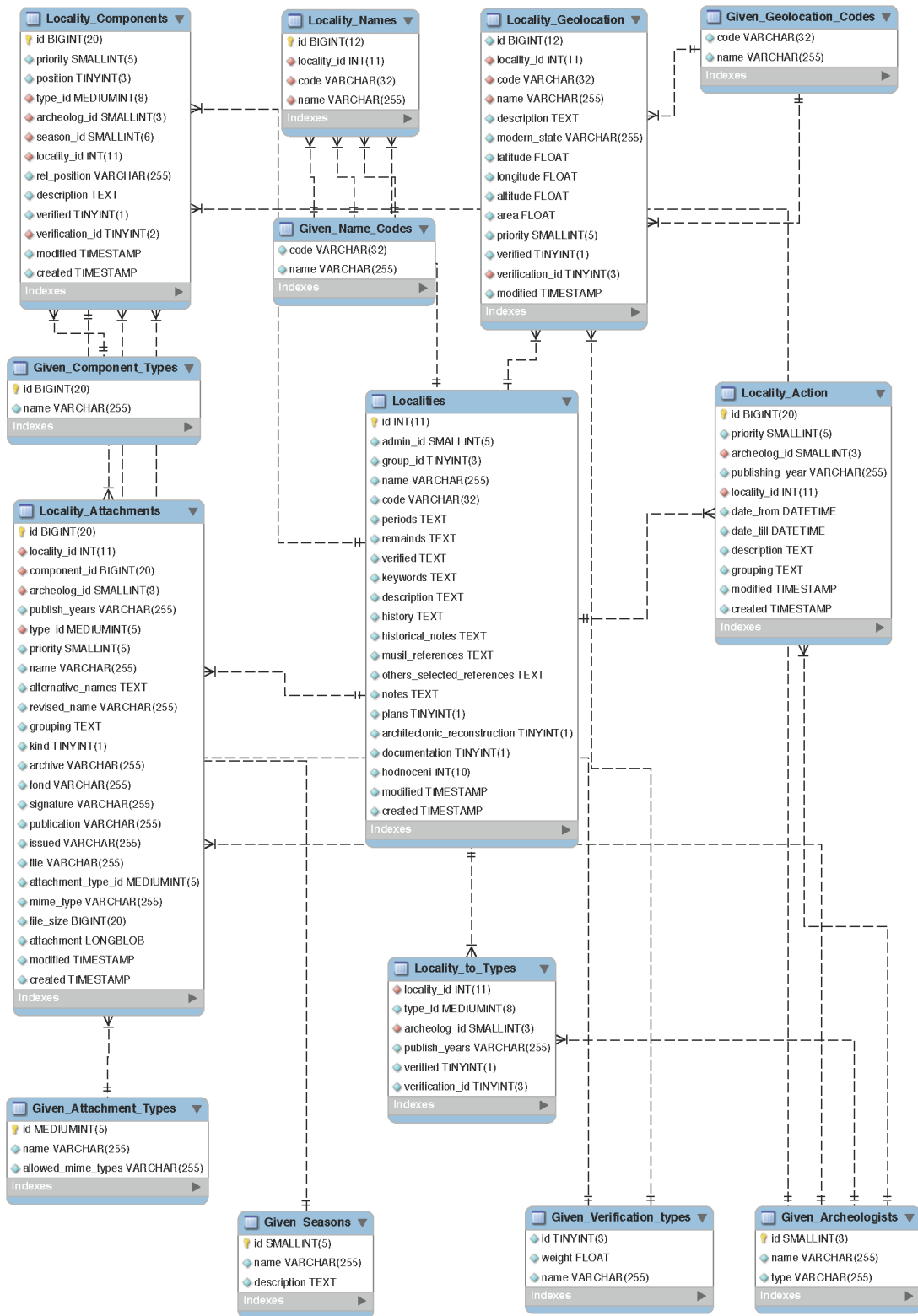


Fig. 64 Diagram of the database.

11 CONCLUSION

11.1 Evaluation of the Quality of Musil's Documentation

In the grade of made documentation Musil gets close to present professional archaeologists, if we take into consideration the circumstances in which he made it.

The quality of his documentation is therefore directly proportional to:

1) **The time spent in the site depending on disturbing circumstances:** for instance

-threatening danger from a hostile Bedouin tribe

– the most frequent various legends and different fabulous beings, due to which Bedouin assistants and guides were afraid to enter the site (for instance Quşayr 'Amra, al-Ruşāfa)

- control of gendarmes

- illness

- extreme temperature

2) **The time period– years,** in which the journeys were made (visible improvements from first journeys in 1896).

Improvements from the first journeys :

- Musil's technical equipment directly proportional to his rising fame because of his discovery and documentation of 'Amra with this connected financial means the higher quality of documentation in connection with further study (cartography in Vienna)
- Personal improvements in knowledge and experience with making of field documentation (at first he did not know how to record appropriately written notes, how to copy in the best way inscriptions, to measure terrain as well as individual monuments etc.

- Improvements in Musil's knowledge of local dialects, mentality and customs of local inhabitants (primarily Bedouins)

3) **Aims of journey:** the journey with the purpose of giving evidence of the existence of the inner decoration (1900, 1901 Quşayr ʿAmra a other quşūr in al- Bādia) was exclusively focused on the documentation of selected monuments. In contrast to it some later journeys had rather political character and were oriented for instance on investigating of the willingness of Bedouins to go into the „Holy War“(jihad) alongside the Ottoman Empire.

4) **The quality of Musil's entourage**

Experienced cartographer Thomasberger or painter Mielich, who were able of independent documentary work, were undoubtedly valuable helpers, while some assistants, who were allotted to him by sheiks of tribes, guides with whom he travelled, from time to time his work rather complicated (for example from the reason of fear of various fabulous beings), equally as some demands of prince Sixtus de Bourbon-Parma described by Musil for example during the stay in al-Ruṣāfa.

Supplying data in the database and analyses sometimes made a comical impression (for instance in xx.xx. xxxx in 11, 42 am we got down from the camel 200 paces from the western wall of the object in the site x), If we compare more publications, we find, that for instance the exact time record agrees, but on the same expediton in the same year and month he got down in 11:42 am one week before than in another publication. Frequent contradictions in dates occur especially in his reports to the Academy (Musil, 1902a,b) and in data about Arabia Petraea (Musil 1907). It could be expected, that data in reports should be more accurate, because he processed them after his return from journeys, and *Arabia Petraea* was published with 5 years of delay from the publication of reports and with 6-7 years of delay from Musil's journeys, that he describes.

Time spent in the site was also not possible to determine in some cases due to the reason that he did not specify the time of arrival or departure.

His plans seem accurate in a similar way, but after closer examination it shows, that many of them do not correspond with the reality. Especially in cases, when Musil

identified a site as a „Roman fort“ and because he supposed that these forts have a square ground plan, he measured only one side and other sides extrapolated as a square. Some sites he did not measure at all, he only stepped them off.

Also in the case of photographs we can see, that presented name of the site not everywhere corresponds with the reality.

11.2 Evaluation of Analyses by Musil Documented Monuments

From the analysis of a sample of 29 sites by Musil documented monuments in the area of Al- Bādia al- Shām, which author of this work processed, follows that only several of these sites were subjected to the revised survey or excavation, in some cases repeatedly.



Fig. 65 Al- Basiri.

The sites classified later as Umayyad desert castles and also more important polycultural sites were primarily revised. Recent researches brought chiefly the description of inner structures, which was not visible without more extensive excavations in Musil’s time and were discovered by modern nondestructive methods.

From above mentioned sites the ground plan (in two cases) was lacking in Musil's documentation (Palmyra, of which documentation was stolen from him, and Qal'at Rahba). In remaining cases (11) the ground plan of fortifications was in main traits relatively accurate (except the plans he extrapolated to the square, for ex. Qaṣr al-Ḥayr al-Sharqī), but inner structures were never presented completely.

This fact was caused by limited possibilities of Musil's documentary methods, consisting in precise documentation of constructions above the ground (where demanding working conditions allowed it), which was a disadvantage in comparison with present possibilities of some nondestructive exploration methods (for instance analyses of aerial photography and a geophysical survey). A customary uncovering did not enable to reveal building constructions which were not preserved above the ground.

In the case of the site al-Khulla Musil recorded plans of a Roman fortress, but he did not discover remains of an Umayyad palace in vicinity, which were confirmed only by a recent research. In the case of Esrija in Musil's plans was absent a part of inner constructions. At qaṣr al-Ḥayr al-Sharqī Musil completely omitted an inner structure of a large enclosure. In considerably extensive site al-Ruṣāfa A. Musil recorded besides an outside fortification in a more real way three from four later documented churches, but the inner layout of another from recorded churches did not correspond exactly with the revised research. He also did not record in more precise way the construction of a mosque adjacent to the church of Saint Sergius and any from Umayyad castles situated outside the defensive wall.

Musil's datation does not correspond in some cases at all, in some other corresponds only in one phase of the settlement, namely in the Roman period (for ex. Ḍumayr). The Umayyad site Qaṣr al-Kharāna. he dated it in the 12th century. The site al-Ṣāliḥiyya he dated into the period of the Arabian dominance, although it was not already used at that time.

Most of the sites in Palmyra region Musil identified with ancient fortifications along Roman roads. Modern revised researches of some of these monuments were not performed or published at all, some of them were in last years prospected and measured chiefly by Denis Gennequand. Usually these were mostly seemingly "less

representative sites”, moreover Musil’s avocation in still unexplored monuments determined their location to very remote and hardly accessible places. It is valid also today, because desert sites distant from roads, which were accessible for Musil on a camel, are not easy accessible by a car. There was a problem in Syria even before the outbreak of the last political conflict to get a suitable terrain car for a reason of higher import taxes for this type of cars.



Fig. 66 Fuez – my Bedouin guide and driver in Tadmur’s region.

Several monuments in the region between Damascus and Palmyra were not possible to document safely without special permission, because there were military objects in the vicinity and the like. In the vicinity of ʿDumayr is apparently a military airport, one monument (Khān al- Shāmāt) is inaccessible for research purposes from the reason of a „military concealment“, when even a simple visit was dangerous and more detailed documentation was excluded. The rest from these monuments, which I had the opportunity to visit, was strongly damaged both by the influence of weather and by the recycling of the building material by local inhabitants, and last but not least, many sites were put in danger by robbers. Some of them as well as came from „security units.“ During my last visit of some sites I witnessed in the region on connecting line Damascus – Palmyra – al-Ruṣāfa, where I had thanks to the escort of

some representatives of our embassy also unwanted presence of members of these security units, their conversation about still not thoroughly searched monuments. The aim of these interest was not the scientific knowledge, but they were motivated by the search for valuable objects.



Fig. 67 The company of the members of „security unit“.



Fig. 68 Our Expedition to al-Turkmāniyya, with members of our Embassy and the “company”.

Traces of contemporary seekers of treasures, consisting partly from members of these units, were evident everywhere in vicinity. In the case of one „non-Musil’s

monument“, which at least according to relatively trustworthy local sources it was 5 year ago in a comparatively preserved form, but in the time of our visit total destruction of the parts above the ground was evident. According to a military expert the destruction was apparently caused by some type of explosive (the test of force).

11.3 The evaluation of the scientific research and its contribution for the contemporary science

The reason for incorrect datations of some sites was, equally as in the case of some of his contemporaries, often erraneous identification with ancient sites and also incorrect interpretation resulting from a similarity of usual ground plan of Roman forts with youngersites, which developed from them. For instance Musil considered the large fortress in Qaṣr al-Ḥayr al-Sharqī as „undoubtedly“ of a Roman origin and a smaller fort in the same site as a Persian fort, although in both cases was later confirmed, that they were established in an early Islamic period. To determine exactly the right age of a site only on the base of the typology of a ground plan is almost impossible. His contemporaries, who in contrast to Musil considered themselves as professional archaeologists, had similar problems.

Alastair Northedge tried to distinguish at present time within the possibilities Umayyad desertcastles from Roman fortifications also on the base of a comparative typology, and Denis *Gennequand* (2006) made a detailed comparative study.

Musil dated objects on the base of research of historical sources, which can be, of course, considerably distorting in the connection with the purpose with which they were written at their time, on the base of typology of an object, and also on the base of an analysis of inscriptions. He performed the evaluation on the base of combination of these methods.

Musil at his time even did not try to date ceramics, coins etc. If he expressed an interest in excavations, he was motivated according to his own words rather by an attempt to dig out „more achitectonic decorations, which dissappeared under ground.

Among explorers, who were amateur archaeologists travelling in the Near East in the 19th century and at the beginning of the 20th century, Musil holds an important place mainly because of his abilities and his knowledge. His knowledge of

languages, especially perfect knowledge of Arabic, biblical Hebrew and Greek, and also the knowledge of a great amount of historical texts and topographic and documentary knowledge enabled him not only to realize significant discoveries, but also to properly evaluate and use them.

His ability to establish friendly relations with Bedouins and a long-time stay among them, and simultaneously his observing capability enabled him to collect a substantial volume of data, ethnographical, archaeological and geographical. In such a way gathered materials represent an irreplaceable Musil's legacy to contemporary scholars in these fields.

His field documentation is especially valuable and also drawings and plans of sites made by Musil and his co-workers-architects on the base of this documentation. Especially invaluable are the plans and documentation of sites, which are endangered, damaged or now already irretrievably destroyed. Some were damaged by a modern housing development in such a way, that it is impossible at the present time to make a reconstruction of the archaeological situation (see the database – for instance al-Muwaqqar; two supporting towers in Bazuriyya, not found recently; or Musil documentation of Corinthian capital -which later disappeared- signifying an important source for dating in al-Bakhrā

Interesting pieces of knowledge can be also derived from the comparison of Musil's photo documentation and the photo documentation of the present condition of some sites. Photographs catching, if possible, the same sight show for example substantial destructions of various kinds, missing parts at the present time (see the database- for instance a missing tower in Qal' at Raḥba, which fell, because of inappropriately coordinated visits of tourists, when buses arrived in the immediate vicinity of this monument, and statics of the tower did not endure this strain; or in example on Musil's photography the masonry adjoining to Quṣayr 'Amra, which does not exist at present time), or alternatively on the other side more or less inappropriate reconstructions of some monuments in the Near East, reminding often unsuitable reconstruction of some monuments in the period before the „Velvet revolution“ in my native country, caused either by insensitive completion (either still popular substitution of missing parts with the concrete, their inappropriate „completion“ or in the case of

the Near East frequent incorporation of found architectural elements in the standing monument, which is incompatible with the original setting (or in the place, where it cannot be safely proved). This can be seen for example in al-Ḥallābāt, Palmyra, Qaṣr al-Ḥayr al-Sharqī and many other sites. Within so called „reconstruction“ of the monument for the purpose of its better representation for tourists the monument was in many cases damaged and photographs of Musil and of some of his contemporaries are at the present time irreplaceable documentation.

In the case of Quṣayr ‘Amra, where Musil’s photo documentation of the interior was not fully sufficient, the important source became also drawings of A. Mielich, on which are besides other things represented „in situ“ also parts of frescoes, which Musil with Mielich bought from Bedouins and then they ripped them from the wall, or they damaged them in attempts to do it. Also photographs of al-Mushatta are similarly valuable, and they show its facade yet „in situ“, that means before its transport to Berlin.

Some shots, which would be identical with Musil’s photographs, are not already possible to make, because of urban construction (Qal‘at al- Halab from a larger distance etc.).

His field anthropological diaries until now not subjected to analysis are also valuable. They are dealing in detail with Bedouin poetry and various tales and customs. Musil used transcriptions from these diaries in his published work „*The Manners and Customs of the Rwala Beduins*“ issued in New York in 1928 by the American Geographical Society.

11.4 Musil’s aims, methodology and a shift of Musil’s researching interests in the Near East

Musil originally went to the Near East with the intention to study the roots of monotheism in the Arabian region al- Bādiya. Alois Musil, as well as Wilhem Schmidt, believed that by gaining of knowledge about Bedouins culture is possible by a retrospective projection obtain some picture about a religious life in biblical times. Both Musil and Schmidt considered field survey for an interpretative key to understanding of monotheistic religion of Israel and the Old Testament.

Musil later used this method of backward projection, consisting in observing and recording data about life of Bedouin society, their supplement with pieces of knowledge from historical sources and the backward projection into the historical times. He also tried to understand and interpret early Muslim society in al- Bādia and results of this method can be found also in his hypotheses about founders of Umayyad castles.

Musil's scientific conception was changing during his first journeys to the Near East. The original focus on biblical geography and with it connected chronological selection of monuments, oriented on ancient monuments gradually widened on all architectonic types of buildings without any chronological limitation. Ground-breaking discovery of the desert Qaşayr 'Amra and a commotion, which this discovery elicited in the academic European milieu, led him to new orientation on so called Umayyad castles from the Umayyad period.

The original preference of copying of ancient inscriptions and mere making of plans changed in a systematic documentation, focused on recording of architectural structures leading to possible typological comparison.

11.5 Musil's significance for the Islamic archaeology

Musil's importance in the field of the Islamic archaeology does not consist only in his discovery of Umayyad desert castles, but primarily in his documentation, which had in his time a relatively high quality, as long as the circumstances allowed it, and in many cases he also correctly dated these buildings. Musil dated buildings both on the base of comparative typology of the explored objects, and on the base of historical sources, which were in several cases confirmed by the analysis of inscriptions.

Musil also attempted to find a comprehensive interpretation of these buildings. His hypothesis was relatively soon overcome and Sauvaget and other professional archaeologists considered it as „too romantic.“ In spite of incorrect original datation into the Ghassanid period Musil moreover belonged among first explorers, who correctly dated this building and similar desert castles into the Umayyad period. Musil determined the date of origin of the castle more exactly than the leading expert on the

history of Orient Karabacek already in the course of preparation of the monumental volume „*Ḳuṣayr ʿAmra*. Musil dated the object on the base of the interpretation of an inscription in the interior of Quṣayr ʿAmra and on the base of information found in the historical sources. Karabacek and other historians of fine arts on the contrary dated it primarily on the base of stylish typology of frescoes and different reading and interpretation of the inscription. The confirmation of the datation brought correct analyses of inscriptions, in the case of ʿAmra recently definitely confirmed.

12 EPILOGUE

To the complete evaluation of Musil as an archaeologist it will be necessary to supplement the database of the documented sites with new data, both from revised researches, which are now under way, alternatively from researches, of which results were not known to me at the time of the completion of this work or which were not from various reasons accessible, and also with other comparative photo documentation and results of other field prospection.

The project of database of archaeological sites the author at the present time is processing on HTF UK in a project supported by GACR (Czech Science Foundation)

The completion of all accessible data originating from archives and publications should be closed at the end of this year and subsequently released on the web site of the university. Simultaneously the database will be supplemented in the future with other data from revised researches and with a field prospection this time focused on Jordan, which is planned on the autumn of this year and which should be partly financed from the means of GACR (Czech Science Foundation). The fulfilment of this aim of the project, a structured gathering of Musil's field and documentary data, their comparison with the documentation of his contemporaries and results of modern revised researches would be considerably assisted by a solving of the problem of with hold documentation by my colleague Žďárský, with whom I am an official co-researcher within the subproject „electronic database of the documents“, to which, of course, I don't have at the present time the access, equally as to materials, digitalized and purchased within this project in the last year. At the present time this problem the management of HTF UK tries to solve, and let's hope, that it will be successfully solved, in order to enable timely addition of data as well as into the database of archaeological sites documented by Alois Musil.

The database should be simultaneously interconnected just with electronical database of the documents of Alois Musil and its aim was besides the evaluation of Musil's contribution in the field of archaeology and the evaluation of his documentation also to gather and provide in the future the best Musil's base for

archeologists exploring various sites in the Near East, which Musil visited and documented.

Prof. ThDr. Alois Musil, Dr.h.c. - basic biographical data with emphasis on biographical data relating to the topic of the thesis

- 1868 (30.6)** - born in Rychtářov
- 1887-1891** - secondary school in Kroměříž, Brno and Vysoké Mýto and studies of theology at the faculty in Olomouc
- 1891 (6.7.)** - ordained as priest
- 1891** - working in Moravská Ostrava
- 1895 (20.6.)** - graduated as doctor of theology
- 1895-1897** - studies on the École biblique in Jerusalem (Arabic and Hebrew languages archaeology)
 - school expedition in Sinai peninsula to the monastery of St. Catherine
 - first independent research journeys (Kerak, vādī Mūsā, Petra)
- 1897 (February)** - changeover to Beirut; studies at the Jesuit Université St. Joseph in Beirut - among his teachers were some excellent specialists: Louis Cheikho, Henri Lammens, Antun Salhani, Donat Vernier, Jean Baptiste Belot or Joseph Brun.
 - other independent research journeys
- 1897 (May)** - he sets out on the expedition in environs of Mādaba together with Austrian officer and military cartographer ing. Rudolf Lendl, who taught him the base of terrain mapping (he heard from Bedouins about Quşayr ° Amra)
- 1898 (8.6.)** - he visited for the first time Quşayr ° Amra
 - a negative acceptance of the new discovery in Viennese Academy, but on the recommendation of Orientalist Zschokke and Müller he obtained 100 guildens on purchase of a perfect camera.
- 1898-1899** - appointed catechist in State secondary school for natural sciences in Olomouc
- 1899-1900** - study tour in London, Oxford, Cambridge, Berlin and Vienna

- 1900** - a journey via Beirut into the desert, documentation of 'Amra
- 1900-1901** - appointed as a substitute Professor of biblical studies of The Old Testament at the Faculty of Theology in Olomouc
- 1901** - documentation of 'Amra with academic painter A. Mielich
- 1902 (16.3.)** - appointed as an extraordinary Professor of Viennese University
- 1902** - the expedition to Arabia Petraea; he made drawings and a complete map of the territory from Egyptian border to Wadi Sirhan and from Kerak to the Red Sea (in 1906 he was asked by British minister of foreign affairs Sir Edward Grey to define disputed border between Egypt and Turkey. Musil drew the border; his proposal was later accepted by both sides. The British Crown thanked him and the Ottoman government provided him generous honorarium.
- 1904 (16.11.)** - appointed as regular Professor at the Faculty of Theology in Olomouc
- 1908** - Pope Pius X. granted him the honorary title Home prelate of Holy Father
- 1908** - expedition to Arabia, sojourn at tribe Rwala
- 1908 (June) - 1909 (July)** - he mapped the North Arabia. His main task consisted in topographic survey of North Arabia between Palestine and Mesopotamia, connected with ethnographic and linguistic research and with gathering of plants for Professor Velenovský from the Charles University, he travelled with cartographer R. Thomasberger
- 1909 (28.2.)** - head of department of auxiliary biblical sciences and Arabic language at Viennese University
- 1909** - he purchased a plot and built villa Musa in Rychtářov (he furnished rooms with imported Oriental furniture)

- and Persian rugs)
- 1910**
 - on request of the Ottoman government he mapped and made a geological survey around the railway between Amman and al-Ela. Allegedly because of the construction of a hospital.
 - 1910 (21.4.)**
 - Musil with R. Thomasberger and dr. L. Kober went to North Hijjaz, they mapped the region between Maan and al-Ela. They made the map in the scale 1 : 500 000
 - he verified the location of biblical mountain Sinai
 - 1911 (16.2.)**
 - named honorary member of Danish Royal Geographic Society in Copenhagen
 - granted the doctorate honoris causa from the University in Bonn
 - 1912 (14.1.)**
 - granted by Bavarian king Luitpold I. The Royal Meritorious Order of St Michael of the II. class
 - 1912 (20.2.)**
 - Musil, Sixtus Bourbon de Parma and Thomasberger left for Alexandria, from there to Damascus and Halab. The journey to North Arabia (he documented among other things al-Ruṣāfa)
 - 1914 (14.10.)**
 - he notified German envoy in Vienna that he received letters from Núri and Aude (sheikhs of Bedouin tribes), in which they warned him, that Englishmen incite them to sabotages against Turkish garrisons.
 - Prof. Max von Oppenheim - archaeologist and Orientalist recommended government officials in Berlin Musil's „diplomatic“ journey to the Near East from reasons of his good contacts with Bedouins and his knowledge of the territory; the purpose of his journey should be to convince Bedouins to stay on the Turkish side
 - 1914-1915**
 - he travelled in North Nağd
 - 1916**
 - he was granted by emperor Karl the title of real secret court councillor and title Excellency

- 1917** - commissioned to lead a mission of archduke Hubert, for which he was named the Field Sub-Marshal
- 1917 (6.9.)** - within the mission he was received by sultan and he got the Order of Međidije of the I. class
- 1918 (15.9.)** - he visited the emperor, in order to ask him for granting pardon to Czech participants of revolt in Kotor on the request of a future Czechoslovakian minister; in all probability it was Musil's last visit at the seat of emperor .
- 1920** - changeover from Vienna to the Charles university in Prague
- 1920 (21.1.)** - appointed the regular Professor of Oriental auxiliary sciences and of modern Arabic language at the philosophical faculty of the Charles university in Prague
- 1920 (11.2.)** - inaugural lecture „Jak jsem poznával Orient" (How I was getting to know Orient)
- 1923-1928** - he lived in the United States (with exception of 1925), where he prepared the edition of 6 volumes of his works in English for the American Geographic Society
- 1927** - his name ceremonially written on the memorial plate of the American Geographic Society.
- Musil built a central cross in the cemetery in Rychtářov, according to design of dr. Antonín Mendl, who earlier executed plans and architectonic reconstruction of al-Ruṣāfa on the base of Musil's field documentation
- 1928 (21.2.)** - appointed as regular member of the American Geographical Society and decorated by a gold medal of Charles P. Daly
- 1919-1932** - he published 8 travelogue volumes in Czech
- 1933 (15.2.)** - appointed by archbishop of Prague as consistorial councillor
- 1935** - he built a house in Kosova Hora, again according to plan of arch. Dr. From Antonín Mendl.

1934-1939

- he published a selection of works „Dnešní Orient“

1936

- sojourn in Otryby – preparation of the monography „From the world of Islam“ unpublished until now

1938

- he stopped to give lectures in the university, he retired on a pension – he was publishing a series of books for children

1944 (12.4.)

- he died in Otryby, buried in Český Šternberk

1968

- within celebration of 100th anniversary of his birth his remains were transported to the family tomb in Rychtářov.

Basic chronology relating to this work: (according to Burns, R.)

PERSIAN PERIOD	539 – 333 BC
HELLENISTIC PERIOD	333 – 64 BC
ROMAN PERIOD	64 BC – 396 AD
1) Early Roman	64 BC – 135 AD (according to Kennedy, D.)
2) Late Roman	135 BC – 324 AD (according to Kennedy, D.)
BYZANTINE PERIOD	395 AD – 661 AD
1) Early Byzantine	324 AD – 491 AD (according to Kennedy, D.)
2) Late Byzantine	491 AD – 640 AD (according to Kennedy, D.)
ISLAMIC PERIOD (early Islamic)	661 – 1055 AD
1) Umayyad Period	661 AD – 750 AD
2) Abbasid Period	750 AD – 968 AD
3) Fatimid Period	969 AD– 1055 AD

The Umayyad Caliphs

Mu‘āwiya b. Abī Sufyān	41–60/661–680
Yazīd b. Mu‘āwiya (Yazīd I)	60– 64/680–683
Mu‘āwiya b. Yazīd (Mu‘āwiya II)	64/683–684
Marwān b. al-Ḥakam (Marwān I)	64 – 65/684–685
‘Abd al-Malik b. Marwān	65– 86/685–705
al-Walīd b. ‘Abd al-Malik (al-Walīd I)	86–96/705–715
Sulaymān b. ‘Abd al-Malik	96– 99/705–715
‘Umar b. ‘Abd al- ‘Azīz	99– 101/717–720
Yazīd ‘Abd al-Malik (Yazīd II)	101–105/720–724
Hishām b. ‘Abd al-Malik	105– 125/724–743
Al- Walīd b. Yazīd (al- Walīd II)	125–126/743–744
Yazīd b. al- Walīd (Yazīd III)	126/744
Ibrāhīm al-Walīd	126–127/744
Marwān b. Muḥammad (Marwān I)	127–132/744–750

13 SOURCES

AV – Archive of The Academy of Sciences of the Czech Republic

(Archiv Akademie věd České republiky)

AVV- Archiv der Österreichischen Akademie der Wissenschaften Wien

-Nordarabische Kommission

-Sprachenkommission

-Südarabische Kommission

-Personalakt Alois Musil

FA - Private archive of Musil's family

MV - Collection of Alois Musil in the Museum of Vyskov region, Vyskov.

(Muzeum Vyškovska ve Vyškově, historická sbírka, pozůstalost Aloise Musila)

NA- The National Archives in London, fond Foreign Office, 1911-1919

NTM –The National Technical Museum in Praha (CVUT), fond Mendl Antonin

NM - The Archive of the National Museum

(Archiv Národního muzea).

ON - Handschriftensammlung in Österreichische Nationalbibliothek, fond Karabacek

SH - Musil's papers in the Literary archive of The Museum of Czech Literature, Chateau Stare Hradky, fond of Alois Musil, 2-B/119 (unprocessed papers), fond Frantisek Ladislav Riegl

(Literární archiv Památníku národního písemnictví Praha, fond František Ladislav Rieger a fond Alois Musil)

ath-Thawra č. 12834, 2005/10/16,

URL:<http://thawra.alwehda.gov.sy/_archive.asp?FileName=17968073020051015220414>.

14 LITERATURE

- Almagro, M.ed. 1975: Quşayr 'Amra: Residencia y baños omeyas en el desierto de Jordania. Madrid.
- Alroey, G. 2003. Journey to Early-Twentieth-Century Palestine as a Jewish Immigrant
- Anonymous. 1907. Arabia. - Karte von Arabia Petraea (3 sheets). Bulletin of the American Geographical Society, Vol. 39, No. 2: 116.
- Barth, F. 1961: Nomads of South Persia. London.
- Barth, F. 1967: On the Study of Social Change. American Anthropologist 69, 661-669.
- Barth, F. 1972: Analytical Dimensions and the Comparison of Social Organizations. American Anthropologist 74, 207-220.
- Bauer, K. J. 1989: Alois Musil: Wahrheitssucher in der Wüste. Wiena.
- Bazou, T. 1989: A finibus Syriae. Recherches sur les routes des frontières orientales de l' Empire Romain. Thèse de doctorat, Université de Paris I. Sorbonne.
- Bazou, T. 2004: Poidebard, archéologue de l' extrême. In: Denise, F. -Nordiguan, L. 2004: Une aventure archéologique. Antoine Poidebard, photographe et aviateur. 131-145. Beyrouth.
- Bečka, J. 1995: Alois Musil- duchovní otec Orientálního ústavu, in: Veselý,R. ed.: Alois Musil- Český vědec světového jména,Rozpravy Orientalia 1995/1.Praha.
- Bell, G. 1911: Amurath to Amurath. LondonBell, G.: Arabien diaries 1913-1914; in: O'Brien, R. ed.: Gertrude Bell Photographic Archieve (www.gerty.ncl.ac.uk). Syracuse 2000. Staženo březen 2006.
- Bell, G.1907: The desert and the Sown. London.
- Bianquis, T. 1979: Réflexions sur l'archéologie islamique en Syrie: La g?nese de la fouilles de Rahba- Mayadin. Hommages ? la memoire de Serge Sauneron 1927-1976. II. Égypte post- pharaoniques. Cairo.
- Bianquis, T. 1989: Mission franco-syrienne de Rahba- Mayadin (1976-1981), in:Contribution française ? l'archéologie syrienne 1969-1989. Damascus.
- Bisheh,G.- Morin, T.- Vibert - Guigue, C. 1997: Raport d' activités Quşayr 'Amra, Annual of the Departement of Antiquities of Jordan 41, 375-393.
- Bounni, A.- Al- AS 'AD, K.2000: Palmyra. Damascus.
- Bowersock G.W. 1971: A report on Arabia Provincia. JRS 61: 219- 242.

- Bowersock G.W. 1983: Roman Arabia. Cambridge.
- Breycha -Vaultier A .1967: Musil's in Qusair 'Amra. Österreichische Arbeit im Geiste der UNESCO vor 60 Jahren. Bustan. Österreichische Zeitung für Kultur, Politik und Wirtschaft der islamischen Länder, 8, 37-38. Wien.
- Brisch, K. 1963: Des Omayyadische Schloss in Usais. Berlin.
- Brünnow, R. E. - Domaszewski,A. Von, 1905: Die Provincia Arabia. Strassburg
- Burckhardt, J. L. 1831: Notes on the Bedouins and Wahabys. London.
- Chatty, D. 1998: Enclosures and Exclusions: Conserving Wildlife in Pastoral Areas of the Middle East. Anthropology Today 14, 2-7.
- Chatty, D. 2010: The Bedouin in Contemporary Syria: The Persistence of Tribal Authority and Control. The Middle East Journal 64, 29-49.
- Crawford, O. G. S. 1954 : A Century of Air-photography. Antiquity 28, 206-210.
- Creswell, K. A. C. 1989: A Short Account of Early Muslim Architecture, revised and commented by J. Allan, Adlershot.
- Creswell, K.A.C. 1969: Early Muslim Architecture, 2. vol. Oxford 1932-40. Nouvelle édition du 1er volume pour l'art omeyyade, Oxford
- de Vogüe, M. 1865: Syrie central. Architecture civile et religieuse du I.er au VII.e siècle. Paris
- Decker, M. 2006: Building up One Empire while Tearing Down Another: Scholars, Missionaries and Spies in the Ottoman Middle East.
URL:<<http://cnx.org/content/m13674/latest>> (staženo 30. 3. 2010).
- Denise, F. - Nordiguan, L. 2004: Une aventure archéologique. Antoine Poidebard, photographe et aviateur. Beyrouth.
- Deuel, L. 1979: Objevy z ptaci perspektivy. Praha.
- Doughty, Ch. M. 1936: Travels in Arabia Deserta. London: Jonathan Cape.
- Drapal, M. 1972: Život a dílo prof. dr. Aloise Musila. Brno
- Drápal, M. 2005a: Vzpomínka na světoznámého vědce a cestovatele Aloise Musila. Zprávy muzea Vyškovska 92, 3-20.
- Drápal, M. 2005b: Život a dílo prof. Dr. Aloise Musila. Vyškov.
- Dussaud, R. 1927: Topographie historique de la Syrie antique et médiévale. Paris.

Dussaud, R. 1929: La Palmyrène et l'exploitation de M. Alois Musil, in: Syria X, 52-63. Paris.

Eismann, S. s.a.: Resafa- Pilger und Händler in der Syrischen Wüste. In: www.Archeologie in Deutschland, das Magazin. wx. thesiss.

Elphinston, W. G. 1945: The Future of the Bedouin of Northern Arabia. International Affairs 21, 370-375.

Experience. Jewish Social Studies, Vol. 9, No. 2: 28-64.

Fait, E. 1910: Professor dr. Alois Musil a jeho výpravy. Sborník České společnosti zeměvědné, Vol. 16: 141-172.

Fenton, W. N. 1947: Anthropology during the War VII. The Arab World. American Anthropologist 49, 342-343.

Fowden, G. 2004: Quşajr 'Amra: Art and the Umayyad Elite in Late Antique Syria. London: University of California Press.

Franc J, 2010: Alois Musil a hledání pramenů monoteismu: na cestě od pokojného soužití beduínů, muslimů a východních a západních křesťanů k náboženskému a ekumenickému dialogu. Olomouc (unpublished doctoral thesis).

Gaube, H. 1977: Amman, Harāna und Qastal: Vier frühislamische Bauwerke in Mittel-jordanien. ZDPV 93, 52-58.

Gaube, H. 1979: Die Syrischen Wüstenschlösser. Einige wirtschaftliche und politische Gesichtspunkte zu ihrer Entstehung. Zeitschrift des Deutschen Palästina-Vereins 95. 182-209.

Gellner, E. 1995a: Lawrence of Moravia. In: Anthropology and Politics: Revolutions in the Sacred Grove, 212-228. Oxford.

Gellner, E. 1995b: Moravský Lawrence. In: Veselý, Rudolf (ed.). Alois Musil - český vědec světového jména, 39-48. Praha.

Genequand D. 2006: Umayyad castles; the Shift from Late Antique Military Architecture to Early Islamic Palatial Building. In: Kennedy, H.: Muslim Military Architecture in Greater Syria, from coming the Islam to the Ottoman Period, 3- 25. Leiden -Boston.

Genequand, D. 2002: Project " Implantations umayyades de Syrie et de Jordanie"- Rapport sur une campagne de prospection et reconnaissance (2001). SLSA - Jahresbericht 2001, Zürich, 131- 161. Amman.

Genequand D. 2006a: Umayyad Castles: the Shift from Late Antique Military Architecture to Early Islamic Palatial Building. Muslim Military Architecture in

- Greater Syria. From the coming of Islam to the Ottoman Period. Edited by Hugh Kennedy. Brill: Leiden- Boston, 3- 25.
- Gennequand, D. 2003: Projet "Implantations umayyades de Syrie et Jordanie". Rapport sur une campagne de prospection (juin- juillet 2002). SLSA -Jahrebericht 2001. Zurich, 131-161.
- Gennequand, D. 2004: Al- Bakhra (Avatha), from Tetrarchic Fort to the Umayyad Castle. *Levant* 36. 225- 242.
- Gennequand, D. 2006b: Some thoughts on Qasr al- Hayr al- Gharbi, its Dam, its Monastery and the Ghassanids.
- Gennequand, D. 2010: Les élites omeyyades en Palmyrène: contribution ? l'aspects fonctionnels et économiques des établissements aristocratiques omeyyades du Bilad al- Shām. Thèse doctoral. Université de Lausanne/ Université de Paris I Pantéon - Sorbonne.
- Gogräfe, R. 2005: The Temple of Isrye- Seriana- From Oracle Sanctuary to Qasr. Mainz am Rein.
- Gombár, E. 1995: Alois Musil a jeho role při budování hospodářsko-politických vztahů k arabskému světu, in: Veselý, R. (ed.). Alois Musil - český vědec světového jména. Praha: Globe, 25-28.
- Goudard, J. 1908: *La Sainte Virge du Liban*. Paris
- Grabar, O. 1954: The Painting of the Six Kings at Qusayr 'Amrah. *Ars Orientalis* I. 185- 187.
- Grabar, O. 1971: Islamic Archaeology: An Introduction. *Archaeology* 24, 197-199.
- Grabar, O.- Holod, R.- Knustad, J.- Trousdale, W. 1978: City in desert. Qasr al- Hayr East. Harvard Middle Eastern monographs XXIII/ XXIV. Cambridge, MASS.
- Graf, D. 1995: The Via Nova Traiana in Arabia Petraea, in. Humprey 1995, 141- 167.
- Gray Hill, J. E. 1896: A Journey East of the Jordan and the Dead Sea, 1895. *Palestine Exploration Fund Quarterly Statement* 28, 24-46.
- Gregory, S. 1995 - 1997: Roman Military Architecture on the Eastern Frontier. From AD 200-600. 3 vol., Amsterdam: Adolf M. Hakkert.
- Gregory, S.- Kennedy, D. L. (eds.)1985: Sir Aurel Stein's Limes Report. The full text of M. A. Stein's unpublished Limes Report. (his aerial and ground reconnaissances in Iraq and Transjordan in 1938-39). Oxford (Bar, International Series 272). Vol. 1= Stein; vol. 2 = commentary and discussion.

- Gunter, A. C.- Hauser, S. R. 2005: Ernst Herzfeld and Near Eastern Studies, 1900-1950, in: Ernst Herzfeld and the Development of Near Eastern Studies, 1900-1950. Leiden: Brill, 3-45.
- Guyer, S.1920: Rusâfah, Sonderabdruck in: Sarre,F.-Herzfeld E. 1920: Archäologische Reise im Euphrat und Tigris- Gebiet. Berlin.
- Hagen, G. 2004: German Heralds of Holy Wars: Orientalist and Applied Oriental Studies. Comparative Studies of South Asia, Africa and the Middle East, 24:2.
- Hammer - Purgstall 1835: Über die Länderverwaltung unter dem Chalifate.
- Hart, L. 1937: Colonel Lawrence. New York
- Helms, S. 1990: Early Islamic Architecture of the Desert: A Bedouin Station in Eastern Jordan. Edinburgh: Edinburgh University Press.
- Helms, S. 1991: A New Architectural Survey of Qasr Burqu', Eastern Jordan. The Antiquaries Journal 71, 191- 215.
- Herold, Ch. F. 1928: Americké vyznamenání. Prof. Alois Musil, cestovatel světového jména, uctíván v New Yorku. Svornost 143, 28. února, 1.
- Herzfeld E. 1907: Samarra, Aufnahmen und Untersuchungen zur islamischen Archäologie. Berlin.
- Herzfeld, E. 1909: Die Genesis der islamischen Kunst und das Mshatta-Problem. In: Becker, C. H. 1909: Der Islam.
- Hillenbrand, R.1991: Creswell and Contemporary Central European Scholarship. Muqarnas 8, 23-35.
- Hitti, P. K. 1940: History of the Arabs. London: Macmillan.
- Hrdina, K.ed. 1950: První pokračovatelé Kosmovi. Praha
- Hrozný, B. 1920: Nové úkoly orientální archeologie. Naše doba 7, 484-490.
- Ilayn, J.s.a.1998: New system of representation of Umayyad desert castles in Jordan. Integral museum of Umayyad civilisation. Jordan
- Imbert, F. 1995: Inscriptions et espaces d'écriture au palais d'al- Kharr?na en Jordanie, 403- 416, in: SHAJ V, Amman.
- Insoll, T. 1999: The Archaeology of Islam. Oxford: Blackwells Publishers.
- Jaussen, A.-Savinac, M. 1922 /III : Mission archéologique en Arabie. Les châteaux arabes de Quseir Amra, Harânen et Túba. Paris.

Jedlička, I. M. 1964: Na mopedu k beduínům: Dobrodružství nejmenších motocyklů v horách a pouštích tří světadílů, cestou na Sinaj a k obratníku Raka. Praha.

Kappers, C. U. A. 1931: Contribution to the Anthropology of the Near East. IV. The Semitic races. Proceedings of the Koninklijke Akademie van Wetenschappen te Amsterdam 34, 116-130.

Karnapp, W. 1968: Die Stadtmauer von Resefa, Syrien. Bonner Jahrbücher 166, 156-160. Berlin

Karnapp, W. 1972: Die deutschen Grabungen und Forschungen in Resafa (Syrien), in: Schmoll, J.A. et. eds.: Festschrift L. Dussler. München, Berlin.

Kennedy, D. 2004: The Roman Army in Jordan. London.

Kennedy, D. ed. 1996: The Roman Army in the East, Ann Arbor, Michigan (Journal of Roman Archaeology, Supplementary Series 18).

Kennedy, D. 1982: Archaeological Exploration on the Roman Frontier in North East Jordan. The Roman and Byzantine military installations and road network on the ground and from the air. Oxford (Bar, International Series 340).

Kennedy, H. 1997: From Oral Tradition to Written Record in Arabic Genealogy. Arabica 44, 531-544.

Kennedy, D.- Bewley, R. 2004: Ancient Jordan from the Air. London.

King, G. 1989: The Umayyad Qusur and Related Settlements in Jordan. The Fourth International Conference on the History of Bilad al- Sham during Umayyad Period. Ed. by al- Bakhit, M. A.- Schick, R. Amman. University of Jordan, English section, Vol. II., 71- 80.

King, G. 1992: Settlement Patterns in Islamic Jordan: The Umayyads and their Use of the Land. Studies in the History and Archaeology of Jordan IV., 369-375.

Konrad, M. 2001: Römische Grenzpolitik und die Besiedlung an der Strata Diocletiana? Neue Kleinfunde des 1. Jahrhunderts n. Chr. aus Nordsyrien. DaM 9, 163-180.

Konrad, M. 2005: The Limes project. Mainz am Rein.

Kropáček, L. 1995: Alois Musil a Islám, in: Veselý, R. ed.: Alois Musil- Český vědec světového jména, Rozpravy Orientalia 1995/1. Praha.

Kropáček, L. 1998: Duchovní cesty islámu. Praha: Vyšehrad.

Lagrange, M.- J. 1896: Chronique de Suez à Jérusalem par le Sinai. Revue biblique, Vol. 5: 618-643.

- Lammens, H. 1898: *Aqdam athar li-Baní Ghassán aw achribat al-Mushatta*. *Al-Mashriq* 1, 481-487, 630-637.
- Lammens, H. 1910: *La Bâdia et la Hîra sous les Omayyades. Un mot á propos de Mshattâ*. *Mélanges de la Faculté Orientale de l'Université Saint-Joseph* 4, 91-112.
- Lancaster, W. 1981: *The Rwala Bedouin Today*. Cambridge: Cambridge University Press.
- Lawrence, T. E. 1935: *Bouře nad Asií*. Praha.
- Lawrence, T. E. 1988: *Crusader castles. A new edition with introduction and notes by Denis Pringle*. Oxford: Clarendon Press.
- Lawrence, T. E. 1990: *Crusader Castles by T.E. Lawrence, ed. Pringle Danys*. Oxford.
- Leisten T. 2005: *Mshatta, Samarra, and al-Hira: Ernst Herzfeld's Theories Concerning the Development of the Hira- style Revisited*, in: Gunter, A.C.- Hauser R.S. 2005: *Ernst Herzfeld and the Development of Near East Studies, 1900- 1950*. Leiden.
- Leisten, T. 2003: *Excavation of the Samarra. Vol. I.: Architecture final report of the first campaign 1910-1912*. Mainz am Rein.
- Lewis, N. N. 2009: *Nomads and Settlers in Syria and Jordan, 1800-1980*. Cambridge: Cambridge University Press.
- Libal, P. 2010: *Dům Aloise Musila*. In: *Dům a zahrada*. 2-4.
- Meeker, M. E. 2004: *Magritte on the Bedouins: Ce n'est pas une société segmentaire*, in: Streck, B. (Hg.): *Segmentation und Komplementarität. Organisatorische, ökonomische und kulturelle Aspekte der Interaktion von Nomaden und Sesshaften*. Beiträge der Kolloquia am 25. 10. 2002 und 27. 6. 2003. Halle (Orientwissenschaftliche Hefte 14; Mitteilungen des SFB "Differenz und Integration" 6), 33-55.
- Menčík, F. 1908: *Prof. Dr. Alois Musil. O jeho cestách, spisech a jejich významu*. Olomouc.
- Mendl, A. 1925: *Resáfa - příspěvek k městskému a sacrálnímu stavebnictví křesťanského Orientu*. Praha: nákladem A. Mendla.
- Mendl, M. 2004: *Alois Musil a Antonín Mendl, náhodná spolupráce*. *Věstník Historicko-vlastivědného kroužku v Žarošicích* 13, 74-76.
- Milwright, M. 2010: *An introduction to Islamic Archaeology*. Edinburgh
- Mouterde, R. - Poidebard, A. 1945: *Le Limes de Chalcis, organisation de la steppe en haute Syrie romaine. Documents aériens et épigraphiques*. I. -II. Paris.

- Musil, A. 1896: Siesta. Na břehu Nílu 10. února 1896. *Novýživot* 1, 29-31.
- Musil, A. 1898: Zpráva Dra. Aloise Musila, t.č. v Bejrútě, o jeho činnosti na východě, in: *Věstník České akademie císaře Františka Josefa pro vědy, slovesnost a umění*, roč.VII/1. Praha.
- Musil, A. 1898a: Riḥla Ḥadītha ilá bilád al-bádija. *Al-Mašriq* 1, 625-630.
- Musil, A. 1898b: Zpráva Dra. Aloisa Musila, t. č. v Beirútě, o jeho činnosti na Východě. *Věstník České akademie císaře Františka Josefa pro vědy, slovesnost a umění* 7, 1-6.
- Musil, A. 1899a: Pouští Exodu. Zpráva o poslední cestě Dra. Aloise Musila, t.č. v Olomouci, in: *Věstník České akademie císaře Františka Josefa pro vědy, slovesnost a umění*, roč.VIII/5, 251-262.Praha.
- Musil, A. 1899b: Prvá zmínka egyptská o Israelitech. *Hlídka*, Vol. 16: 512-514.
- Musil, A. 1901a: Faraó Exodu. *Hlídka*, Vol. 18: 263-265.
- Musil, A. 1901b: Staroegyptské prameny místopisu a národopisu jižní Palestiny a pohraničních území. *Starozákonní studie*. *Hlídka* 18, 247-252, 302-306, 695-698, 778-784.
- Musil, A. 1902a: Kusejr Amra und andere Schlösser östlich von Moab. *Topographischer Reisebericht. I. Theil. Sitzungsberichte der philosophisch-historischen Classe der kaiserlichen Akademie der Wissenschaften* 7, 1-51.
- Musil, A. 1902b: Kusejr Amra. *Věstník České akademie císaře Františka Josefa pro vědy, slovesnost a umění* 11, 325-349.
- Musil, A. 1902c: *Starozákonní studie a drobné příspěvky k výkladu Písma svatého*. Brno: Tiskárna Benediktinů.
- Musil, A. 1904: Die Provincia Arabia von R. E. Brünnow, A. v. Domaszewski und J. Euting. *Wiener Zeitschrift für die Kunde des Morgenlandes* 18, 379-404.
- Musil, A. 1907a: *Kušejr Amra*. Wien.
- Musil, A. 1907b: *Arabia Petraea I. Moab*. Wien: Alfred Holder.
- Musil, A. 1908: *Arabia Petraea II. 2. Edom*. Wien.
- Musil, A. 1911: Im nördlichem Heğaz. Vorbericht über die Forschungsreise 1910. *Anzeiger der philosophisch-historischen Klasse der kais. Akademie der Wissenschaften in Wien vom 17. Mai 1911*, No. 13: 139-159.
- Musil, A. 1919: Naše úkoly v orientalistice a v Orientě. *Naše doba* 3, 176-182.

- Musil, A. 1920: Naše úkoly v orientalistice a v Orientě. Naše doba 4, 270-281.
- Musil, A. 1921: Jak jsem poznával Orient. (Nástupní přednáška universitní.) Česká revue, Vol. 14, No. 5-6: 214-227.
- Musil, A. 1926: The Northern Heğaz. New York.
- Musil, A. 1927a: The Middle Euphrates. New York.
- Musil, A. 1927b: Arabia Deserta. New York.
- Musil, A. 1928a: Palmyrena. New York.
- Musil, A. 1928b: Northern Neğd. New York.
- Musil, A. 1928c: The Manners and Customs of the Rwala Beduins. New York.
- Musil, A. 1932: Tajemna Amra. Praha.
- Musil, A. 1935: Plukovník Lawrence ve skutečnosti a legendě. Přednáška pro Československý rozhlas. Muzeum Vyškovska ve Vyškově H 18488/26.
- Musil, A. 1939: Křesťanské církve nynějšího Orientu. Olomouc
- Musil, A. 1941: Ze světa islámu. Rukopis, Muzeum Vyškovska ve Vyškově 53/2006.
- Musil, A: 1907c. Arabia Petraea II. 1. Edom. Wien.
- Musil, A. 1928/ 29: Pod ochranou Nuriho. Praha.
- Najjar, M. 1989: Preliminary Report on Results of the Excavation at al- Muwvaqqar. Annual of Department of Antiquities of Jordan 33, 305- 322.
- Navrátilová, H., Míšek, R. 2002: Alois Musil and the Rise of Czech Oriental Studies: A Perspective of a Non-classical Orientalism. Archiv Orientální 4, 558-564.
- Nodiguian, L. 2004: Une tradition photographique jésuite. In: Denise, F. -Nordiguian, L. 2004: Une aventure archéologique. Antoine Poidebard, photographe et aviateur. 185- 191. Beyrouth.
- Nöldeke, T. 1907: Ein Wüstenschloss. Neue Freie Presse, n. 15301, 28th März 1907, Wien.
- Nordiguian, L. 2000: Aux Origines de L'archeologie Aérienne. Beyrouth.
- Northedge, A. 1991: Creswel, Herzfeld and Samarra, in: Muqarnas 8/ 1991
- Northedge, A. 1994: Archaeology and New Urban Settlement in Early Islamic Syria and Iraq, in: King G.R.D.- Cameron eds.: The Byzantine and Early Islamic Near East: vol. 2. Land Use and settlement. 231-264. Princeton .

- Northedge, A. 2000: *Entre Amman et Samarra: l'archéologie et les élites au début de l'Islam (VIIe-IXe siècle)*. Paříž, nepublikovaná habilitační práce.
- Northedge, A. 2005a: Ernst Herzfeld, Samarra, and Islamic Archaeology. 385- 403, in: Gunter, A.C.- Hauser R.S. 2005: *Ernst Herzfeld and the Development of Near East Studies, 1900- 1950*. Leiden
- Northedge, A. 2006: *The Qubbat al-Sulaybiyya and its interpretation, Sifting Sands, Reading Signs: Studies in honour of Professor Géza Fehérvári*, London, Furnace Press, pp.71-82.
- Northedge, A. 2008: *The Umayyad Desert Castles and Pre- Islamic Arabia. Castles, Settlements, Transformation Processes from Late Antiquity to Early Islam in Bil'd al-Sham*. Edited by Karin Bartel and Abd al- Razzaq Moaz. Rahden/Westf.:VML, 243-259.
- Northedge, A.1992: Book Review: Helms, S.: *Early Islamic Architecture of the Desert: A Bedouin Station in Eastern Jordan (Edinburgh 1990)*, in: *Bulletin of the School of Oriental and African Studies* 55, 127-128.
- Northedge, A. 2005b: *The Historical Topography of Samarra*. London. British School of Archaeology in Iraq (Samarra Studies I.)
- Otto - Dorn, K. 1957: *Grabung im Umayyadischen Rusāfah*, in: *Ars Orientalis* 2, 119 - 33
- Parker, T. (ed.) 1987: *The Roman Frontier in Central Jordan. Interim Report on the Central Limes Arabicus Project 1980 - 1985*, 2. vols. Oxford (Bar, International Series 340).
- Parker, T. 1986 : *Romans and Saracens. A history of Arabian Frontier*. Winona Lake.
- Parker, T. 1997: *Geography and strategy on the south eastern frontier in the Late Roman period*, in W. Groenman- van Waateringe et. al. (eds.) *Roman Frontier Studies 1995*. Oxbow Monograph 91, 115- 122.
- Poidebard, A.1934: *La Trace de Rome dans Le désert Syrie. Le Limes de Trajan a la Conquête arabe. Recherches aériennes 1925-1932. I.-II*. Paris.
- Prochazka B.1968: *Cesta za Qusajr 'Amrou*. In : *Svet v obrazech 1968/29*.
- Reich, E. 1930: *Alois Musil, selský synek světovým cestovatelem*. Praha: Českomoravské podniky tiskařské a vydavatelské.
- Rosen - Ayalon, M 1995: *Return to Qusayr Amra*, in *Archiv Orientální* 63, 455-70. Praha.
- Ross, B. 1999: *Monument of Syria*. London- New York.

- Rypka, J. 1938: Alois Musil. *Archiv Orientální* 10, 1-34.
- Rypka, J. 1968: Alois Musil (30. červen 1868-30. červen 1938), in: Alois Musil 1868-1968. Katalog výstavy ke 100. výročí narození pořádané ve dnech 9. června-28. července 1968 ve výstavním sále Muzea Vyškovska ve Vyškově na Moravě. Československá zeměpisná společnost při ČSAV, pobočka Brno a Muzeum Vyškovska, 7-33.
- Sack, D. 1996: *Resafa 4, Die Grosse Mosche von Rusāfat Hishām*. Mainz am Rein.
- Sack, D.- Becker, H. 1999: Zur städtebaulichen und Baulichen konzeption Frühislamischer residentem in Nordmesopotamien mit ersten ergebnissen einer testmessung zur geophysikalischen prospektion in Resafa-Rusāfat Hishām. In: *Stadt und Umland*. Mainz am Rein.
- Sack, D.- Gussone, M. 2005: *Resafa/ Rusafat Hisham*. Mainz am Rein.
- Sarre, F.-Herzfeld, E. 1911-1922: *Archäologische Reise im Euphrat und Tigris Gebiet*. Berlin.
- Sauer, G. 1969: Alois Musil's Reisen nach Arabien im Ersten Weltkrieg. *Archiv Orientální* 37, 243-263.
- Sauvaget, J. 1939a: Remarques sur les monumentes omeyyades. *Journal Asiatique* 231. janvier-mars 1939. 1-59.
- Sauvaget, J. 1939b: Les ruines ommeyyades de Jabal Seis. *Syria* 20, 239- 256.
- Sauvaget, J. 1939c: Les Ghassanides et Sergiopolis. *Byzantion* 14, 115- 130.
- Sauvaget, J. 1967: Châteaux omeyyades de Syrie. Contribution ? l'étude de la colonisation arabe aux Ier et IIe siècles de l'Hégire. *Revue des études islamiques* 35, 1-52.
- Shanklin, W. M. 1935: The Anthropology of the Rwala Bedouins, *The Journal of the Royal Anthropological Institute of Great Britain and Ireland*, 65, 375-390.
- Shanklin, W. M. 1953: Anthropological Measurements on the Arab Bedouin with Comments on Their Customs, *Man* 53, 134.
- Sklenář, K. 1989: *Z Čech do Pompejí*. Praha: Československý spisovatel.
- Sodini J. P. et. al. 1980: Déhès. Campagnes I.-III. (1976- 1978), *Recherches sur l'habitat rural*. *Syria*. 57, 1- 304.
- Souček, V. 1979: *Bedřich Hrozný*. Lysá nad Labem
- Sourdél, J. ed.1983: *La civilization de L'Islam classique*. Paris.

- Spanner, H.- Guyer, S. 1926: Rusafa, die Wallfahrtsstadt des heiligen Sergios. Berlin.
- Sweet, L. E. 1965: Camel Raiding of North Arabian Bedouin: A Mechanism of Ecological Adaptation. *American Anthropologist* 67, 1132-1150.
- Sweet, L. E. 1983: Book Review: Lancaster, W.: *The Rwala Bedouin Today* (Cambridge 1981), in: *American Ethnologist* 10/1, 212-213.
- Tate, G. 1992 : Les campagnes de la Syrie du Nord du II.e au VII.e siècle : un exemple d' expansion démographique et économique à la fin de Antiquité. Paris
- Tayseer, K. N. 2008: Anthropological and Etnographical study of the Bedouin in East Palestine. Praha, disertační práce UK FF.
- Tureček, B. 2008: Příběh Aloise Musila.
URL:<http://www.rozhlas.cz/svet/portal/_zprava/470304> (cit. 17-11-09).
- Ulbert, T. 1983: Resafa- Sergiopolis. AAAS, 69-82. Berlin.
- Ulbert, T. 2001:La residencia rural omeya de Hallul- Cholle(Syria), in: Valdés-Velázquez,A. (eds.) : *La Islamización de la Extremadura Romana*. Mérida. 191-192
- Ulbert, T. 2005 : Resafa/
Sergiopolis.URL:<http://thawra.alwehda.gov.sy/_archive.asp?FileName=17968073020051015220414>.
- Vernoit, S. 1997: The Rise of Islamic Archaeology, in: Muqarnas XIV: An Annual on the Visual Culture of the Islamic World, vol. 14. Leiden. 1-10.
- Veselá, M. 2008: Alois Musil a antropologické výzkumy beduínů Rwala, in *Krajané ve starém Orientu. Orientalia Bohemica – české země Orient, sv. 2*.Praha, 20-33.
- Veselá, M., Žďárský, P. 2009: Alois Musil and Egypt, in: Lazar, I., Holaubek, J. (eds.) *Egypt's Heritage in Europe. Egypt and Austria V*. Koper: Univerza na Primorskem, 89-129.
- Veselá, M.:Alois Musil jako průkopník islámské archeologie a antropologie in: *Alois Musil – Scheich Musa: ein österreichisch-tschechischer Orientpionier. Alois Musil – šajch Músá: rakousko-český průkopník v Orientu*, ed. Schipper, F.T.- Selz,G. J.- Veselá,M.(currently been published).
- Veselá, M.2007: Alois Musil and Islamic Archaeology, in *Egypt and Austria III – The Danube Monarchy and the Orient*, ed. Oerter, W. B., Holaubek, J., Navrátilová, H., Prague, pp. 261–271.
- Veselá, M.2008: Alois Musil and Anthropological Researches of Rwala Bedouins, in *Egypt and Austria IV –Crossroads*, ed. Oerter, W. B., Holaubek, J., Navrátilová, H., Prague, pp. 225–238.

- Veselý, R. 1995: Postavení knižní řady " Dnešní Orient" ve vědeckém odkazu profesora Aloise Musila, in: Veselý, R. ed.: Alois Musil- Český vědec světového jména, Rozpravy Orientalia 1995/1, 33-38. Praha.
- Vibert - Guigue C. 1997: Le Peinture omeyyade du Proche- Orient: L' exemple de Qusayr 'Amra, thèse de 3.e cycle, Université de Paris I., Panthéon- Sorbonne.
- Vibert - Guigue, C. -Bisheh, G. 2007: Les Peintures de Qusayr 'Amra. Beyrouth.
- von Berchem, M. 1909/ 1978: Aux pays de Moab et d' Edom. Journal des savants 1909, 293- 411. Réédité dans Opera minora 1, 1978, Genève, 579- 614.
- von Karabacek, J. 1907: Datierung und Bestimmung des Baues. In: Musil, A. 1907a: *Ḳuṣejr 'Amra*, 213- 234. Wien.
- von Mžik, H. 1907a: Karte von Arabia Petraea nach eigenen Aufnahmen von Professor Dr. Alois Musil. Mitteilungen der Kaiserlich-Königlichen Geographischen Gesellschaft in Wien, Vol. 50: 60-64.
- von Mžik, H.. 1907b: Umgebungskarte von Wadi Musa (Petra). Alois Musil, Arabia Petraea, III. Edom. Mitteilungen der Kaiserlich-Königlichen Geographischen Gesellschaft in Wien, Vol. 50: 64-66.
- von Oppenheim, M.. 1939- 68: Die Bedouinen, vols. 1-4. Leipzig and Wiesbaden.
- von Wickhoff, F. 1907: Der Still der Malereien. In: Musil, A. 1907a: *Ḳuṣejr 'Amra*, 203- 207 Wien.
- von Wickhoff, F. 1907: Erklärung der Tafeln. In: Musil, A. 1907a: *Ḳuṣejr 'Amra*, 208- 212 Wien.
- von Worschech, U. 2007: Alois Musil in the Arḍ el- Kerak. Frankfurt am Main
- Walmsley, A. 2007: Early Islamic Syria. London.
- Whitcomb, D. 2000: Hesban, Amman, and Abbasid Archaeology in Jordan. The Archaeology of Jordan and Beyond. Essays in Honor of James A. Sauer. Ed. by Stager -L. Green, J.-Coogan, M. Winona Lake: Eisenbrauns, 505-515.
- Whitecomb, D. 1994: The Misr of Ayla: Settlement at al- Aqaba in the Early Islamic Period, in: King, G.R.D. - Cameron, A. eds.: The Byzantine and Early Islamic Near East. Princeton.
- Wiegand, T. 1932: Palmyra. Ergebnisse der Expeditionen von 1902 und 1917. Berlin.
- Winstone, H.V.F. 2004: Gertruda Bell. London
- Wooley, C. L., Lawrence, T. E. 1914/15: The Wilderness of Zin. Annual of the Palestine Exploration Fund.

Zayadine, F. 1978: The Umayyad Frescoes of Quseir 'Amra. *Archaeology* 31/ 3, 19-29.

Zwettler, M. 1976: Classical Arabic Poetry between Folk and Oral Tradition. *Journal of the American Oriental Society* 96/2, 198-212.

The work contains adjusted part of author's dissertation „Archeologie Předního východu v díle Aloise Musila“ and parts of her contributions „Alois Musil and Islamic Archaeology“, in: *Egypt and Austria III, The Danube Monarchy and the Orient*, Praha, 2006; „Alois Musil and Anthropological Researches of Rwala Bedouins“, in: *Egypt and Austria IV, Crossroads*, Praha, 2008; „Antropologické výzkumy beduínů Rwala“, in: *Krajané ve starém Orientu*, Praha, 2008, and Veselá, M.- Žďárský, P. 2009: Alois Musil and Egypt, in: Lazar, I., Holaubek, J. (eds.) *Egypt's Heritage in Europe. Egypt and Austria V*. Koper: Univerza na Primorskem, 89-129.

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16 SUMMARY

Alois Musil (1868 – 1944): Archaeology of Late Antiquity and the Beginning of Islamic Archaeology in the Middle East

This thesis is a comparative analysis of Alois Musil's theoretical approaches and recording methods, based on historical and archaeological sources and the evaluation of the personality of Alois Musil as an archaeologist in context of scholarly work conducted in the Near East. It compares the results of his pioneering work in the field of archaeology and anthropology with the methods of research of several scholars, within the range of their work, with their system of site documentation and the contributions of their results to contemporary knowledge and revised prospections and excavations.

Musil did not consider himself an archaeologist, nevertheless because of his extraordinary discoveries, documentary and interpretative abilities he is quoted to this day. The work is dealing with Musil's exploration of the Roman limit as well, because some localities classified by Musil and his contemporaries as Roman or even „undoubtedly Roman“were in reality a part of the network of Umayyad residential structures in Bilād al-Shām.

Musil's archaeological discoveries, including his discovery of Quṣayr °Amra, were bound with Bedouins, so this work also deals with Musil as an anthropologist and the development of ethnographic research in the Near East.

The work describes the development of research of Umayyad castles, Musil's hypothesis and the evolution of research, and it contains a database of archaeological sites visited and documented by Musil, the comparison of classification and documentation with the researches of his contemporaries and, where possible, with modern researches.

17 RÉSUMÉ

Alois Musil (1868- 1944): Archéologie de l'Antiquité Tardive et le début de l'archéologie Islamique au Proche-Orient

Cette thèse est une analyse comparée des approches théoriques et des méthodes de recensement élaborées par Alois Musil. Elle se fonde sur des sources historiographiques et archéologiques, ainsi qu'une analyse de la personnalité d'Alois Musil en tant qu'archéologue, dans le contexte des travaux scientifiques conduits au Proche-Orient. Cette thèse compare les résultats de ses travaux pionniers dans les domaines de l'archéologie et de l'anthropologie, avec les méthodes de recherche élaborées par plusieurs autres chercheurs, ainsi qu'avec leurs systèmes respectifs permettant la documentation des sites et leurs apports à la connaissance contemporaine.

Bien que Musil ne se considérait pas lui-même comme un archéologue, ses découvertes extraordinaires, de même que ses compétences en matière de documentation et d'interprétation ont permis à ses écrits de traverser le temps et d'être toujours abondamment cités aujourd'hui. Toutefois, ce travail aborde également les limites de l'exploration de sites supposés Romains par Musil, dans la mesure où un certain nombre de lieux, classifiés comme Romains voire 'indubitablement Romains', n'étaient en réalité qu'une fraction du réseau résidentiel Omeyyade à Bilād al-Shām.

Par ailleurs, les découvertes archéologiques de Musil, en particulier celle de Quṣayr^cAmra, furent étroitement liées aux Bédouins. A ce titre, cette thèse aborde également le versant anthropologique de son œuvre, et sa contribution au développement de la recherche ethnographique sur le Proche-Orient.

Enfin, ce travail décrit le développement des recherches sur les forteresses Omeyyades, ainsi que l'évolution des hypothèses et des méthodes développées par Musil. Elle comporte une base de données incluant les sites archéologiques visités et documentés par celui-ci. Elle repose aussi sur la comparaison des classifications et des recueils de données élaborés par Musil, avec les recherches de ses contemporains et, lorsque cela est possible, avec les travaux les plus récents.