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Martina Vesela

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**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**

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University, Prague

Date of Defence: June 2014

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:

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Contents

1	INTRODUCTION	11
1.1	<i>Aims and scope</i>	11
1.2	<i>The reason for the choice of this topic</i>	12
1.3	<i>Sources of the work.....</i>	14
1.4	<i>Brief content of the work</i>	16
1.5	<i>Method of presentation.....</i>	18
2	THE ORIGINS OF THE EUROPEAN INTEREST IN THE NEAR EAST	19
2.1	<i>The first journeys from the Czech lands to the Near East and the origins of scientific explorations of Czechs in the Near East.....</i>	19
2.2	<i>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.</i>	23
2.2.1	Max van Berchem (1863-1921).....	25
2.2.2	The beginning of German archaeological engagement in the Near East	26
2.2.3	The development of priorities in the archaeological research in the Near East and in the Islamic archaeology	28
2.2.4	K. A. C. Creswell (1879 – 1974)	30
2.2.5	Friedrich Sarre (1865-1945) and Ernst Herzfeld (1879-1948).....	31
2.2.6	Gertruda Bell (1868-1926).....	34
2.2.7	T.E. Lawrence (1888-1935).....	35
2.2.8	A. Musil a T. E. Lawrence.....	37
2.2.9	The origins of aerial archaeology in the Near East	39
2.2.10	Antoine Poidebard (1878-1955)	39
2.2.11	The development of archaeology in the Near East after the First World War	44
2.2.12	Jean Sauvaget (1901-1950).....	44
2.2.13	The development of subsequent research in Islamic archaeology up to present times (in brief).....	45
3	THE STUDIES AND RESEARCH JOURNEYS OF A. MUSIL.....	48
3.1	<i>Musil's arrival to the Near East, École Biblique, the first school expedition to Egypt and the origins of his studies of archaeology.....</i>	50
3.2	<i>Transfer to Université St. Joseph in Beirut</i>	55
3.3	<i>Musil's travels to the Sinai Peninsula.....</i>	58

3.4	<i>The first research travels in the Near East</i>	61
3.5	<i>The journey to Musil's life's discovery</i>	62
3.6	<i>Musil's planned cooperation with Brünnnow</i>	64
3.7	<i>Musil's essential monographies published in Vienna</i>	66
3.8	<i>The summary of Musil's journeys in 1908 – 1917</i>	66
3.9	<i>Musil's activities after the First World War</i>	68
3.10	<i>Musil's publication activity after the First World War</i>	70
4	MUSIL AS AN EXPLORER AND A CREATOR OF DOCUMENTATION	75
4.1	<i>Musil and photodocumentation</i>	78
4.2	<i>Musil as a cartographer and his documentation of monuments</i>	85
4.3	<i>Musil's cooperation with architects and the interest in modern archaeological research</i>	90
4.4	<i>Quality of Musil's documentation</i>	98
4.5	<i>Advantages of connections of Musil's archaeological and cartographic research with travelling with Bedouins</i>	101
5	ALOIS MUSIL IN THE FIELD OF ANTHROPOLOGY	103
6	ANTHROPOLOGICAL RESEARCHES OF BEDOUINS	110
7	MUSIL AND KEY ARCHAEOLOGICAL SITES – MUSIL'S THE MOST EXPLORED SITES IN DETAIL	133
7.1	<i>Quşayr 'Amra</i>	133
7.1.1	History of discovery - Musil's great discovery and initial problems connected with it.....	133
7.1.2	Musil's description of Quşayr 'Amra	142
7.1.3	Monumental publication about Quşayr 'Amra from 1907	144
7.1.4	The documentation and problems of the publication	145
7.1.5	Chronology of Quşayr 'Amra and the initial problems with its dating	149
7.1.6	Modern explorations in Quşayr 'Amra - Researchers in Quşayr 'Amra after Musil	159
7.1.7	Restoring interventions	162
7.1.8	Other publications about Quşayr 'Amra.....	162
7.1.9	Recent researches in Quşayr 'Amra	164
7.1.10	Present project of reconstruction and research in Quşayr 'Amra..	166
7.2	<i>Al-Ruşāfa</i>	167

7.2.1	History of the site.....	168
7.2.2	Survey, documentation and publications of A. Musil	169
7.2.3	Description of the site according to Musil.....	170
7.2.3.1	Basilica of St Sergius with three naves.....	172
7.2.3.2	Basilica with five naves	174
7.2.3.3	Martyrion or the central church	174
7.2.3.4	The church extra muros	175
7.2.4	Significance of the site.....	175
7.2.5	Revisional explorations and new projects	176
8	MUSIL AND THE Umayyad CASTLES.....	178
8.1	<i>Phenomenon of the Umayyad castles</i>	<i>178</i>
8.2	<i>The development of the hypotheses about the function of the Umayyad castles from Musil up to the present.....</i>	<i>179</i>
9	MUSIL AND THE EXPLORATION OF ROMAN <i>LIMES</i>.....	185
10	THE ARCHEOLOGICAL DATABASE - ITS STRUCTURE AND DESCRIPTION	190
11	CONCLUSION	193
11.1	<i>Evaluation of the Quality of Musil's Documentation.....</i>	<i>193</i>
11.2	<i>Evaluation of Analyses by Musil Documented Monuments</i>	<i>195</i>
11.3	<i>The evaluation of the scientific research and its contribution for the contemporary science</i>	<i>199</i>
11.4	<i>Musil's aims, methodology and a shift of Musil's researching interests in the Near East</i>	<i>201</i>
11.5	<i>Musil's significance for the Islamic archaeology</i>	<i>202</i>
12	EPILOGUE	204
13	SOURCES.....	212
14	LITERATURE	213
15	LIST OF FIGURES	227
16	SUMMARY	231
17	RÉSUMÉ	232



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 prospections 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's degree on 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 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 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 times there were also

published reports and documentation from the first systematic archaeological exploration of an Islamic sites in the Near East – Samarra by Sarre-Herzfeld, and the archive of Musil's contemporary and researcher Gertrude 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 Foreign Office Archive in The National Archives and Alois Musil papers, correspondence 1922-1933 in Charles R. Crane Archive.

In autumn 2010, I flew to Beirut with the aim of visiting the Archive of the Université 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 *limes*. 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 and 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 sites.

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.

Transcription of names, toponyms and arab words is written on the base of system of *Encyclopaedia of Islam* with some common modifications (j instead of đj, kh and sh instead of kh and sh and q instead of q).

Geolocation coordinates are in system WGS 84 (decimal dergees of latitude/ longitude).

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 Martin Kabátník, Bohuslav Hasištejnský z Lobkovic, Voldřich Prefát z Vlkanova, Kryštof Harant z Polžic and Bezdržic 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 the 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 Niniveh. 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 inscription and also the procedure of making a 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 prints“:

„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 texts 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 periodical „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 later 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 for lack of authorisation. 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 his conviction that Bedřich Hrozný should take an qualified 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, Château Staré 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 °Amra, 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 to 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 cuneiform texts, of which he obtained during this expedition almost one hundred. After his return he published them in a work of 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 Western civilisation the 22nd of August 1812 by Swiss explorer and Orientalist Johann Ludwig Burckhardt in the disguise of a Muslim pilgrim. This town reached the peak of its development from the 3rd century BC till the 4th century AD, 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 structures dated from before Petra's incorporation into the Roman Empire was constructed. In the course of time the importance of the town started to decline. The centre of trade became Palmyra. At the beginning of Islam the town disappeared from the awareness of

Western civilisation. Mamluk sultan Baybars was in 1276 in all probability the last, who has seen it. Only in 1812 Johann Ludwig Burckhardt, who previously during his two year 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 gained entry 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 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 the Decapolis in 1806 and William 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 the 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 Akkadian, 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 a 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 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 in archaeological explorations in the territory of the Ottoman Empire, especially in the regions of Iraq and Levant. Their effort to invest in explorations where explorers from France and Great Britain had 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. 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 institute was not, just as the 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,“ 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 Koldewey 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 Qaşayr 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 sondage 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 assesment 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 for both 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 inscriptions 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 is defined as the history of humankind in Islam, viewed primarily through their material remains, with textual sources as a secondary support. 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, and that of the Abbasids in Iraq and North Africa.

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 the illogical conclusions of his contemporaries, as for example those of the 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 archaeology 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 an 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 ʿAmra, 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 ʿAmra (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.

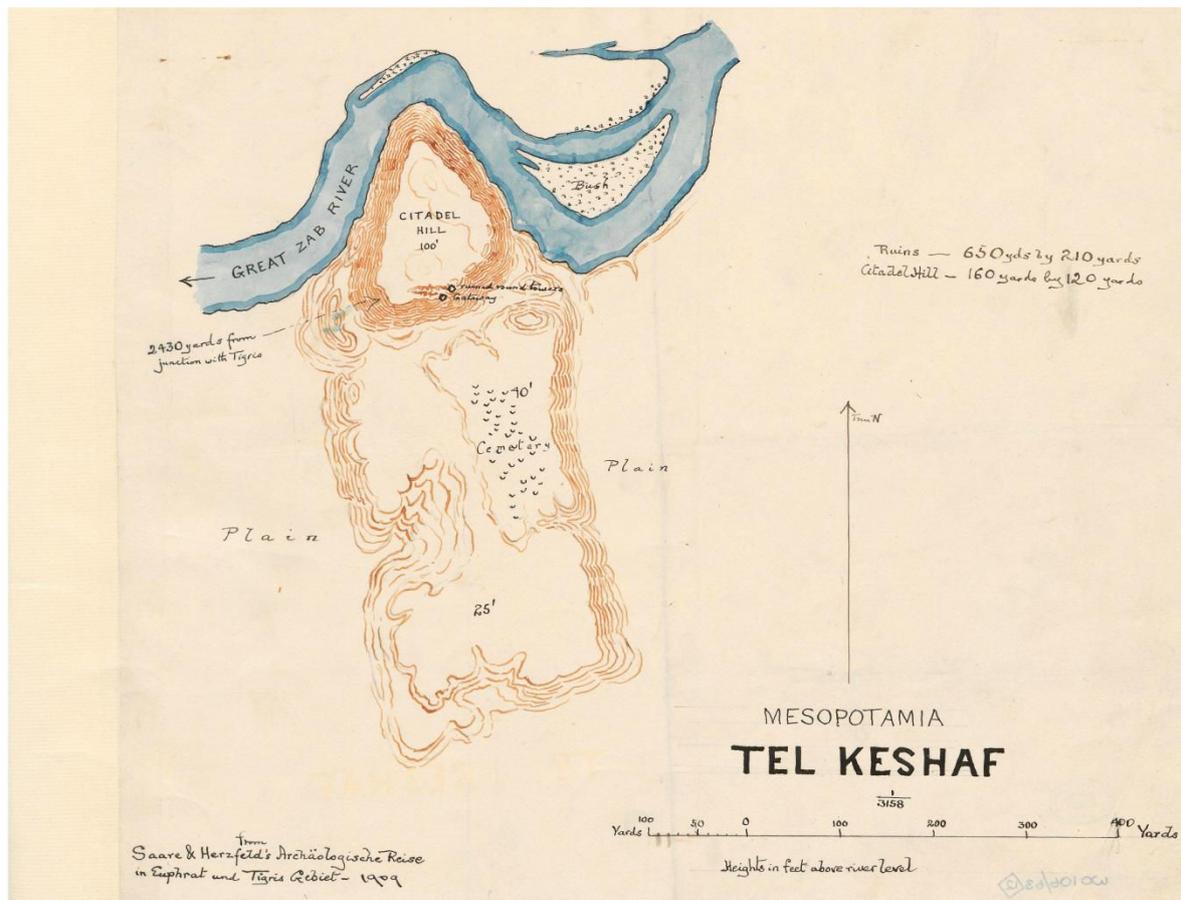


Fig. 1 Draft of Map from Sarre-Herzfeld expedition, NA-MFQ 1/442 002 Sarre-Herzfeld- Archäologische Reise 1909- Tell Keshaf –Mesopotamia.

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 Beylié 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 plan in scale 1:25 000 was never published, as it was the plates for printing that were 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).

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-Khalifa, 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 Qaṣayr °Amra, postscript about findings of figural frescoes from °Abbasid 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. Besides her work in the Baghdad Antiquities Museum 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 Quşayr ʿAmra. 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. Besides the exploration of the

castles, he gathered during his stay in Syria also a number of Hittite seals. Interest in the Hittites was aroused in him by Dr.Hogarth who occupied himself with Hittite civilization. The young student caught his attention by exemplary organisation 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 and 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 Arabian desert and the spiritual and academic world of the Central Europe. Musil, originally rather a biblicist and philologist without 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 the 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 in Arabia as such. In Arabia nobody did 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 its 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, 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 the desert castle of al-Azrak, formerly explored by Musil, Musil's Bedouin friends, now fighting on the British side, were destroying out of boredom the frescoes and mosaics in Qaşayr ʿAmra, which Musil discovered twenty years previously (Fowden 2004, xxi; Sklenář 1989, 402)

2.2.9 The origins of aerial archaeology in the Near East

Great 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 1930s.

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 the upper Tigris in northern Mesopotamia. This region covers an essential section of the 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 *La Trace de Rome dans le désert de Syrie. Le Limes de Trajan à la conquête arabe, Recherches aériennes* (Poidebard 1934). Like the most of the pioneers of the aerial archaeology, Antoine Poidebard was by his original profession not a trained archaeologist. His life career was taking place, in essence, in exactly the reverse direction to that 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 professor of the Jesuit University of St. Joseph in Beirut in 1924. In 1925 he was commissioned by the French Geographic Society to make a 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 materials. He developed the technique which used light coming from the opposite side at rather low height. During a trial flight above the desert to the north of the Euphrates he discovered an ancient road about sixty kilometers long. He did also an aerial survey of the „Via Diocletiana“. He was dealing mainly with the survey of Roman and Byzantine monuments, mapping of Roman roads and strongpoints of the Roman *limes*, but he covered during his surveys also other periods. In 1934 Poidebard completed the survey of the *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 a survey of „the Strata Diocletiana“ between Palmyra and Dumayr, where relatively well preserved Roman monuments were located. Similar to the most previous surveyors, he wasn't the pioneer because a 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 Nordiguan states at the time, when Poidebard surveyed this territory Dunand's „Strada“ was not yet published (Nordiguan 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 of Khān al-Manqūra, which has two main gates opposite to one another (apart from posterns at the base of circular towers).

Musil depicted both gates as open (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 méthode¹⁴, 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 the historian and epigraphist René Mouterd on interpretations of inscriptions of which he made copies and prints during the survey. Nordiguan 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-Bādia“ 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 Rome“ became an important source for archaeologists who from 1960s 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,“ as was 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 the 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 1970s. Among researchers contributing to the knowledge of Roman monuments in this region we can name at least 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 nationale 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 pratique 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 of Aleppo and Damascus. Beside that, he was one of the

successors of Musil in the research on Umayyad castles (Savauguet 1934, 1967). He worked also on the development of *suqs* 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, Genequand 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- Mafjar ('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 research, excavations of different tell-sites at the same time uncovered major Islamic period remains. One of these tells named Hisbān was dug out from 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 archaeologists 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 °Anjār 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 1980s 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 Genequand (Genequand 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- Bādia, 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 in 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 with 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. Bělk, 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, Château 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 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 the 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.

At the École pratique d’études bibliques (current name is École Biblique) in Jerusalem 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.”

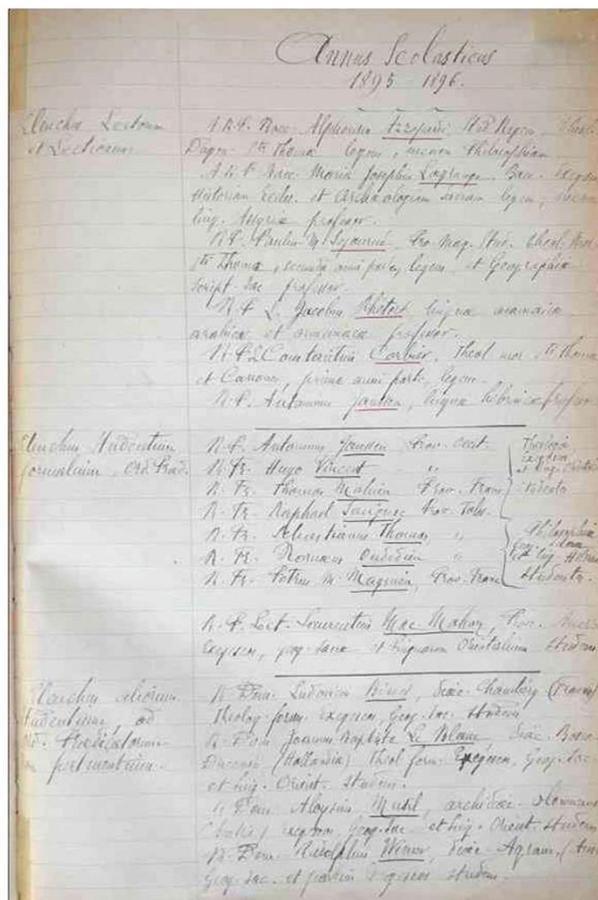


Fig. 4 École biblique, Class-book, school year 1895/1896 – photo by Břetislav Tureček.

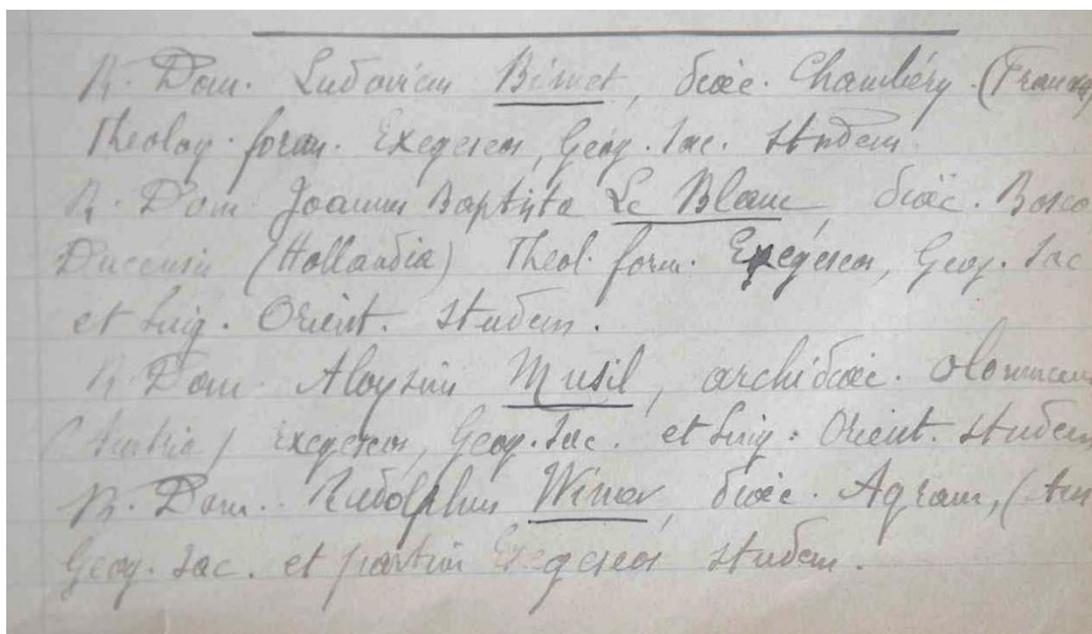


Fig. 5 During his second school year (1896/1897) at École biblique in Jerusalem Musil took lectures on archaeology - École biblique, Class-book, school year 1895/1896 – cut out from the photo above; the name of Aloysius Musil is on the fourth line from the bottom.

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 excavated,... 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 turned down Jerusalem´s, 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.

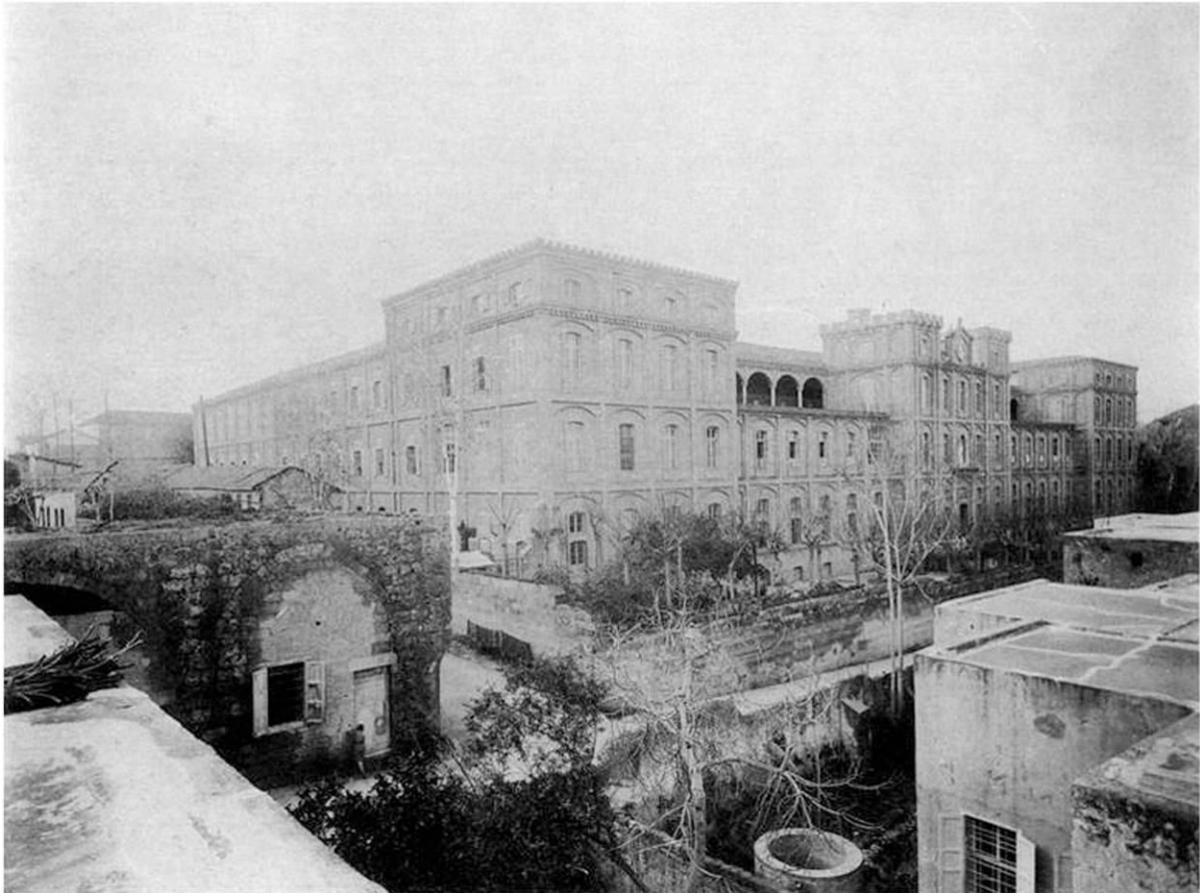


Fig. 7 Université Saint-Joseph, Beirut.

When archbishop Theodor Kohn after complaints of Dominicans from École biblique stopped the financial support to Musil, 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) Fate gave to Musil an unexpected

answer: in March 1898, Musil initiated the key expedition of his life – after two months he entered as the first European into the fresco-decorated interior of the Umayyad Quṣayr ‘Amra... Nevertheless, it was close and the merit for the discovery 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 travel in Orient was made possible for 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 prints 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 sealed letter of recommendation, Ludvík Musil [LOUDOBIKOS MOUZIL – !], 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 back from travels, which took place from 1896 until 1915 hundreds of copies of Nabatean, Greek and Arabic inscriptions, drawings, ethnographic records, photographs, samples of minerals and botanic findings. He explored the route of the Roman road and on the basis of inscriptions discovered, he determined its further direction (Drápal 1972, 16-18; Drápal 2005b, 14-18).

One of the first Musil's journeys to Ma'dabā. 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 the Ottoman fortified station of 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 Quṣayr '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 the Umayyad Quṣayr ‘Amra. Already during his previous journey Musil learnt about the ruins of Qaṣr al- Ṭūba and about the Umayyad castle Quṣayr ‘Amra, whose interior should be decorated by paintings and inscriptions according to description of a Bedouin sheikh. 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- Mushattā and 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-Mashriq 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 Vienna, 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 21st 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 *Mushattā*...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 ʿAmra in 1907 in Vienna under the title “*Ḳuṣejr ʿAmra*” (see more in the chapter „The documentation and problems of the publication“).

In the same year his extensive work about Quṣayr ʿAmra 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 *Wādī 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 ʿān and al-ʿUlā (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.

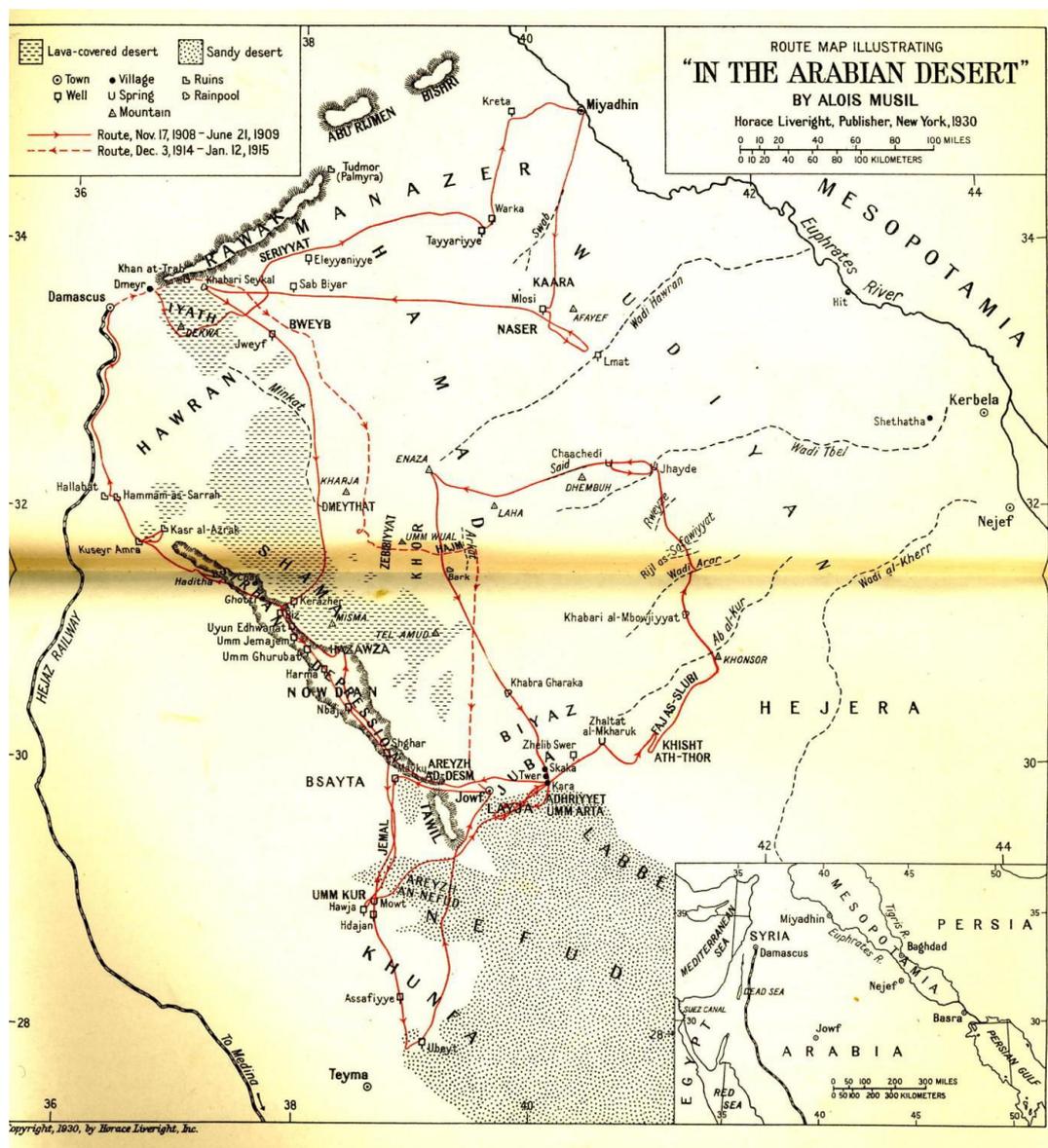


Fig. 9 The map of Musil's routes (1908- 1914).



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 nad 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 onle 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 ministeries 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

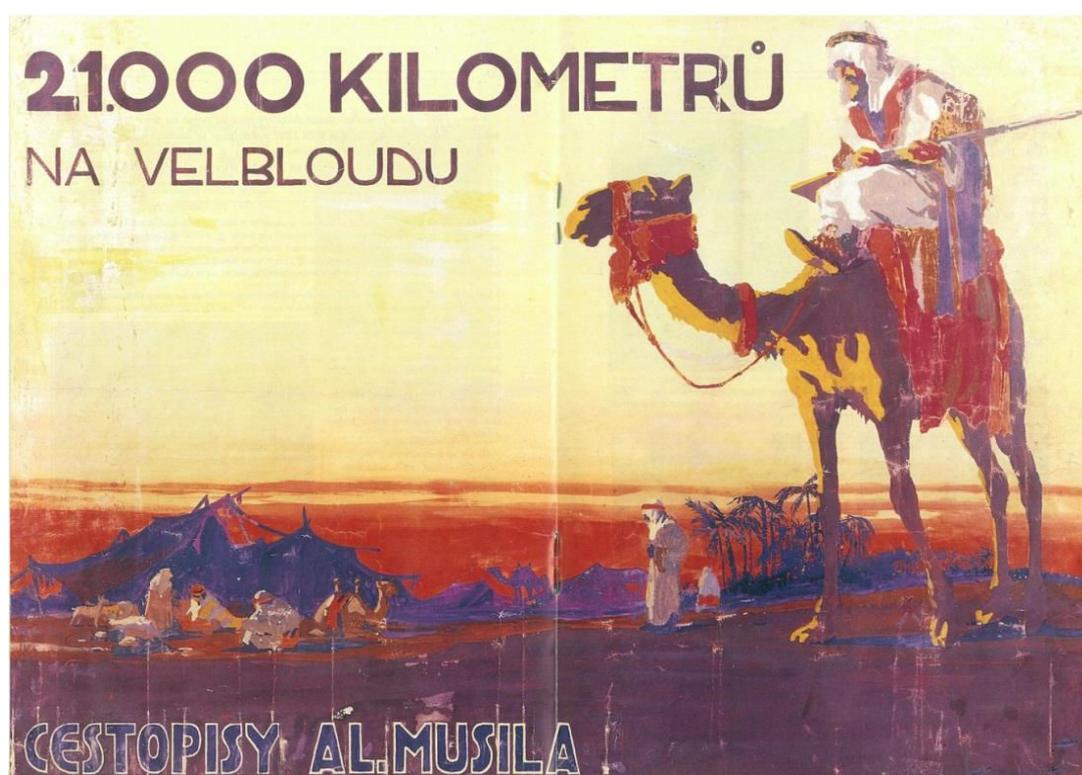


Fig. 12 An advertising poster supplemented Musil's publications of adventurous books.

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).

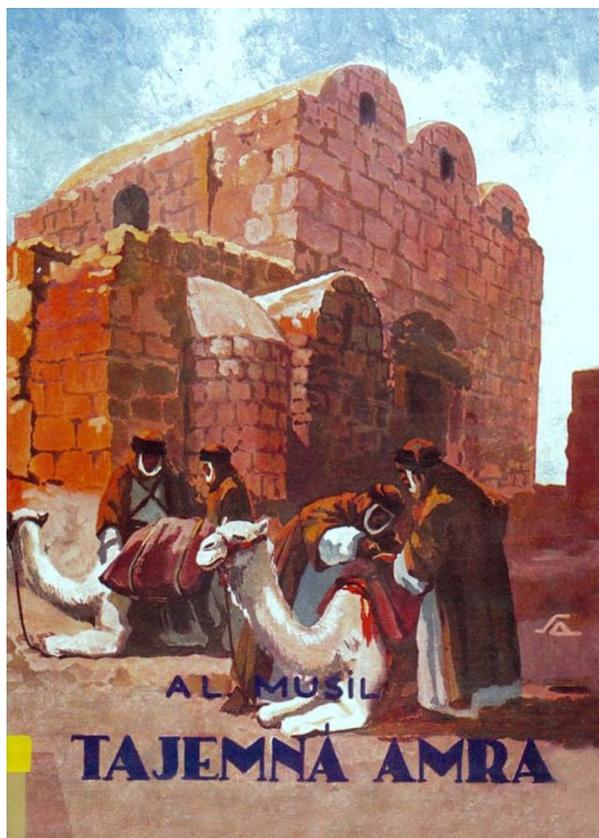


Fig. 13 Musil's book „Tajemná Amra“, published in 1932.

This travelog describes Musil's expeditions to Umayyad desert castles, especially his discovery of Qusayr 'Amra in 1898. Plot of travelog starts at the moment, when Musil heard from Bedouins for the first time about 'Amra. The story continues by describing of Musil's meeting with Banū Sahr tribe, raids, history of the tribe, it's customs and manners and various stories of members of this tribe. At the end he briefly summarizes the history of Arabia and religions in this region. The book is supplemented with Musil's photos.

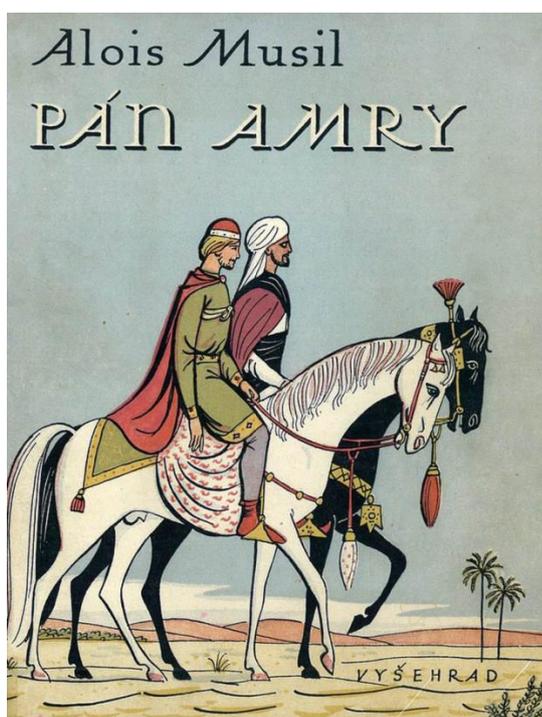


Fig. 14 Musil's book „Pán Amry“, published in 1948, illustrated by V. Fiala.

Novel *The Lord of 'Amra* describes Syrian society in the Middle of the 8th century under the rule of Caliph Hishām and his successor prince al- Valīd II. It's a story of a young builder and painter Jurata who traveled from region of Bohemia to Great Syria and entered into service of Caliph al- Valīd II. for whom he built „desert castles“, including famous Qaşayr 'Amra. The book describes simultaneously political situation in Arabic Empire at that time, together with differences between life in cities and life of nomadic Bedouin and also coexistence of Christians and Muslims on the Near East. The book also describes in detail frescoes in Qaşayr 'Amra.

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).

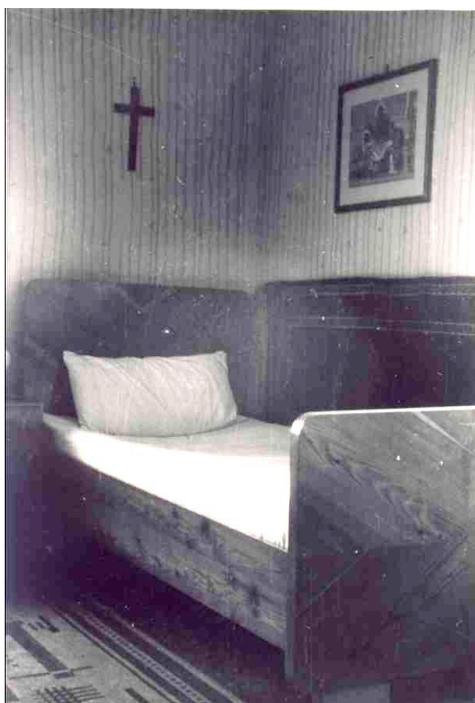


Fig. 15 Musil's death bed in the homestead in Otryby, Private archive of Musil's family.

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 didn'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 with a local rabbi and the Arabic at a local typesetter. 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 Ma‘dabā and its environs in 1896 he became aware of the need to study the method of cartography and documentation in places visited, of which most were not in maps, ruins, burial sites and Roman military fortresses „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).

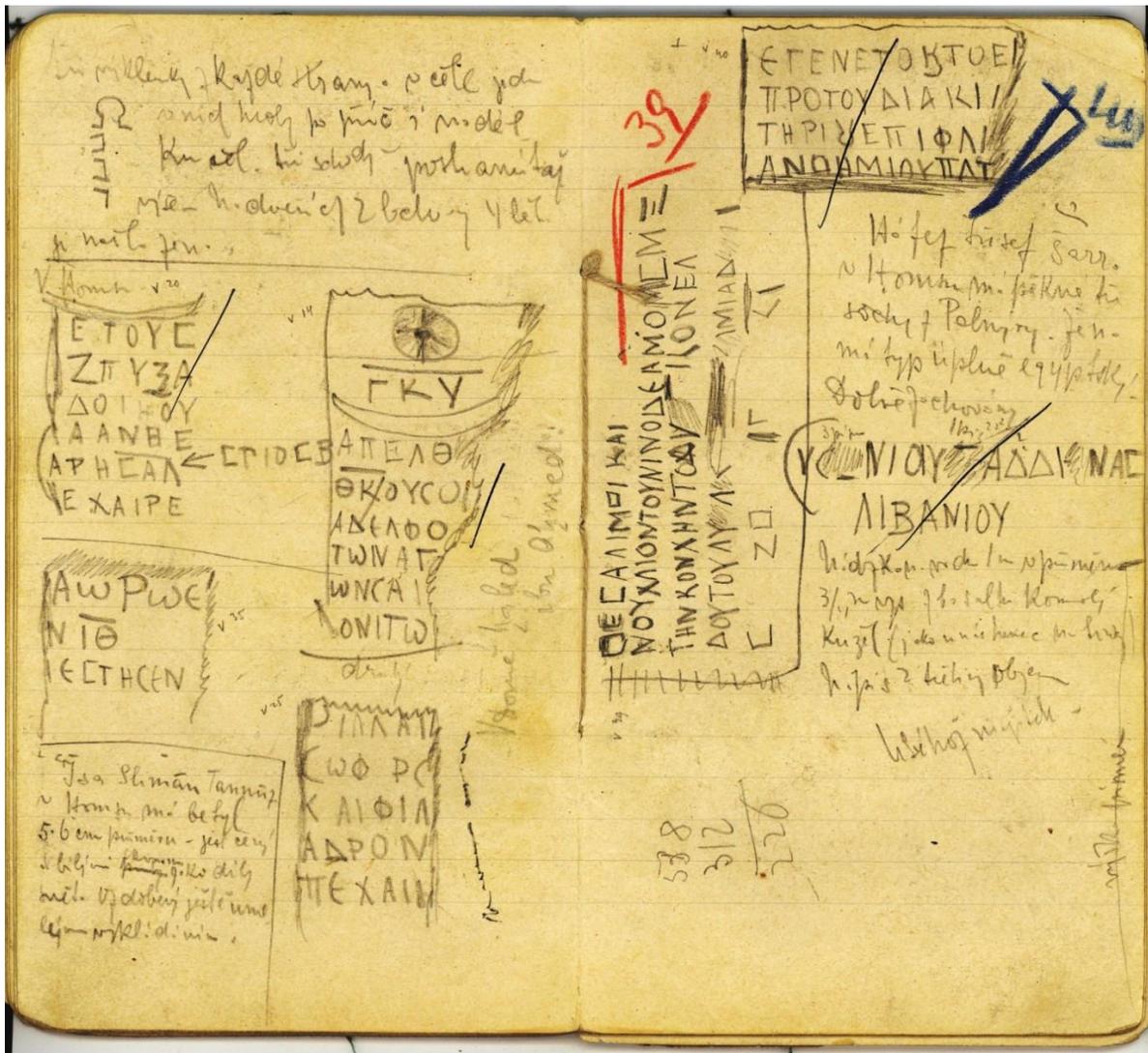


Fig. 16 Inscriptions in one of the oldest Musil's diaries, Musil's papers in the Literary archive of The Museum of Czech Literature, Château Staré Hradý, fond of Alois Musil, 2-B.

In regard to making copies of inscriptions for the Viennese Academy court councilor David Heinrich Müller repeatedly complained of 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).

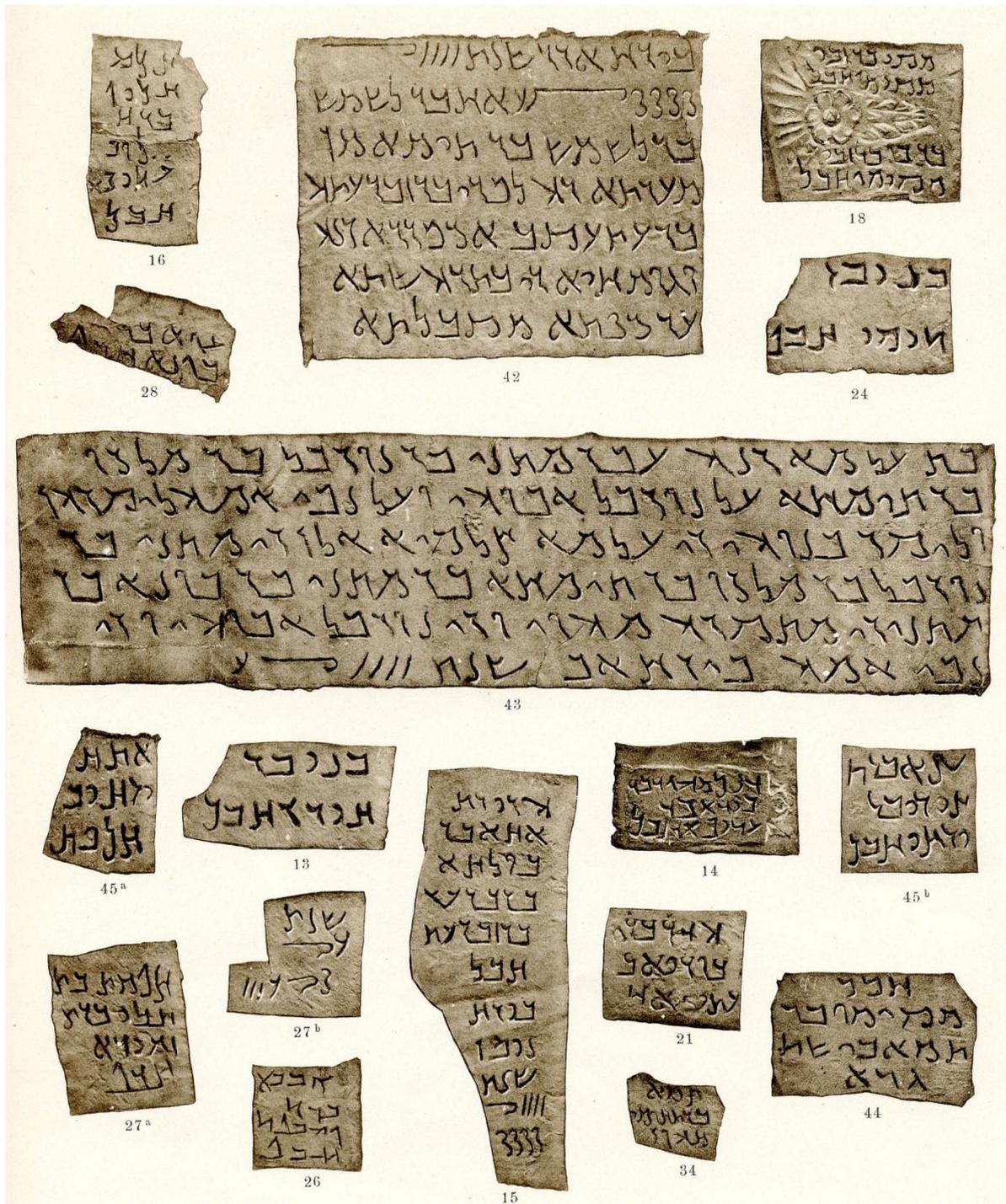


Fig. 17 Inscriptions collected by Musil from above mentioned publication.

In further research, he intended to focus on places which were not sufficiently or not at all yet explored. For this reason, he avoided the 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 Quşayr °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 a 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 expeditions 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 Frescoes 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 Nordiguan 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, Château Staré Hradý 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 Quşajr ‘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 soiled frescoes. Fowden believes, that if Musil had supplemented his publication by fitting and high-quality photographs of frescoes, Qaşayr 'Amra would have gained 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 exposure. 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 Vyškov there are at the present time three of Musil's cameras. The first two Museum acquired in 2008 together with an

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.

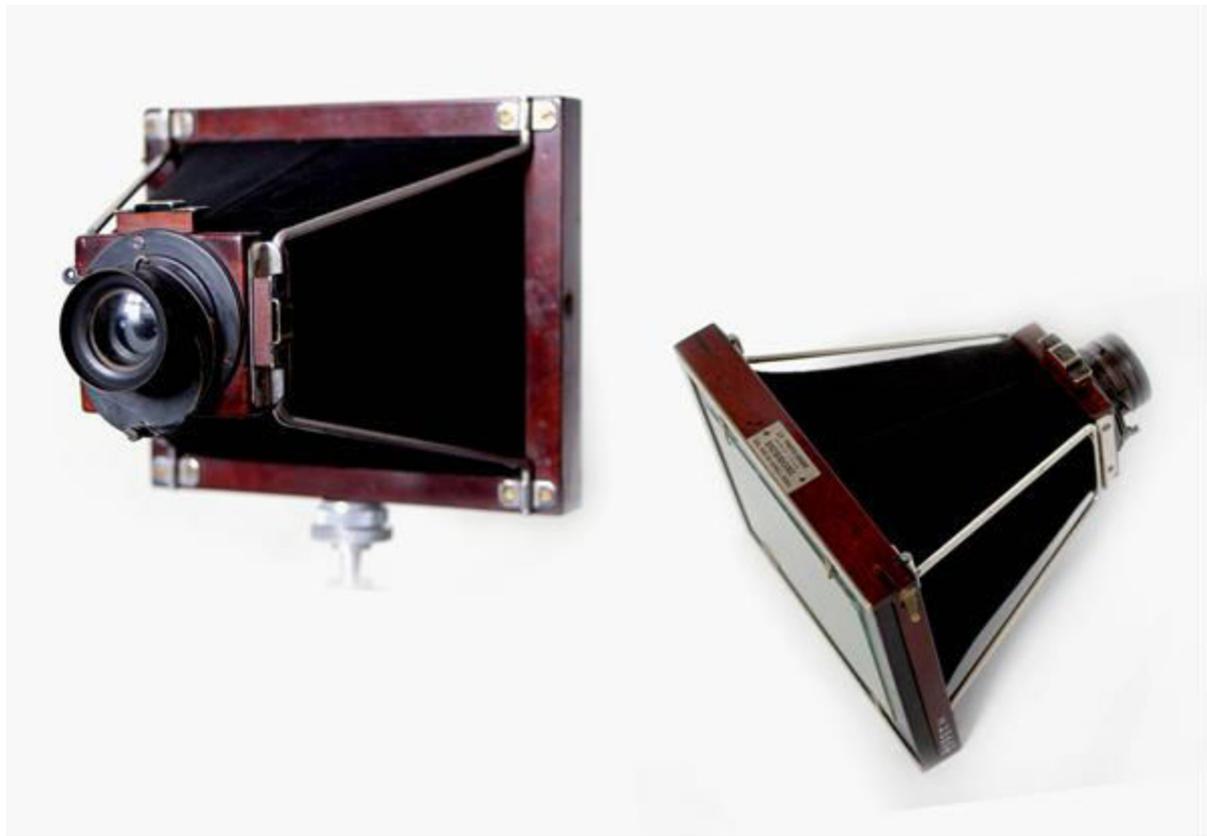


Fig. 20 Musil's camera „Dubroni“, Collection of Alois Musil in the Museum of Vyškov region, Vyškov, photo by M. Veselá.

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 the taking of pictures of such near objects as macrocameras did. These were constructed for making pictures of details.

(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 his life in these regions, but fortunately every time he escaped without 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 in getting it back thanks to friendship with important members of some Bedouin tribes, but for example, just from this reason nobody believed in the unique discovery of Quşayr ʿAmra, because the attack of one hostile Bedouin tribe prevented him from making documentation and to present to European researchers" proofs about the existence of this unique monument (for more see the chapter „Quşayr 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 Affaires, Sir Edward Grey, turned to Musil with request for help in the det ermination 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.

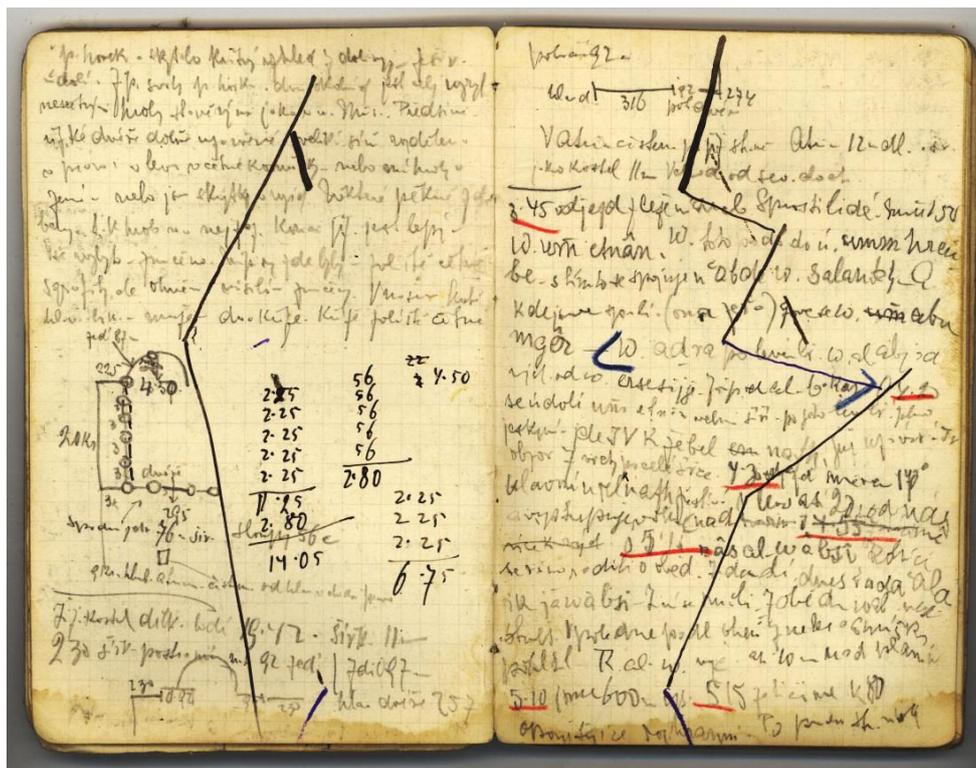


Fig. 23 One of the first Musil's diaries, Musil's papers in the Literary archive of The Museum of Czech Literature, Château Staré Hradý, fond of Alois Musil, 2-B.

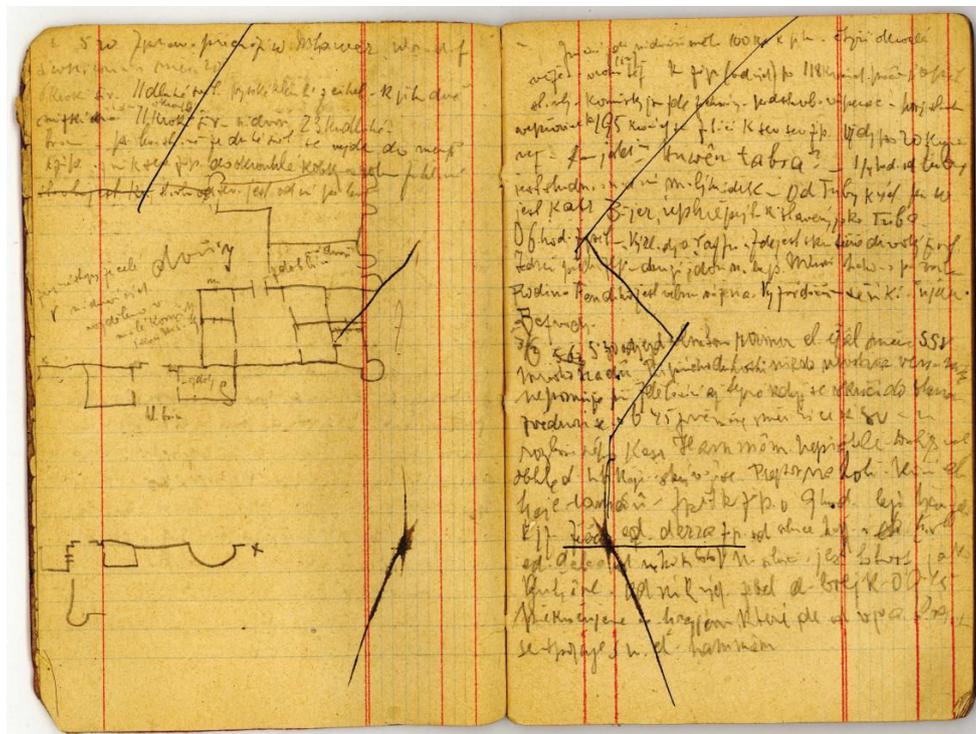


Fig. 24 One of the first Musil's diaries, Musil's papers in the Literary archive of The Museum of Czech Literature, Château Staré Hradý, fond of Alois Musil, 2-B.

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 on 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 Astromm. Theodolit Marke 4 1/2'

Anvisierter Punkt	Libelle		Ablesung		Mittel	Zenithdistanz
	Obj.	Ok.	Limbus	Nonius		
Höhe des Instrumentes.						
Ma'an	8	3 ⁿ	86° 30' 0"	0	86° 30' 0"	
" "	2	9 ^l	86° 0' 4"	0	86° 5' 0"	86° 18' 0"
G. Attmār	8	8 ⁿ	84° 15' 3"	0	84° 16' 30"	
" "	3	8 ^l	83° 45' 4"	0	83° 50' 30"	84° 3' 30"
abu Kujra	9	2 ⁿ	79° 45' 1"	0	79° 42' 30"	
" "	8	8 ^l	79° 15' 8"	0	79° 21' 30"	79° 34' 30"
Nirān	8	3 ⁿ	82° 30' 2"	0	82° 31' 0"	
" "	8	8 ^l	82° 0' 4"	0	82° 5' 0"	82° 15' 0"
Halck	9	2 ⁿ	87° 30' 5"	0	87° 32' 30"	
" "	2	9 ^l	87° 0' 9"	30"	87° 4' 30"	87° 15' 30"
Barismūh B	8	3 ⁿ	75° 15' 10"	0	75° 23' 0"	
" "	3	8 ^l	74° 45' 11"	0	74° 52' 30"	75° 10' 15"

Höhe des Instrumentes. 1.5 m

Theodolit Marke 4 1/2'

Korrektur d. Fernsichtweite

Kreislage rechts - 13'

" links + 13'

Reingewinnung = Z. D.

Zwecktheodolit, v. Tischhand

Zenithdistanz: Kreis. L-O

Korrektur d. Z. P. = 0

Kreislage R. Z. P. = Z. P. - Leistung

Kreislage L. Nm. I. Z. P. = Leistung

$$\begin{array}{r} 260 \\ 7 \ 30' \ 13' \ 45'' \\ 2 \ 35' \ 28' \ 45'' \\ \hline 295 \ 35' \ 48'' \\ 260 \\ \hline 35 \ 46' \ 45'' \end{array}$$

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 stations distinguishable from afar located 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 at a distance of 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).

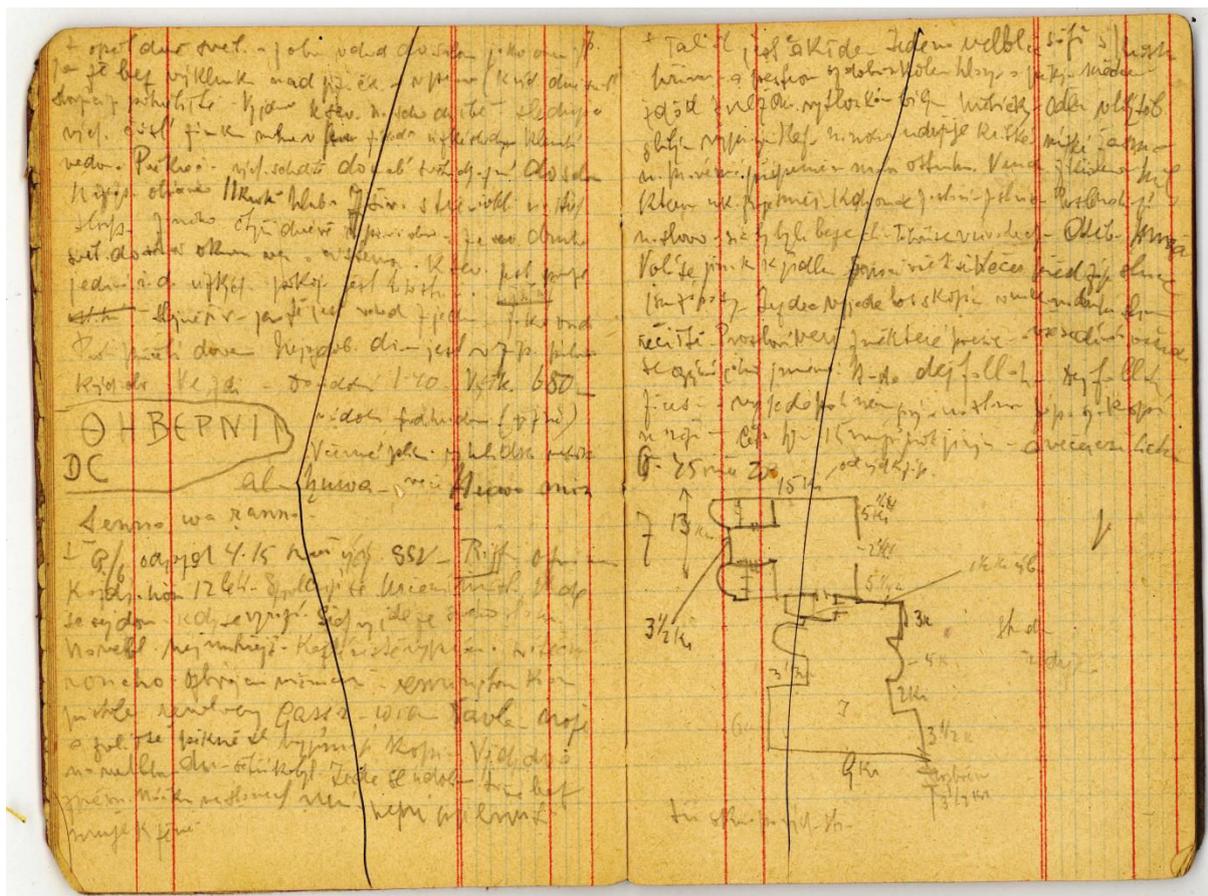


Fig. 26 Probably first sketch of Amra in one of the oldest diaries, Musil's papers in the Literary archive of The Museum of Czech Literature, Château Staré Hradý, fond of Alois Musil, 2-B.

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);

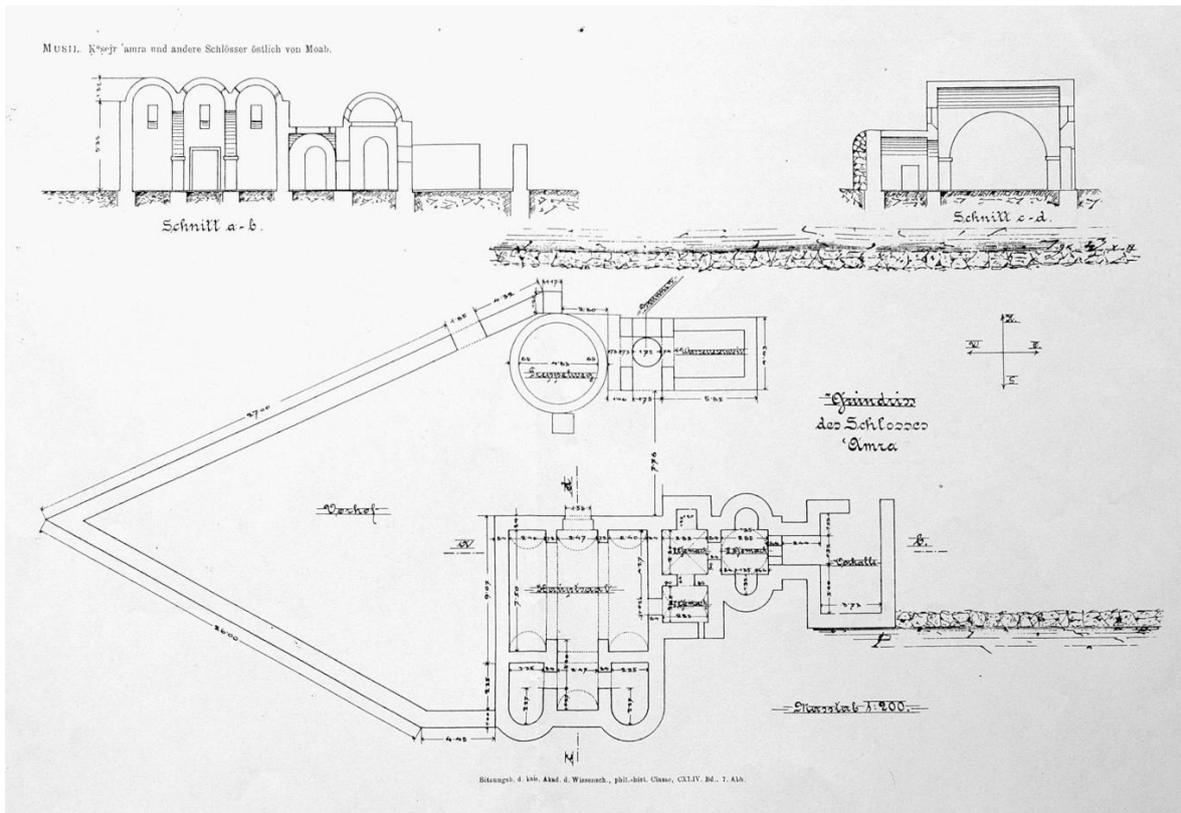


Fig. 27 Pallat's plan of Qusayr 'Amra, published in: Musil 1902b.

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).

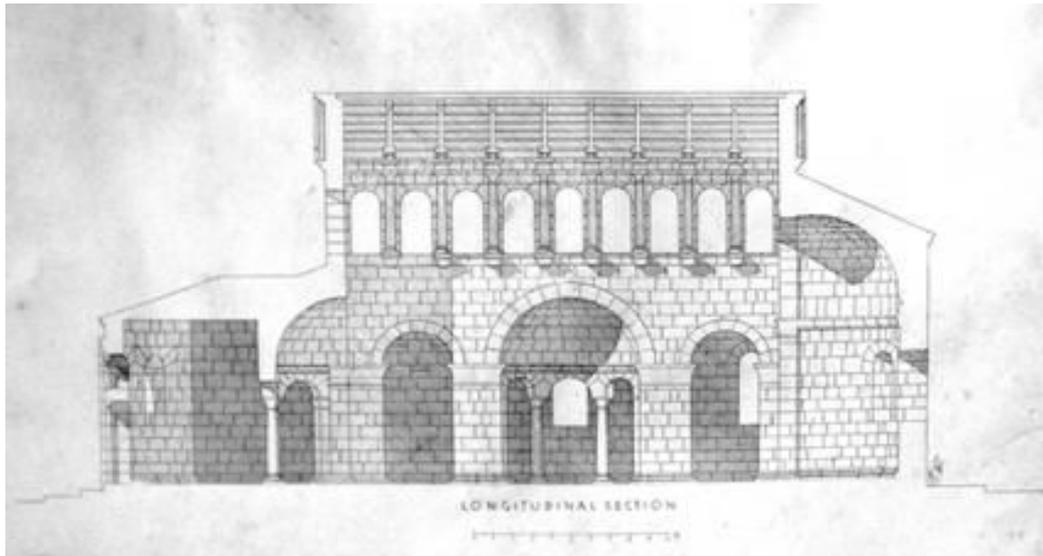


Fig. 28 Mendl's reconstruction of the Martyrium in al- Ruṣāfa, The National Technical Museum in Praha, fond Mendl Antonin.

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.

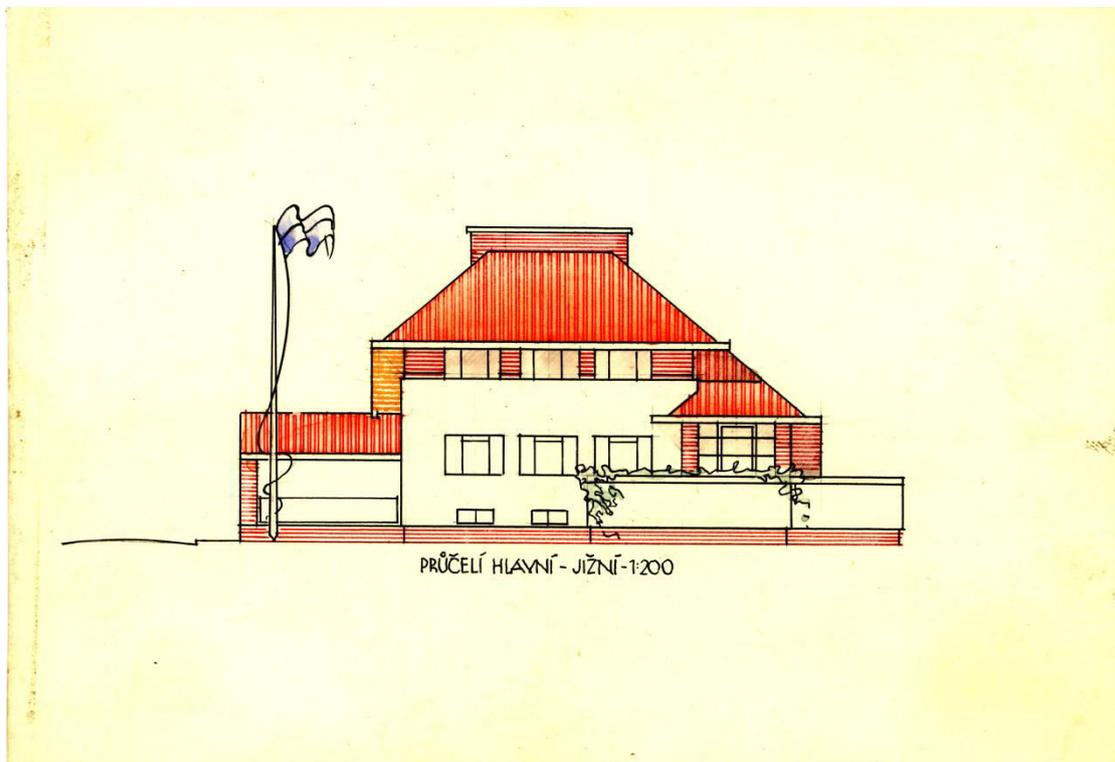


Fig. 30 Mendl's project of Musil's villa in Kosova Hora, The National Technical Museum in Praha, fond Mendl Antonin.

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.

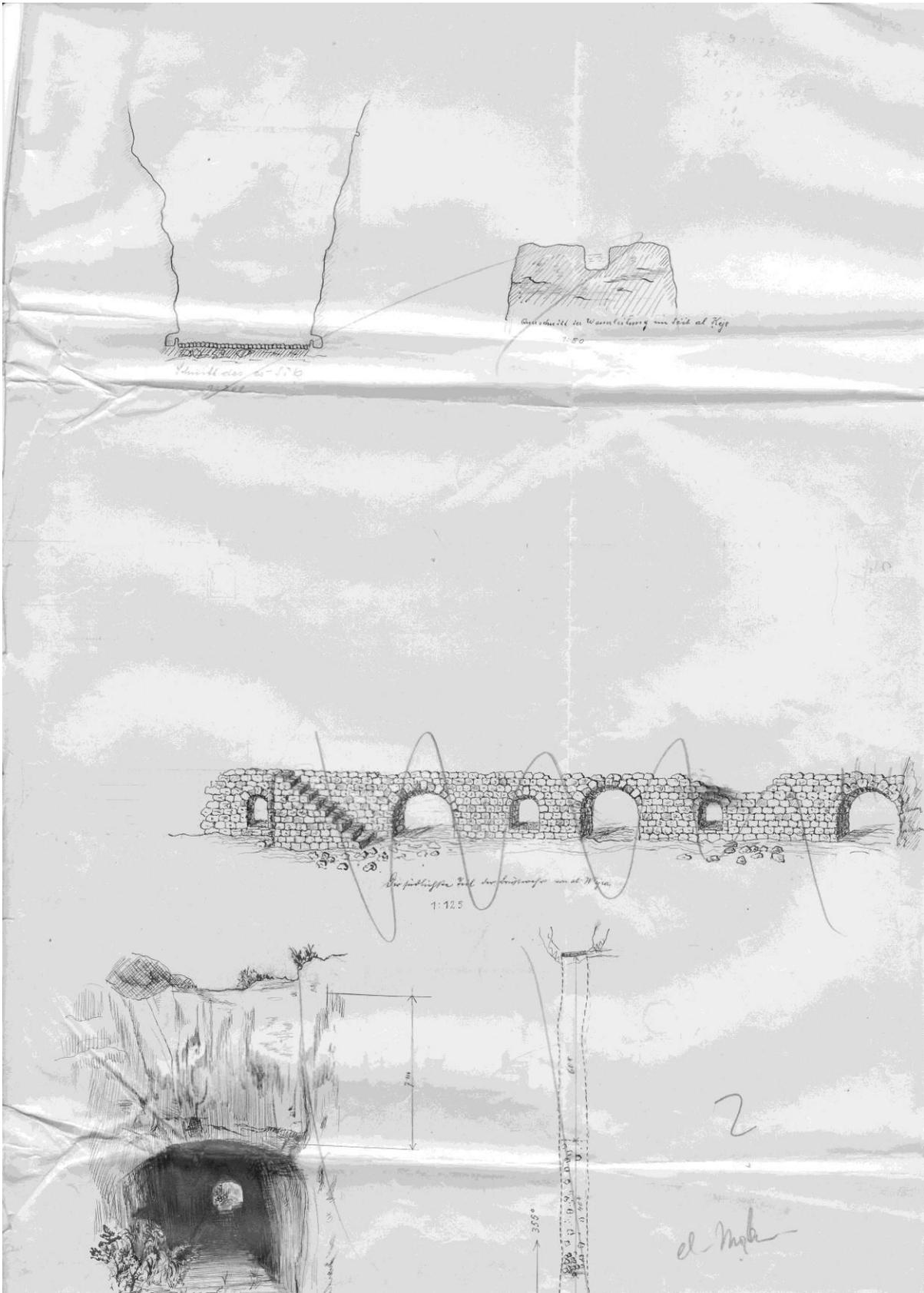


Fig. 33 Collection of Alois Musil in the Museum of Vyskov region, Vyskov.

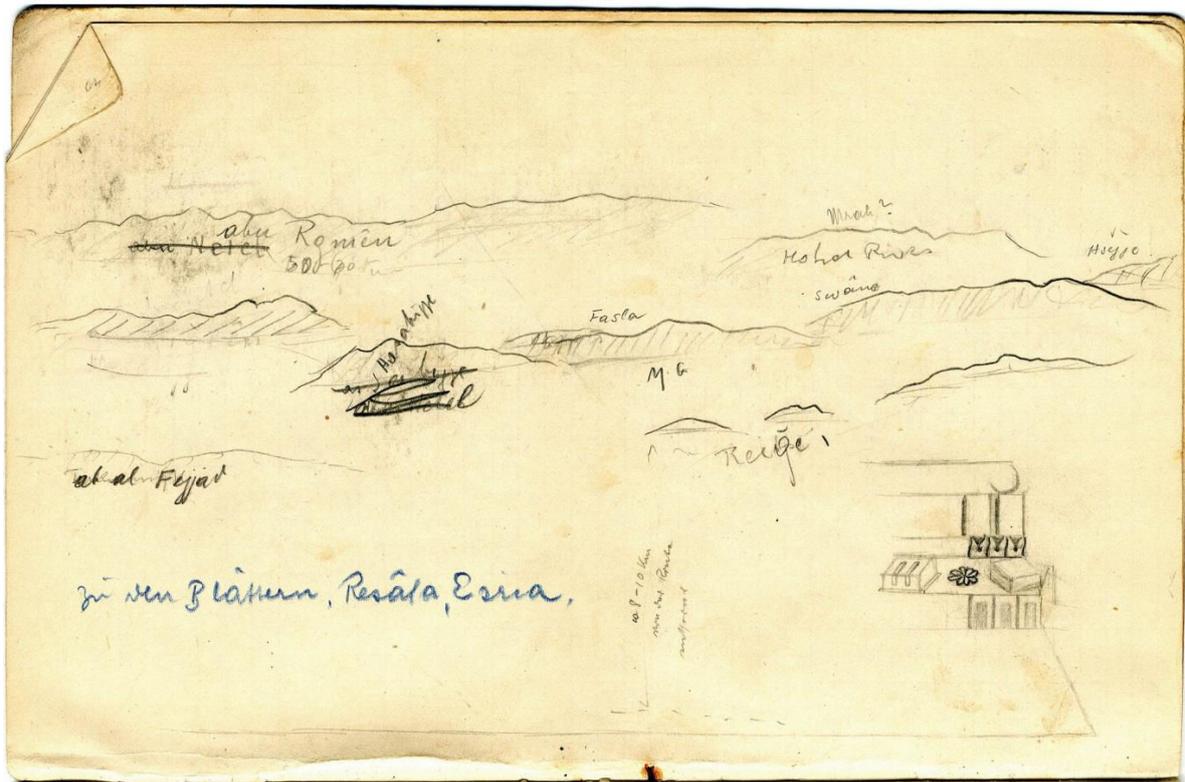


Fig. 34 From Musil's diaries (1908- 1911), Musil's family archive.

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 traveller 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 -Qaşayr ‘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, the Rwalā 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‘lān⁶², 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 Ša‘lān, 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.)

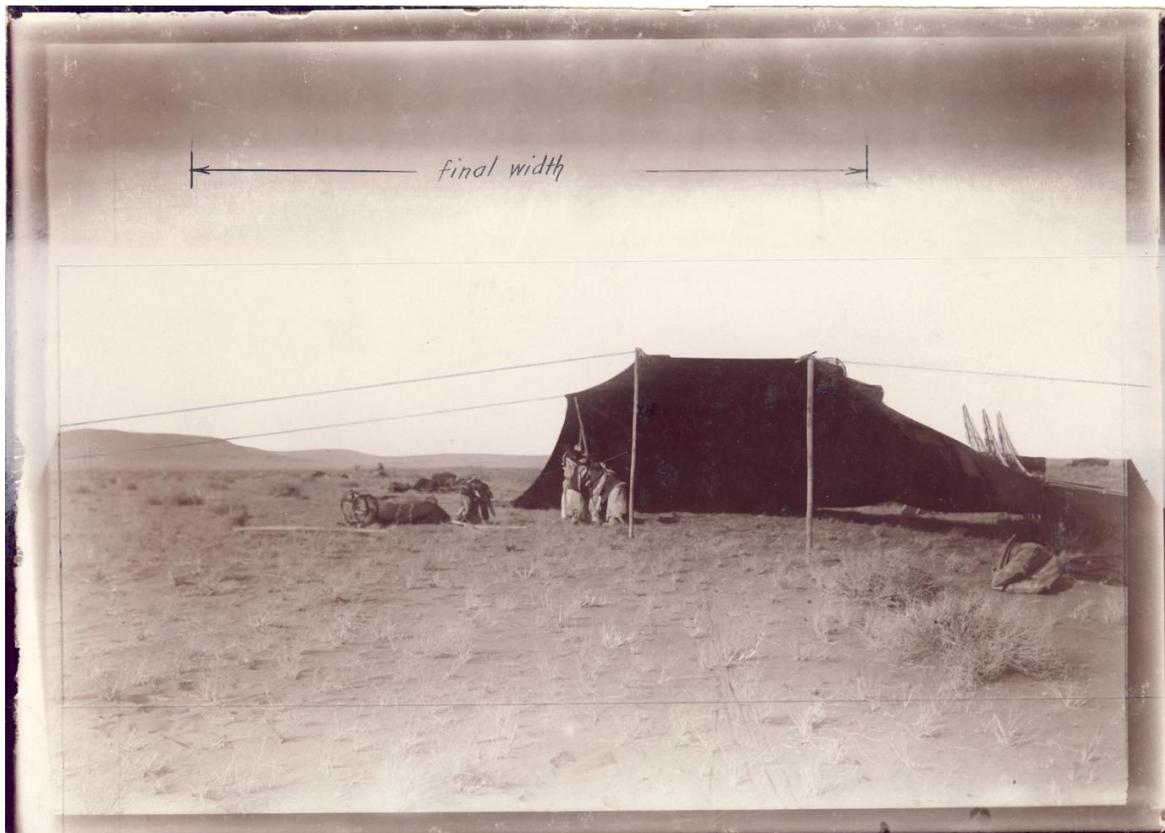


Fig. 38 Collection of Alois Musil in the Museum of Vyskov region, Vyskov.

Later, Musil became honourable chieftain 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 of Islam (cit. Drápal 2005b, 38-39).

Drápal emphasizes Musil's extraordinary observational talent, as well as his ability to describe noted facts. Rypka for the same reason quoted the review of Musil's four-volume 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 song 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). Musil was incorrect in attributing the restricted status of women to Mongols and Turks. In fact it comes probably from the ancient traditions of Mesopotamia. 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. 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.

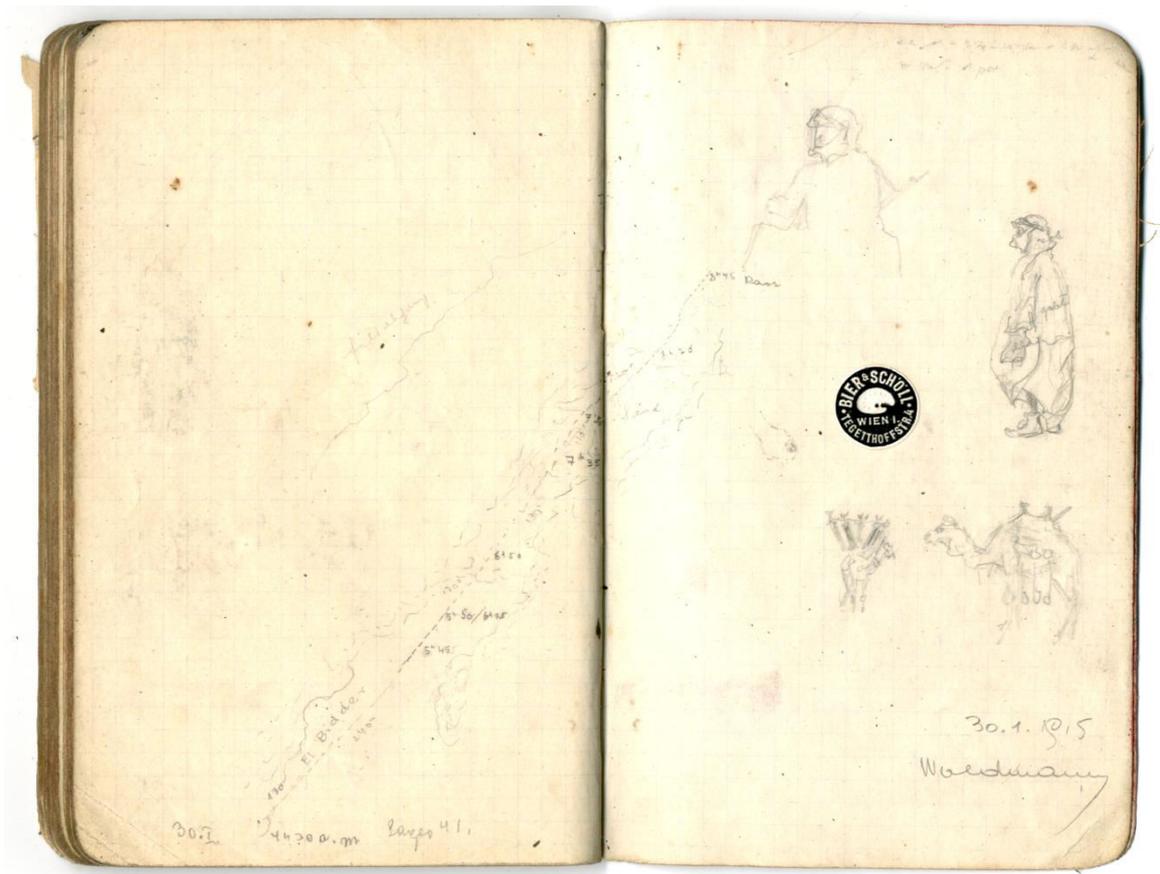


Fig. 41 Sketch of Bedouins and of the camel, Musil's papers, Private archive of Musil's family.

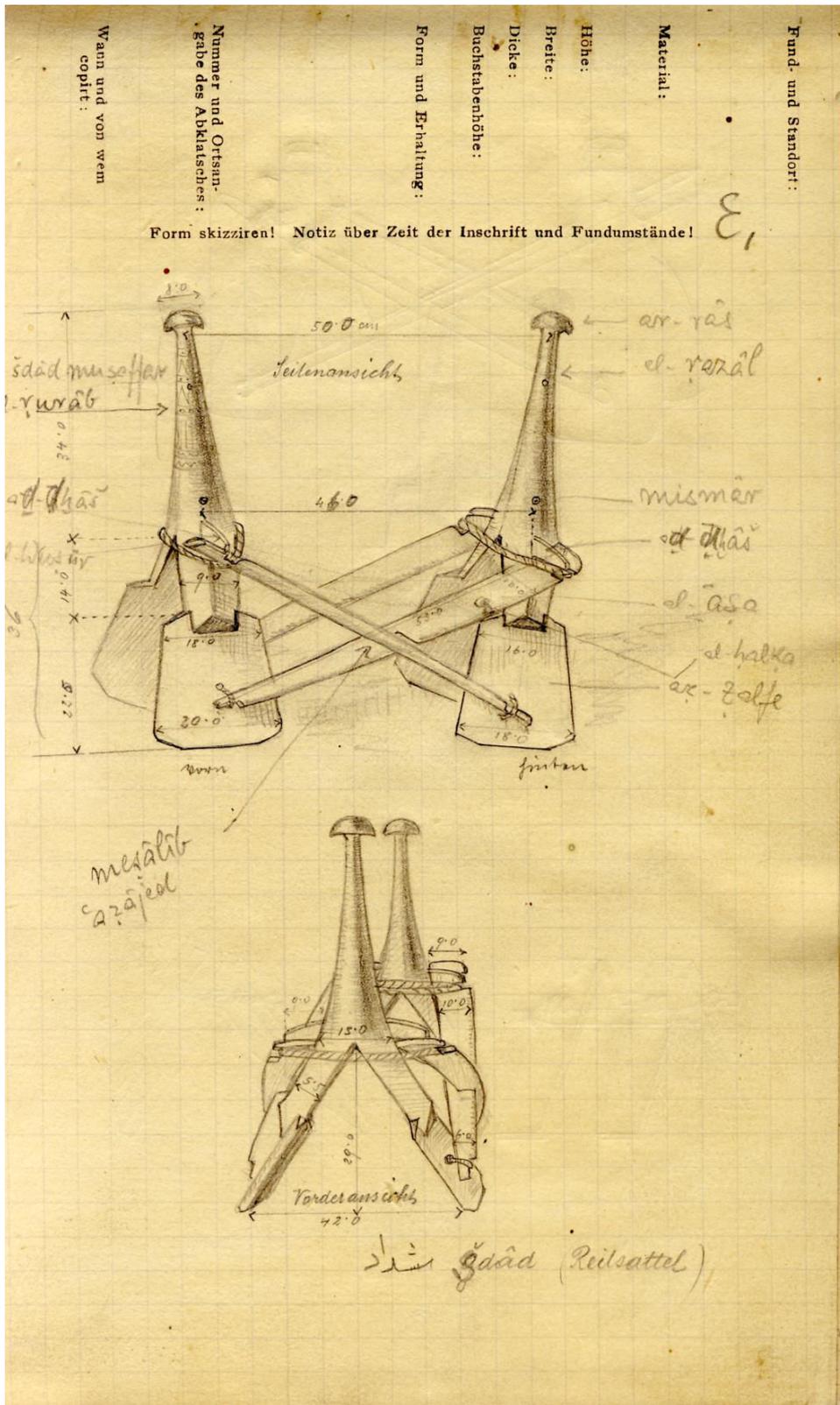


Fig. 42 Musil's diary, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.

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).

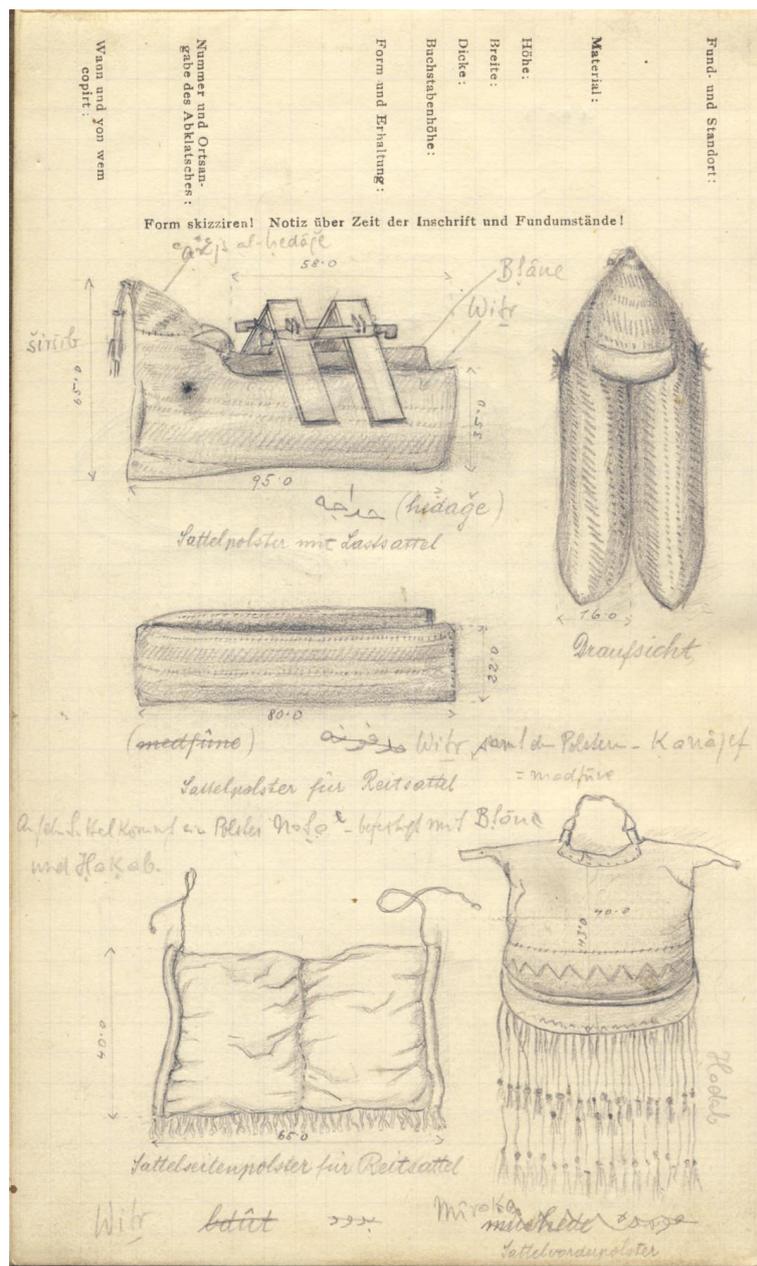


Fig. 43 Musil's diary, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.

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 „external“ 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 Bedouin camp, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.

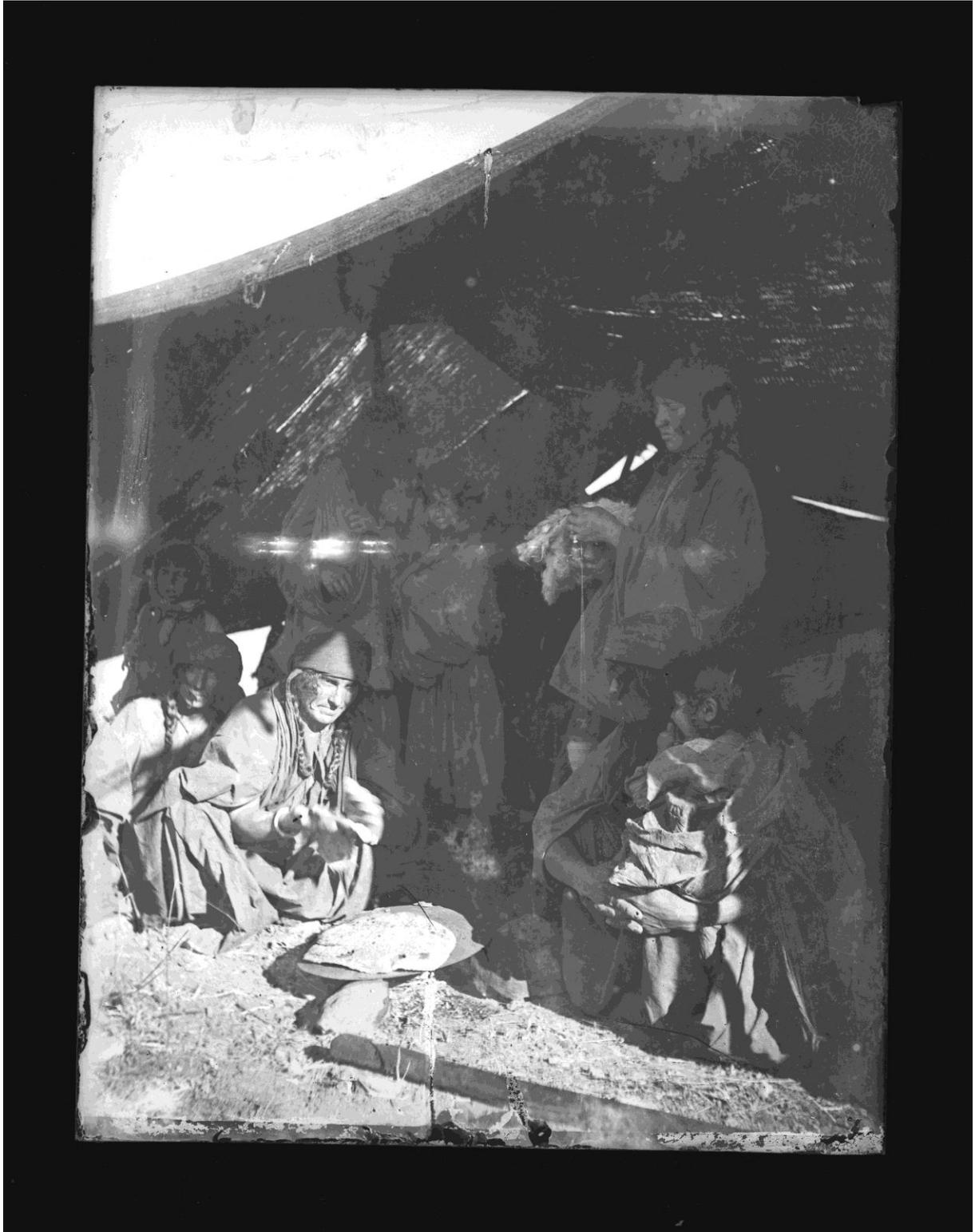


Fig. 45 Photo of Bedouin, Musil's papers, Private archive of Musil's family.



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



Fig. 47 Bedouin 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 Arab 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 the outside world, were allies of the Bedouins (Hitti 1940, 28; Elphinston 1945, 370).



Fig. 48 Collection 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 the Bedouin 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).

Louise 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 economic 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 Bedouin' 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-Rabiyya'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 economic 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 Bedouin in the region of the 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 economic 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 economic 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 numbers horses. Later, poorer Bedouins lived 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 formerly allocated property 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 did not 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 BSRJA.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 Bedouins became still greater nomads than in the past. A new mode of transportation enabled most of the Bedouin to live in a village and yet to retain regular access to pastures and herds (Chatty 2010, 48).



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

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



Fig. 52 Modern day camels and their young, Palmyra region, Photo by Vesela.



Fig. 53 One of the sources of income comes also from sale of rare bird species, 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 Bedouin later invested money, gained by these illegal business deals, in 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 in their 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 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 orientalisks, 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 Bedouin' tent near the ruins at al-Baṣīri.



Fig. 56 Modern-day Bedouin tent (Palmyra region), photo by M. Vesela.



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



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



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



Fig. 60 Modern-day Bedouin near al-Turkmāniyya.



Fig. 61 Modern-day Bedouin cemetery in al-Sukkarīyya.

7 MUSIL AND KEY ARCHAEOLOGICAL SITES – MUSIL’S 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 between Amman and Azraq’, 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 Qaşr al-Kḫarāna Musil covered in the company of only one fighter from Banū Şakhr and thus visited the legendary Quşayr ‘Amra.



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

As he himself wrote in his report for the Czech academy, he didn't anticipate that he would be able to stay there for a longer time, because the very same day he had a scheduled meeting in Qaşr al-Azrak. In this report, which was published in May 1899, Musil writes that Qusayr 'Amra is in its style similar to the Quşūr of Tūba, Bājer and 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 door on the eastern side with its basalt frame. Continuing his description, he writes that the middle nave is wider than both side aisles. 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 the Arabian mythical being, the 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 problems 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 human figures 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 the 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 succeeded in 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 photographic apparatus, which would enable him to make the photographs of Quşayr 'Amra's interior 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 building 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 at 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 of Banū Ṣakhr protected them and at the same time transported from a great distance the water 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 terebinth branches (Musil 1932, 294). Musil also describes how they economized on water, which was indispensable for the needs of the documentation. Musil also rationed out water for drinking; only the painter could take as much water as he needed (Musil, 1932, 301).

During this visit in 1901 the 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 canvas over it, cut the canvas 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 canvas 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 writings under the pictures of the individual rulers, but the most important parts had crumbled and fallen out. Also, the main inscriptions suffered a lot by copious washing 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 platform of 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 Qaşayr ‘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 canvas 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 the 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 Ṣakhr 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 Hāyelin 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 text 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, 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 to a 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 toponymy 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 Universität 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 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 Qaşayr '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, Château Staré 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 Qaşayr '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 exactly how many photographs of the Quşayr ‘Amra’ interior Musil 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

Qusayr 'Amra, which he painted after his return from the journey in 1901, executed as an oil painting on the canvas, depicts the Qusayr 'Amra's exterior.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 Qusayr '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 Qusayr '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 in pencil, are not always clearly legible (Fig. 23, Collection of Alois Musil in the Literary Archive of the Museum of the Czech Literature, Château 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 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, took a great number of photographs of Quşayr ‘Amra, due to the negligible number of published photographs as well as the fractional number of photographs remaining at the present time in Musil’s inheritance, we are not able to assess exactly to what extent these scholars had high-quality sources for research in the field of art history. Nevertheless, it is possible to assume that they were considerably limited by the 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 inscription 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 Vyşkov region, Vyşkov, H 19 457/6). In one of the following letters from

the 20th of May 1908 he urges Musil that if he had the opportunity to visit Quṣayr ‘Amra again, it would be enormously interesting to take good photographic pictures (with magnesium lighting) of the semicircular text above the seated ruler and also of the two figures to the right from the 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 Musil’s earlier observations and recommended to Musil that he return to Quṣayr ‘Amra and make not only proper photographs of the inscriptions but also inspect them closely from a ladder. He also surmised that the Caliph al-Musta‘in, as a prince, restored the originally 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 Quṣayr ‘Amra among scholars continued unceasingly. Rudolf E. Brünnow, on the 11th of April 1907, again urges Musil to take without delay photographs of the inscriptions once more and examine them. He offers to lend theodolites and photographic apparatus and proposes to Musil a visit to Bonn in order to choose the equipment and appropriate 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 Quṣayr ‘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 Quṣayr ‘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 inscription from Qaşr 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 Quşayr ‘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 Quşayr ‘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 Quşayr ‘Amra, Qaşr al-Tūbā, Qaşr

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 the castles mentioned, 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 of Beni Ghāssan, who possessed a high culture, were in contact with Constantinople and Persia, and who already in their homeland, Hadramaut, had a 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 in al-Mashriq, which was published shortly before Musil's first visit to 'Amra.

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 him for the 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 Statement*. 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. [Mittheilungen und Nachrichten des Deutschen Palästina-Vereins] 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 inscriptions was solved by a 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 Quşayr 'Amra, to ensure that there are no errors in it. He promises Musil that he will personally supervise the reproduction of the drawings of Mielich's plates with the writing... He also found the similarity between the paintings of inscriptions in Quşayr 'Amra and inscriptions 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 inscriptions and adds that he was not able to read them 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 Quşayr '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 Quşayr '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 inscriptions 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 Ghassanid and Umayyad work he now considers as probable and he only regrets that all inscriptions 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 in just 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 inscription 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 inscriptions is concerned they didn't make any progress, while in the bilingual inscriptions 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 an inscription belonging to the figures, is correct. The inspection of plates 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 */the Dome of the Rock/*. He states that the practice of bilingualism was common during the Ghassanid and Umayyad rule, but because the text 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 (born in 836 AC as the grandson of the Abbasid caliph Al-Musta’in), 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 text from the Plate 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 text 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 proofs 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 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 view 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 the reading of the names Qayšar, 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 Kušejr '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 Genequand (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 inscription reading “Oh God! Make Walīd Bin Yazīd virtuous”.

The experts working for World Monuments 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

Other 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 by 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 information was 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 still visible in Qaşayr 'Amra. The question is, what would remain from the decoration in Qaşayr 'Amra, if all of their attempts had been 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 a 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. *Iterebinth trees!* 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 Gertrude Bell there are altogether 8 photographs of the interior of Quṣayr ‘Amra⁷⁸, collected during her trip. Several pictures portray also the frescoes and there are 5 photographs of the exterior of Quṣayr ‘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.C. 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 Quṣayr 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 Encyclopaedia 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 Quṣayr ‘Amra for the first time. The same year he published an article: „The paintings of the six kings at Quṣayr ‘Amrah“ (Grabar 1954). For the 60th anniversary of the monumental publication about Quṣayr ‘Amra A. Brejcha-Vauthier published an article about Quṣayr ‘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 Quṣayr ‘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 Arab troops (Brejcha-Vaultier 1967, 37-38, Drápal 2005, 28). T. E. Lawrence writes: «In the afternoon, tired, we came to kuṣejr ‘Amra, the hunting castle Harita, protector of poets... Burton took the staff into its cool

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

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

79 Gertrude 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 Restoration projects

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 bañosomeyas 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 the *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 Archaeology“. 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 bath 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 Garth 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 Quşayr ‘Amra

With the exception of a short exploration of Quşayr ‘Amra by Denis Genequand 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. Denis Genequand 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 Quşayr ‘Amra, where the foundations of a mosque were found (Genequand 2001,4). Previously it was assumed that Quşayr ‘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 Quşayr ‘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 Quşayr ‘Amra was dependent on Qaşr 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 rather simple (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 Denis Genequand more complete (Genequand 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. Denis Genequand 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 Genequand 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 bath fits 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 the 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 (Genequand 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 bath 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 musalla), is also evidenced in the layout of the locality with the absence of the castle (Genequand 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; Genequand 2001, 9). According to Northedge, Qaşayr '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; Genequand 2001, 9). However, it has since been shown that it was built by Walid b. Yazid (see above).

7.1.10 The present project of reconstruction and research in Qaşayr 'Amra

The newest project is the conservation of the Umayyad site of Qaşayr 'Amra. This is a collaborative project of the Departement 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 Qaşayr 'Amra, which have generously provided the use of these historic photographs for study purposes (<http://www.wmf.org/project/qasayr-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 Sergiopolis or town of St. Sergius, is located in the Syrian desert about 25 km south of the Euphrates. The nearest large 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 Quṣayr ‘Amra World Heritage Site, Hashemite Kingdom of Jordan March 14-15, 2012).

7.2.1 History of the site

Musil wrote that the origin of the town is very problematic. As late as 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 Diocletiana“ 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 cult of the Christian martyr Sergius, who was tortured to death here during the reign of Diocletian. Byzantine emperor Anastasius I (491- 518) officially renamed the town Sergiopolis, and built the great basilica, cisterns. He also improved the 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, the walls were considerably rebuilt, so that the town could better defend itself against the threat from the Persian Empire, and the town acquired a noticeable military character. The town later resisted Persian raids for a long time, but during the campaign of Khusraw II it was plundered (Musil 1928, 262-266). In 636 it submitted to Musil supremacy. During the Umayyad dynasty, Ruṣāfa became the residence of the caliph Hishām ibn ‘Abd al- Malik (724-743), who repaired it and built his palace close to the walls. He was also an 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 from 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 survived uneasily 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, most structures recorded by Musil are still visible together with the foundations of buildings 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 the Bedouin tribe Shammar (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).

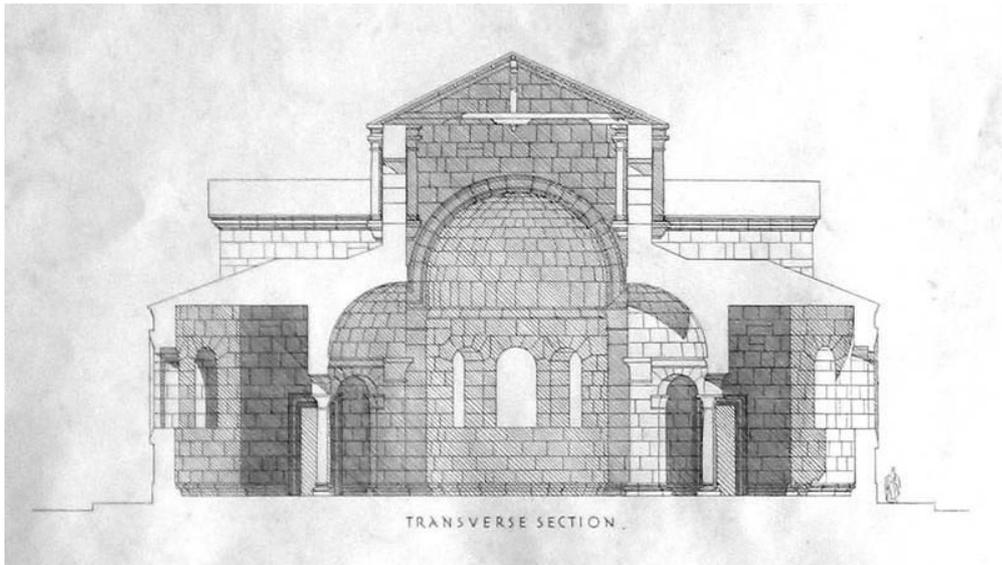


Fig. 63 Mendl's reconstruction of Martyry in Al- Ruṣāfa, The National Technical Museum in Prague, fond Mendl Antonin.

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 the 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-levelled, 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 Ruṣāfa 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 the 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, 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 residence outside of city walls.

The City walls were minutely documented already by architect Walter Karnapp 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 the ruler al-Mundhir of the 6th century (Ulbert 2005, 111-113). Sack also published her 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). A substantial part of previously not recorded structures was not revealed before aerial photography 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 often 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 the Islamic conquests under the rule of the Umayyad dynasty (41/661-60/750), when some of monuments of this type was possibly built by newly arriving people in steppe regions in the Middle East (al-bādiya).

The first more systematic archaeological researches of this type were executed in the 1930s. 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 far less doubt (see the chapter about the origin of Quṣayr ‘Amra), but their function is still the object of discussions.

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 carried out (Genequand 2006, Genequand 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” has persisted 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 the 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 al-Farağ al-Isfahani *Aghāni*: 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 Yazid⁸⁴ had various buildings put up around the manor at al-Muwaqqar, and refers to *Abu-al-Farağ (Aghāni*: 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 pronunciation of Bedouin Arabic, Musil explains also some other Lammens' reflections which he regards as erroneous.

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

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 “*maštâ*”. 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 *maštâ* “ and “not a single Bedouin 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).

Some recent hypothesis identified al- Mushatta with the city mentioned by Severus b. al-Mugaffa as building in the desert which was associated with Walīd bin Yazīd’s habit of receiving the pilgrims from Mecca and not with Bedouin wintering territories.

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 scholar 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 residences (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 Thomine only in 1967. Sauvaget was dealing in this article with the relationship 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; Genequand 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 the historical sources are often misleading. In the case of the sources related to the Umayyad castles, the majority of written sources originate already from the period of the Abbasid caliphate and, as a result, in the description of the Umayyad dynasty negative evaluations prevail (Genequand 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; Genequand 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 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

Svend Helms was later dealing with the relationship 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 Denis Genequand who apart from the extensive exploration of Qaṣr al-Ḥayr al-Sharqī was predominantly dealing with the relationship between 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 Genequand 2002, 2004, 2006a, 2006b, 2010).

According to Genequand, these aristocratic Umayyad seats served predominantly three functions and these functions were in some cases equally balanced, while in other cases one or another function dominated 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 (Genequand 2010, 344-345).

9 MUSIL AND THE EXPLORATION OF THE ROMAN *LIMES*

One of the Musil's aims was to give precision to the Roman *limes* in the Syrian desert and a documentation of the fortifications. He explored the region of the Syrian desert around Palmyra in 1908, 1912 and 1915. On the basis of the sources he read from Classical and medieval 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).

On the basis of new findings printed in *Palmyrena* René Dussaud corrected 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 Diocletiana“ 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 of Danaba with al-Basiri. On the other hand, Musil was first to correctly identify al-Chulle between al-Ruṣāfa and Oriza or Tayyiba (Dussaud 1929, 53-55, 57-58).

Next considerable improvement of knowledge of the „*Limes Romanus*“ was made possible by 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, 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 frontier (Konrad 2001).

More recently Thomas Bauzou (for instance 1989) engaged in the exploration and the definition of the 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- Ḥayr al- Sharqī, where Musil evidently measured only the shorter side and accordingly extrapolated dimensions into a square (Gregory 1995, 25-26).

Gregory 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 was characterized by Parr as completely inaccurate, but Parr 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 two and half hours, at al-Hallābāt he stayed for one and half hours; meanwhile he was attacked by a hostile Bedouin tribe, and in al-Basiri he did not finish 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 Musil's plan of Nessana and that of Woolley-Lawrence. Another scholar complained that Musil's description and plan 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 ca. 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 the documentation of travellers 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 the 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 of Jabal Says, identified by Musil correctly by the toponym „Usays“, and situated 105 km southeast of Damascus was at 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 Sauvaget, 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. It was interpreted according to Creswell.

as caravanserai (1969, 528). Later it was confirmed by Grabar's excavation between 1964-1972. The latest exploration of Denis Genequand proved that it is an Umayyad castle. Denis Genequand 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 Genequand 2006, Genequand 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 a database of archaeological sites for her thesis. Later, she also obtained support of the Czech Science Foundation for 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 the papers of Alois Musil, electronic database of documents and database of archaeological sites“.

The archeologic database has the purpose of collecting 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 a comparison to ascertain if Musil dated and interpreted correctly individual structures. Results should show in which extent the quality of Musil's documentation depended on his opportunities to spend sufficient time at the site and which other factors 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 for reasons of the 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 those sites, to which belongs most of Musil's documentation (plans, photographs, description, diaries), and simultaneously to which comparative data from modern field research were available to the author. It is intended to make possible analysis of 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“.

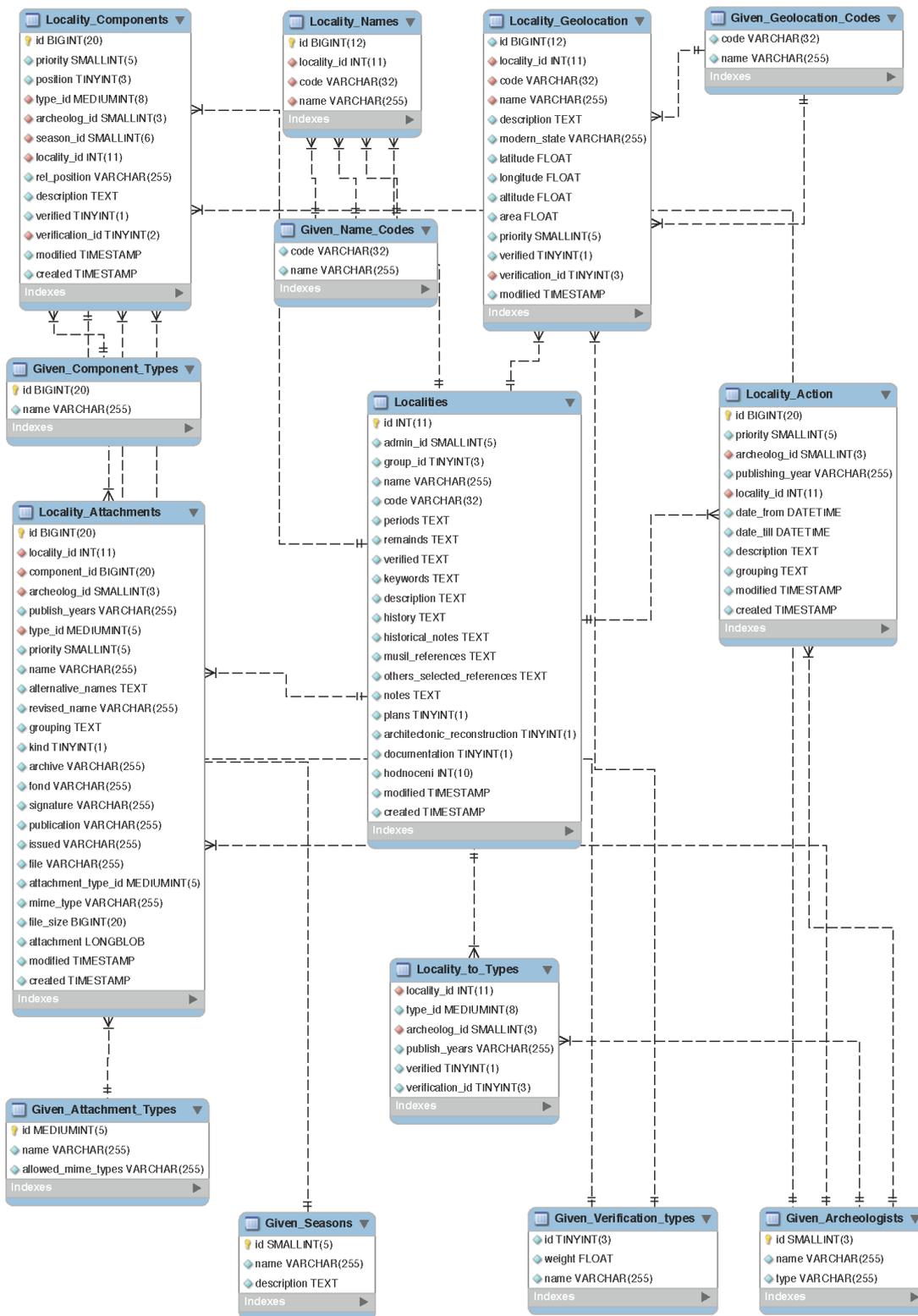


Fig. 64 Diagram of the database.

11 CONCLUSION

11.1 Evaluation of the Quality of Musil's Documentation

In the grade of his 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 Quṣayr 'Amra, al-Ruṣāfa)

- control of gendarmes

- illness

- temperature extremes

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 providing evidence of the existence of the inner decoration (1900, 1901 Quşayr cAmra a other quşūr in al- Bādīa) was exclusively focused on the documentation of selected monuments. In contrast, some later journeys had a 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 capable of independent documentary work, were undoubtedly valuable helpers, while some assistants, who were allotted to him by sheikhs of tribes, guides with whom he travelled, from time to time made his work rather complicated (for example for the reason of fear of various fabulous beings), as much as some demands of prince Sixtus de Bourbon-Parma described by Musil 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 objective in the site x), If we compare more publications, we find, that for instance the exact time record agrees, but on the same expedition in the same year and month he got down at 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 the journeys that he describes.

According to A. Northedge in Herzfeld's notes about Samarra are frequent contradictions, too.

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.

The calculation of the length of Musil’s pace is rather difficult - although he measured substantial number of sites by pacing, in publications at the most of buildings he states already lengths converted to meters. According to available data the length of Musil pace should correspond approximately to 0,8 m.

Also in the case of photographs we can see, that name of the site given does not everywhere correspond with the reality.

11.2 Evaluation of Analyses by Musil Documented Monuments

From the analysis of a sample of 29 sites monuments documented by Musil in the area of Bādiat al- Shām, which the author of this work processed, it emerges that only some of these sites were subjected to newer 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 reworked. Recent research 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 the sites mentioned above the ground plan (in two cases) was lacking in Musil's documentation (Palmyra, of which the 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 the 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 make it possible to expose constructions which were not preserved above the ground.

In the case of the site of 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 recent research. In the case of Esriyya in Musil's plans a part of inner constructions was absent. At Qaṣr al-Ḥayr al-Sharqī Musil completely omitted an inner structure of the large enclosure. At the extensive site of al-Ruṣāfa A. Musil recorded besides an outside fortification in a more real way three of four later documented churches, but the inner layout of another of the recorded churches did not correspond exactly with the revised research. He also did not record in more precise way the construction of a mosque described in Palmyrena (Musil 1928, 161) and any of the Umayyad castles situated outside the defensive wall. Plans and architectonic constructions in Resafa published in Musil's work were made by architect A. Mendl, who was focused on Old Christian architecture.

Musil's dating 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). For example, he dated the Umayyad site of Qaṣr al-Kharāna in the 12th century. The site al-Ṣāliḥiyya he dated incorrectly into the Islamic period.

Most of the sites in the Palmyra region Musil identified with ancient fortifications along Roman roads. Subsequent research on some of these monuments have not been carried out not performed or published at all; some of them were in last years prospected and measured chiefly by Denis Genequand. Usually these were mostly seemingly "less representative sites".

Moreover Musil's interest in still unexplored monuments determined their location in 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 car. There was a problem in Syria even before the outbreak of the latest political conflict to get a suitable terrain car for reason of higher import taxes for this type of cars.



Fig. 66 Fuez – my Bedouin guide and driver in the Tadmur' region.

Several monuments in the region between Damascus and Palmyra were not possible to document safely without special permission, because there were military sites 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 of these monuments, which I had the opportunity to visit, were heavily 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 researched monuments. The aim of these interest was not 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 treasure-seekers, consisting partly of members of these units, were evident everywhere in the 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 desctruction 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 dating of some sites was, as in the case of some of his contemporaries, often erroneous identification with ancient sites and also incorrect interpretation resulting from a similarity of the usual ground plan of Roman forts to later sites, which developed from them. For instance Musil considered the large fortress in Qaṣr al-Ḥayr al-Sharqī as „undoubtedly“ of 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 the early Islamic period. To determine exactly the correct date 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 *Genequand* (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 ananalysis 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 attemptto dig out „more achitectonic decorations, which disappeared under ground.

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

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

His ability to establish friendly relations with Bedouin 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 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 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 datation 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 of the same scene, if possible, 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 the statics of the tower did not endure this strain; or in example on Musil's photography the masonry adjoining 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 us of 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 concrete, their inappropriate „completion“ or in the case of

the Near East frequent incorporation of found architectonic 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 adequate, the most important source became also the drawings of A. Mielich, on which are besides other things represented „in situ“ also parts of frescoes for which Musil and Mielich paid to Bedouins and then they ripped 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 still „in situ“, that means before its transport to Berlin.

Some shots, which would be identical with Musil’s photographs, are no longer possible to make, because of urban construction (Qal‘at al- Halab from a distance etc.).

His field anthropological diaries not yet subjected to analysis are also valuable. They deal 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 research interests in the Near East

Musil originally went to the Near East with the intention to study the roots of monotheism in the Bādia. Alois Musil, as well as Wilhem Schmidt, believed that by gaining of knowledge about Bedouin culture it is possible by a retrospective projection to obtain some picture about religious life in biblical times. Both Musil and Schmidt considered field survey as an interpretative key to understanding monotheistic religion of Israel and the Old Testament (Gellner 1995b, 41; Franc 2010, 31-32).

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- Bādīa and results of this method can be found also in his hypotheses about the 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 orientation on ancient monuments gradually widened to all architectonic types of buildings without any chronological limitation. The ground-breaking discovery of the desert Quşayr 'Amra and the commotion which this discovery elicited in the academic European milieu led him to new orientation towards so called Umayyad castles from the Umayyad period.

The original preference of copying of ancient inscriptions and 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 dating 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 correctly than the leading expert on the

history of Orient Karabacek already in the course of preparation of the monumental volume „*Kuṣejr 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 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 or Museum Vyškov. Final location will depend on resolving the contracts with institutions related to this project.

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. 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 withhold documentation from the subproject „electronic database of the documents“. 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 electronic 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 at 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, Wādī 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:

PERSIAN PERIOD	539 – 332 BC
HELLENISTIC PERIOD	332 – 64 BC
ROMAN PERIOD	
1) Early Roman	64 BC – 135 AD
2) Late Roman	135 BC – 324 AD
BYZANTINE PERIOD	324 AD- 640 AD
ISLAMIC PERIOD	
early Islamic	635 AD-XI.century
1) Umayyad Period	661 AD – 750 AD
2) Abbasid Period	750 AD- 902 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– 99/705–717
‘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, Château Staré Hrady, 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>.

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15 LIST OF FIGURES

Fig. 1 Draft of Map from Sarre-Herzfeld expedition, NA-MFQ 1/442 002 Sarre-Herzfeld- Archaologische Reisse 1909- Tell Keshaf –Mesopotamia.	32
Fig. 2 Lawrence’s suggestion to Musil’s map, NA- WO 302/113/ 773.	36
Fig. 3 Alois Musil (first row, second from the left side) with other teachers in Ostrava in 1895.	49
Fig. 4 École biblique, Class-book, school year 1895/1896 – photo by Břetislav Tureček.	54
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.	54
Fig. 6 Port in Beirut, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.	55
Fig. 7 Université Saint-Joseph, Beirut.	56
Fig. 8 First picture of Quşayr °Amra in Lammens‘ article published in al-Mašriq in 1898, after Musil’s photo.	63
Fig. 9 The map of Musil’s routes (1908- 1914).	67
Fig. 10 Musil mission with Hubert Salvator in 1917.	68
Fig. 11 Musil’s „Villa Musá“ in Rychtářov, Private archive of Musil’s family.	71
Fig. 12 An advertising poster supplemented Musil’s publications of adventurous books.	72
Fig. 13 Musil’s book „Tajemná Amra“, published in 1932.	73
Fig. 14 Musil’s book „Pán Amry“, published in 1948, illustrated by V. Fiala.	73
Fig. 15 Musil’s death bed in the homestead in Otryby, Private archive of Musil’s family.	74
Fig. 16 Inscriptions in one of the oldest Musil’s diaries, Musil’s papers in the Literary archive of The Museum of Czech Literature, Château Staré Hrady, fond of Alois Musil, 2-B.	76
Fig. 17 Inscriptions collected by Musil from above mentioned publication.	77
Fig. 18 A photo of original cardboards with glass plates, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.	80
Fig. 19 A photo of original cardboards with glass plates, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.	81
Fig. 20 Musil’s camera „Dubroni“, Collection of Alois Musil in the Museum of Vyskov region, Vyskov, photo by M. Veselá.	83

Fig. 21 Musil's camera, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.	84
Fig. 22 Scatch map „Aqaba to Maan“, from Musil's map, NA, MFQ 1/442 001.....	86
Fig. 23 One of the first Musil's diaries, Musil's papers in the Literary archive of The Museum of Czech Literature, Château Staré Hradý, fond of Alois Musil, 2-B.....	87
Fig. 24 One of the first Musil's diaries, Musil's papers in the Literary archive of The Museum of Czech Literature, Château Staré Hradý, fond of Alois Musil, 2-B.....	87
Fig. 25 Musil's cartografic diaries from 1908, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.	89
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, Château Staré Hradý, fond of Alois Musil, 2-B.....	91
Fig. 27 Pallat's plan of Quşayr ° Amra, published in: Musil 1902b.	92
Fig. 28 Mendl's reconstruction of Martyry in al- Ruşāfa, The National Technical Museum in Praha, fond Mendl Antonin.	94
Fig. 29 Mendl's project of Musil's villa in Kosova Hora, The National Technical Museum in Praha, fond Mendl Antonin.	96
Fig. 30 Mendl's project of Musil's villa in Kosova Hora, The National Technical Museum in Praha, fond Mendl Antonin.	96
Fig. 31 Collection of Alois Musil in the Museum of Vyskov region, Vyskov.....	97
Fig. 32 Collection of Alois Musil in the Museum of Vyskov region, Vyskov.....	99
Fig. 33 Collection of Alois Musil in the Museum of Vyskov region, Vyskov.....	100
Fig. 34 From Musil's diaries (1908- 1911), Musil's family archive.	101
Fig. 35 Collection of Alois Musil in the Museum of Vyskov region, Vyskov.....	102
Fig. 36 Musil in costume of Rwala Bedouins, studio photo, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.	104
Fig. 37 Bedouins raid, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.	105
Fig. 38 Collection of Alois Musil in the Museum of Vyskov region, Vyskov.....	106
Fig. 39 In the camp before departure to Petra, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.	108
Fig. 40 Collection of Alois Musil in the Museum of Vyskov region, Vyskov.....	109
Fig. 41 Sketch of Bedouins and of the camel, Musil's papers, Private archive of Musil's family.	113
Fig. 42 Musil's diary, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.	114

Fig. 43 Musil's diary, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.	115
Fig. 44 Bedouins camp, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.	116
Fig. 45 Photo of Bedouins, Musil's papers, Private archive of Musil's family.	117
Fig. 46 Bedouins' camp, Musil's papers, Private archive of Musil's family.	118
Fig. 47 Bedouins camp, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.	118
Fig. 48 Collection of Alois Musil in the Museum of Vyskov region, Vyskov. Fig. Collection of Alois Musil in the Museum of Vyskov region, Vyskov.	119
Fig. 49: Siesta in a tent, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.	120
Fig. 50 After the raid..., Collection of Alois Musil in the Museum of Vyskov region, Vyskov.	121
Fig. 51 Today's Bedouins near of Palmyra. Photo by M. Vesela.	124
Fig. 52 Today's camels' breeding, Palmyra region, Photo by Vesela.	125
Fig. 53 One of the sources of income comes also from sale.	125
Fig. 54 Bedouin patriarchs, Collection of Alois Musil in the Museum of Vyskov region, Vyskov.	128
Fig. 55 Bedouins' tent near of al-Baṣīri ruins.	129
Fig. 56 Today's Bedouin tent (Palmyra region), photo by M. Vesela.	129
Fig. 57 Interior of the Bedouin tent today (Palmyra region), photo by M. Vesela. ...	130
Fig. 58 Morning siesta before the tent (Palmyra region), photo by M. Vesela.	130
Fig. 59 The Old Bedouin woman, photo by M. Vesela.	131
Fig. 60 Today's Bedouins near al-Turkmānīyya.	131
Fig. 61 Today's Bedouin cemetery in al-Sukkarīyya. Fig. Today's Bedouin cemetery in al-Sukkarīyya.	132
Fig. 62 Quṣayr 'Amra, Private archive of Musil's family.	134
Fig. 63 Mendl's reconstruction of Martyry in Al- Ruṣāfa, The National Technical Museum in Prague, fond Mendl Antonin.	170
Fig. 64 Diagram of the database.	192
Fig. 65 Al- Basiri.	195
Fig. 66 Fuez – my Bedouin guide and driver in Tadmur's region.	197
Fig. 67 The company of the members of „security unit“.	198
Fig. 68 Our Expedition to al-Turkmānīyya, with members of our Embassy and the “company”.	198

LIST OF SITES

1. Quşayr 'Amra –p.233-255
2. al-Ruşāfa/ Sergiopolis- p. 256-288
3. Qaşr al-Ḥayr al-Sharqī/ Al-°Arīza ?-p. 289-298
4. al- Mushatta-p.299-305
5. al-Ṭübā-p. 306-310
6. al-Muwaqqar-p.311-316
7. al-Bakhrā / Avatha-p.317-324
8. al-Başīrī/Avira, Aviraca-p.325-330
9. Bāzūriyya-p.331-336
10. Khān al-Manqūra-p.337-339
11. Khān al-Trāb/ Valle Diocletiana-p.340-342
12. Khān 'Anaybe-p.343-346
13. Khān al-Ḥallābāt/ Beriaraca-p.347-351
14. Khān al- Shāmāt-p.352-354
15. Khān al- Shindāh-p.355-357
16. al-Kulaybiyya-p.358-359
17. al-Şāliḫiyya/Dura Europos-p.360-363
18. al- Mlāka-p.364-365
19. Esrīya/ Seriana-p.366-368
20. Qal°at Rahba-p.369-373
21. Al-Khulla/Cholle-p. 374-375
22. Ḍumayr/Thelsee-p.376-378
23. Qaşr al-Kharāna-p. 379-384

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 limes 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 ʿAmra, 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' Islam 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 archéologue, ses découvertes extraordinaires, de même que ses compétences en matière de documentation et d'interprétation ont permis 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^c Amra, 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.

Quṣayr 'Amra

MUSIL CS: **Amra**

MUSIL DE: **Ḳuṣejr °Amra**

ARABIC: **قصير عمرة**,

Periods

There were quite sharp disputes over the date of the construction. Musil didn't agree with the opinion that this site was of Roman or Byzantine origin (Musil 1902, 347).

Shortly after the discovery of the bath, Musil and some other scholars ascribed the site to the Ghassanids. Opinions that construction was built by the Umayyads appeared even before publication of Musil's monumental volume *Ḳuṣejr °Amra* in 1907.

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 who of the members of the Umayyad family was the real author of this building, either al-Walīd, or some other member of the Umayyad dynasty.

For instance from the correspondence Nöldeke-Musil from December 1905 follows, that Quṣayr °Amra was built by al-Walīd II. (b. Yazīd), which seems be now confirmed by the findings of an inscription from May 2012.

In May 2012 a conservation team working to save the frescoes of Quṣayr °Amra uncovered an ancient inscription definitively tying the palace to an Umayyad prince. According to the World Monument Fund, conservationists have revealed an Arabic inscription 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 building 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. [\[1\]](#)

However, even if the preliminary interpretation of the inscription itself is correct, it does not mean the building itself or frescoes have to be necessarily dated to the same time as this epigraphic text.

[\[1\]](#) The informations was 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, program director of WMF for North Africa, the Middle East and Central Asia.

Date of surviving remains

Verified by modern research

With the exception of a short exploration of Quṣayr °Amra by Dennis Genequand in the summer 2001 executed within the archaeological project „Implantation umayyades de Syrie et de Jordanie“, focused on issues of links among Umayyad localities and on economic and environmental aspects of the structure of population among Umayyad foundations (41-132 H/661-750 AC), all recent activities were focused only on the research of the bath building, primarily of its decoration, alternatively on the structures immediately adjacent to this building.

Dennis Genequand in the preface to the report from this research states, that while the review of aerial photographs did not bring more or less new, the more detailed field research of the sites led to two greater discoveries. One of them was made in the vicinity of Quṣayr °Amra, where the foundations of a mosque were found (Genequand 2001,4). Before it was supposed, that Quṣayr °Amra is missing both a mosque and a residential building – which are otherwise the basic components of Umayyad castles. It was ascribed to the fact, that Quṣayr °Amra was never completed or visitors did not stay in the palace but in 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 distant from it. Almagro's team published in 1974 a speculation, that the castle is a small, poorly preserved building in 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 habitation (Northedge, 2000, 53).

Description

1) Musil's description of his visit in 1900, published in AP, vol. I. (Musil 1907b):

- 2,65 m wide, paved road, partly in bad condition, leading to the castle.

- 741 paces from bath's south-western corner is a quadrangular court with 2 forward protruding towers on corners of the northern wall and a fortified gate in the middle of the southern wall. The whole object is 62 paces long and 36 paces wide. Inside are around three peripheral walls remains of rooms, probably for servants or soldiers. In the extended western part of the castle we can see up on ridge foundations of a completely ruined object, which is 21 paces long (from west to east) and 11 paces wide. Walls are 0,58 m thick. Further to the east after 100 paces we find a square tower, each side 6 paces, the remains of completely destroyed objects. A water reservoir is close to the castle (1907b, 222- 224)

The castle itself consists of 3 parts: the main building, the well with a circular track and the yard, which is on the west enclosed by a wall, which is connected on one side with south-western corner of the building, on the other side with the northern pillar of the circular track, but is interrupted by 1,85 m wide entry gate. The wall served to retaining water during floods, in order not to get to the castle, and from this reason it has the form of a sharp wedge. This wedge is the border of an artificial augmentation of the court's level about 1 m.

The well near by the end of the wall consists of a square peripheral wall with a shaft. There stands piers on all four corners, which are mutually connected by semi-circle arches. On the northern side there was a space between two pillars later walled up. On the western side a circular track adjoins to it, on which northern and southern side is in both cases one thick and high pillar, but only the northern one remained preserved. These pillars served to fastening of a winding construction. (Musil 1908b, 225).

The main building also consists of 3 parts: the hall with adjacent rooms, to the east a group of rooms and the entrance hall at the present time without a roof. The entry into the last room is from the north, from the court. Perhaps the roof was of wood. Two rectangular windows on the eastern wall prove, that there was once a ceiling. On the western side of the entry hall is a connecting corridor with a barrel vault, which enables access into the inner spaces of the building. Later it was closed by a wall (Musil 1908b, 227- 230).

The first room was originally a smaller square space, which had a floor two steps lower than the floor in the connecting corridor. The ceiling of the room forms a dome broken by four windows. Its symmetry is accentuated by two deep, semi-circular niches. bottom part of the wall has at the height of 2,33 m above the floor a recess 10 cm deep. In this recess earthenware pipes with diameter about 7 cm protrude in all four corners.

The next room is of the same size with a cross-vault. Its northern wall breaks a niche with a window close to the vault.

Next room is little smaller than the previous one and it has a barrel vault. Southern, eastern and partly northern walls are lined by benches 0,32 m wide and 0,4 m high and in its southern part we can see 0,3 m wide and 0,37 high outlet drain. In the eastern vault lunette is a small square window

The large hall. Two massive round arches rest on four short pillars and support inner girders of three parallel barrel vaults, which cover the hall. In six lunettes is in each lunette one square window. Two other windows we can see in the upper part of the eastern wall. In the middle of the southern wall is a deep rectangular apse with a barrel vault. From it doors lead to the right and to the left into two semi-circle rooms with a barrel vault, but without windows.

The walls of the main hall and three above described rooms have numerous holes in the walls, which show, that the lower walls were originally covered with marble slabs. Also floor was paved with 3 cm thick marble slabs, as we can see from their remnants. Only two rooms without windows have well preserved mosaic floors. Through the door in the middle of the northern wall we can return to the court. The outside walls have no decoration (Musil 1908b, 231).

The castle is built of irregular blocks from hard reddish limestone and outside has no plaster. Only vaults, built also from limestone, have thick plaster, till present time well preserved (Musil 1907b).

In article from 1899 Musil mentioned already that entrance door jambs and small lintel above entrance door were made of basalt stone (Musil 1899, 261). Musil supposed the basalt for jambs came from al- Waynad located in distance of 12 km from 'Amra. (Musil 1907b, 224)

2) Musil's and Mielich visit in 1901 (Musil 1907b)

Inner spaces are decorated by frescoes with various scenes.

On the vault of the first room can be seen the picture of northern sky with various constellations. In the next room arched window niche filled by wine tendrils, in which are depicted animals and humans. Four southern parts of cross vault are filled by mythic plants. In the eastern lunette we

can see in front of a large house two naked women and two naked children, who are taking a bath. On the opposite lunette there are bathing women who mutually pour water on themselves. Above the door on the southern wall is another bathing scene. One woman combs her hair, another carries a child, the third carries a bucket. A house is in background. In the next room are along both sides of the window one naked person, under the window a naked child. On the barrel vault are on a white base bundles and across them leaves in such a way, that they form diamonds (Musil 1907b, 281, 283, 284). In each diamond is some animal or figure. In the middle row are busts of three phases of life, in the first row on the left a crane, a camel, a gazelle, a stork, in the second row a bear playing on the lute, a standing monkey, a man with the expression of amazement, in the third row a water bird Naknuk, a wild donkey, a horse, a stork, in the front row a fox, a snake, a wild cat. On the right in the first row a desert quail, a gazelle with horns in the form of a lyre, a grazing gazelle, in the second row a player on the flute, a female dancer, a male dancer, in the third row a heron, a wild donkey, a bustard, a swan, in the fourth row a porcupine.

On the lunette above the door on the soft bed in sheet wrapped figure of the dead ? (question mark made by Musil). In front of the bed stands a earthenware jug, beside it a mourning half-naked probably male figure. A boy with wings points at the laying figure (note no. 4).

The eastern wall of the large hall is divided into four elongated, mutually parallel spaces. The lowest space is decorated by curtains. Above it a pack of slim dogs chases an antelope. A bull stands with bent down horns, prepared to defence. On the adjacent stripe, where are two windows, are following scenes: 1) a man in long patterned garment rushes towards a woman in white garment,

2) a naked couple

3) a lion attacking a white mare. The above base is blue. The highest space of the eastern barrel vault is divided by stripes on two horizontal rows consisting of 8 rectangles, in which are depicted construction workers. In the background at the bottom brown soil, above it wide red belt and at the top narrow blue belt and narrow yellowish belt. In the top belt is in the 1st space a man, whose gestures are not clear, in the 2nd space a man with a block of wood, in 3rd space a man with a pickaxe, in 4th space a man with a jack-plane (?), in 5th space a man beside a vessel with mortar, in 7th space the wall is smoothly scrubbed, in 8th space the wall is polished. In the bottom row in 2nd space a man probably with a pickaxe, in 3rd space with a box of sand or mortar, in 5th space a camel, in 7th space two men transporting a box of sand, in 8th space a man building a brick wall. The same scenes we can see on the western half of the vault. On the top on no. 2 two men saw a beam, no. 6 a stonemason divides into parts a stone slab, at the bottom on no. 4 a loaded donkey, on no. 7 beside a pit lined by bricks is a large drilled hole. In the triangular surface between two arches is everywhere one palm tree with fruits.

The front wall of the south wall of this wall shows the background of the middle picture the architecture of three white arches, from which hang loose reddish curtains, in front of them two men, one in a white shirt, the second in polka dot blue shirt are gutting an antelope. On the top to the right from the window 2 anciently clothed women with wreaths in hair stand, leaning against one another and writing (Musil 1907b, 282) two words in Greek, on the opposite side one woman, who supports her head, looks in front of her, the third woman stays as a statue and writes one Greek word. On the opposite northern front wall a hunter kills a wild donkey.

The middle vault is decorated by circles of ornaments in two parallel rows. (Note no. 5). In each row is 8 rectangles. In each rectangle on the edge of two massive columns, above which a broken arch rises and of which red base is decorated by white heraldic lilies and hearts, on both sides of each arch is a desert quail. Inside of each broken arch is one or mostly two naked human figures, in the 3rd space of the bottom western row apparently naked couple. In the southern triangular surface between two arches a naked woman in a painted niche, in the northern triangular surface between two arches a woman, towards whom is flying the goddess of victory with a red ball. On the opposite side of the eastern half in the niche laid by curtain, which is enforced by two columns standing on plinths and by which apse as well as spanning ceiling seems to be laid by blue small tiles, a woman is standing, decorated by a bracelet and by a necklace with a pendant. Her rich black hair are wrapped by a string of pearls.

On the northern part of the eastern arch is not the lowest belt preserved, above it a player on a flute on the blue background, and on the top a woman in distinctively larger scale with naked upper part of the body and a squared brown skirt reaches for an ornament on the top of the arch, consisting of a row of circles. On the south half, at first connected to the ornament, we can see again a large woman in the same robe as in the first half, under it a female player on the lute, under it in another space again a figure, which is not distinct (Musil 1908b, 285). On the north wall can be seen above the door on both sides columns and it seems, that this part of the architecture a naked man supports. Above the niche on the part of north front wall on both sides a frame, in which there are three, probably woman's busts. The front wall of the niche has richly articulated paintings. "The ruler on the throne" (note no. 6), outer circumference forms a row of birds on the blue background. The ruler, sitting on the damask throne, has a halo, two coiling columns support the roof above him and on its front surface is an inscription in Arabic. To the left and to the right are accompanying figures, from which that one on the left with a walking stick seems as a man, the figure on right has a woman's halo. Under this scene there is a blue space with water birds, sea animals and a boat.

In the western part of the vault it can be seen under circular arcades, of which columns are winded by a ribbon, in each part under the curtain a naked woman, who has only a piece of cloth about bottom part of the body. The third woman is getting this piece of cloth, this time chequered, from a female servant, and above of each of these curtains it appears yet the head of a larger depicted woman on the blue background. On the top of the niche's vault from a paunchy vase tendrils grow.

The eastern half of the niche (note no.7) is completely analogous to the western half, cloths around the bottom part of the bodies are all chequered a one of these cloths two female servants wrap around the body one one woman. On the southern front wall of the western vault there is under beautiful tent a woman, leaning against a pillow, on both sides in a smaller measure servants (?). On the top to the right is a Nikh. In the middle of the northern front wall (note no. 8) women's figures can be see on the blue background, above beside the window sea creatures, among them a distinct dolphin, at the bottom a boat with one man, and under it a curtain.

The western wall is divided into 3 spaces. In the southern bottom part it can be seen a group of men and women in rich garments and above them fragments of six groups of Greek and Arabic inscriptions. Than there is a bath with a strange architecture and behind it a circular base on which

men exercise, naked with the exception of loincloth, and it seems that two of them jump across the skipping rope. Above this painting is a chase on the wild donkeys. Several men spur long, slim dogs to chase seven or eight wild donkeys, who are trying to flee. Several riders are trying to cut off their way and they drive them into an enclosure from thick branches, which has only one entrance and this entrance can be easily closed by a long pole. Beside this pole two men are hidden. Above this scene it can be seen several drovers on skinny horses.

(Musil 1907b, 275- 290)

History

History of discovery of the site:

Alois Musil learnt about Quşayr   Amra 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 in visiting it, because the territory, where this castle was located, was not only endangered by hostile tribes, but also spinned by Bedouin legends, and from this reason his Bedouin friends were afraid of a local ghost.

In 1898 Musil visited Quşayr   Amra for the first time, accompanied by only one guard from Ban  Şakhr. Musil later wrote, that Quşayr   Amra is similar to Quş r T ba, B jer, Mushatta in type, but differs in materials. Because of abundance of harder stone they didn't build here from bricks, but from red limestone. Musil describes as he entered for the first time into this castle from the eastern side through the basalt gate.

In 1898 he stood there just for very short time due to the attack of the enemies (hostile Bedouin tribe). Musil describes, how they later joint their group and how not far from kasr Azrak bigger skirmish took part, in which 13 men were killed and 27 wounded. The group of Bedouins with Musil were forced to flee. Musil adds to this report a surmise, that Quşayr   Amra was built by the Ghassanids. Due to these circumstances Musil could not return to Amra during this expedition, but he got the promise by sheikh Ban  Sakhr Tal l, that he will not allow to anybody to enter into the castle without Musil's recommendation (Musil, 1899, 262). In his report to the Imperial Academy, which was published in May 1902, Musil writes: „I announced to the Imperial Academy of Sciences about 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 take a holiday and therefore I hoped for return to the desert“ (Musil, 1902, 336). Later Musil recalls in his opening lecture the wrongs he suffered connected with the discovery of Quşayr   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 supported me. In the Academy of Vienna my discovery of Quşayr   Amra was declared the scientific delusion. The biggest expert, professor Karabacek asserted, that is absolutely impossible, so as some from the first successors of prophet Muhammad decorated his summer residence with paintings and allowed to be portrayed himself. According to his opinion this defies the laws of Islam and there is no mention in whole Arabic literature about something like that. Therefore Quşayr   Amra is scientifically impossible, it wasn't discovered by reality, but by imagination. Hereby I was blamed for deception. I wasn't able to defend myself. Nobody believed in my detailed description and I had no photography. I accompanied at that time a robbery expedition, in the castle we were assaulted, my companion was shot dead and I was on the run with his corpse, in order his family could bury him. And this discovery was proclaimed the deception...“ (Musil, 1921, 218; Dr pal 2005, 22).

As 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 they were assaulted directly in the castle, his companion was shot dead and he didn't have the 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 Amra's exterior from 1898 survived (Collection of A. Musil in the Museum of Vyskov region, Vyskov, H 19 535/3-09) and also a drawing of Amra drawn according to Musil's photography and published by Lammens (Lammens, 1898, 630-637), is evident, that Musil had in mind the non-existence of photography of Quşayr   Amra's interior, not a photograph of the exterior of the castle.

Musil suffered from distrust which he met among experts. For this reason he decided to organize another expedition to Quşayr   Amra, from which he could bring back enough trustworthy documentation. Finding money for another expedition was rather difficult, because of a previous conflict with the Viennese Academy in connection with suspicion about misappropriation of the part of money allotted to Musil for purchase of antiques. Musil used part of money designated for this purpose on necessary travel expenses, what especially professor M ller didn't like (Reich 1930, 50-51). Before he succeeded in obtaining money for another expedition, he departed for research to the libraries in 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 for theological faculties in the department of teaching, arranged for Musil 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 the rich collection in the British Museum, in Cambridge he abundantly drew from the rich university library and in Berlin he attended university lectures of excellent professors such as F. Delitzsch, E. Sachau, H. Winkler, H. Gunkel and others. In Vienna he studied apart from other things cartography in the Military Geographical Institute (Dr pal 2005, 23).

Musil comments later his study tour across Europe in the daily newspaper Hlas, in which was published a serialization of description of the journey to the Near East, made in 1900 in the form of letters sent by him: „After exhausting work in the British Museum in London, in the Cambridge University, in Berlin's museums and libraries I came to solving many historical-exegetical mysteries and sometimes also to results,

which entirely or partly are inconsistent with present opinions“.

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 photographic apparatus, which was to enable making photographs of Qaşayr °Amra's interior decoration. Professor Müller wanted by this contribution to secure the potential share of the Viennese Academy in the discovery of Qaşayr °Amra, in case of its possible existence. In May 1900 Musil set off again on the territory east of the Dead Sea. He was accompanied by three gendarmes assigned to him by the Turkish government.

From the 6th till the 14th of July Musil worked in Qaşayr °Amra, where he made many photographs, the plan of the castle and its environs, the copies of the inscriptions 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 disgrace, which affected me for my scientific work. In the summer of 1900 I went again to the Orient, arrived to Qaşayr °Amra once more, and brought from there 110 photographs of paintings. They finally came to believe me. The delusion became the reality, but my esteem for the infallible judgment of the most renowned experts considerable suffered“ (Musil 1921, 218). note: in another publication Musil states, that he brought from Qaşayr °Amra 120 photographs (Musil 1932, 279). The Viennese academy, aware of the importance of this discovery, established after his return the North Arabian commission from its best specialists. With the ample help of some members of this commission and with 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 aim was first of all Qaşayr °Amra and several other castles. Musil was this time accompanied by academic painter O.L. Mielich, the expert for oriental art, whose task was to work out the most exact copies of murals in the castle.

Historical notes

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Notes - Discussions

Notes to Musil's information from his publication

Musil's information in his publications differ sometimes:

- for ex. in description of his first visit (description of the attack of the hostile tribe), information on duration of his second visit in 1900
- Information regarding the duration of his stay in Qaşayr °Amra during expedition in 1900 (his second visit) rather differs in his various publications as well. According to his reports (Musil 1902,a,b), he stayed on the base of his data in Qaşayr °Amra for 3 days. However according to his time data in the first volume of Arabia Petraea he remained in Amra the whole week. I would consider as more credible the data from 1902, because Arabia Petraea was published with considerably longer time distance from the expedition (after 7 years) as well as both Musil's reports (five years after them).

c) Also data about the amount of acquired photos during visits in 1900 and 1901 differ.

Comparison of Musil's description of the site with new prospections:

In the vicinity of Quşayr   Amra were found the foundations of a mosque, which were not recognized before (Genequand 2002,4).

To the site of Quşayr   Amra existed the plan from Alois Musil (Musil 1907a, fig. 96, 1907b), which is according to the statement of Denis Genequand more complete (Genequand 2001, 5) and another plan, which was made approximately about 70 years later by Almagro  s Spanish expedition (Almagro et al. 1975), whose plan was later in 1995 and 1996 supplemented by Thierry Morin. Denis Genequand stated, that from the enclosure remained only small pieces of masonry and a small part of that, what Musil interpreted as a „road“, which was confirmed in the plan of the Spanish expedition. It was a block masonry wedged between two shells from roughly-hewn big stones, of unknown function. In any case according to Genequand it is not a road and as well as supporting system of sewerage as was suggested. Genequand stated also, that the placement of buildings to the north of the bath fits the Musil  s plan. It is not possible to verify some data in their plans, primarily from the reasons of previous agricultural activities (Genequand 2002, 133).

The tower discovered by Musil, which was interpreted by Sauvaget as the foundations of the minaret, was also the object of Genequand research. 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 strongly 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 damaged by bulldozers (Genequand 2002, 134).

Small residence near by the mosque cannot be compared with other Umayyad castles. Similarly as on the other Umayyad sites at the earliest was built the audience hall (majlis), thereafter infrastructures (Northedge 2000, 52-53; Genequand 2001, 9).

Musil as one from the first scholars correctly dated the building into the Umayyad period, and determined al-Walid II. (b. Yazid) as its patron. (confirmation by an inscription in May 2012 by an expert of WMF, see periods above).

Musil's documentation of Quşayr   Amra:

The plan of Quşayr   Amra on the base of Musil's field records which he made during his first visits was created by architekt A. Pallat from Olomouc and published in Musil's reports in 1902 (Musil 1902, a,b). The plan published in Arabia Petraea was created by architect Alfred Castelliz. Castelliz revised also the architectural description.

In reality Musil published in total only 10 photographs of the Quşayr   Amra  s interior. Apart from this in the archives is in the present time 20 unpublished photographs of the interior and 2 photographs of the exterior.

The part of these photographs is in some places overexposed due to the fact, that Musil was taken pictures against the light, coming inside through the small window, and apart from some exceptions the frescoes are badly visible also owing to patina, or also in consequence of reaction of the acid used by Musil and Mielich during cleaning the pictures. The other way around on the photographs are visible various visitor  s graffiti. Unfortunately it is not also often clear, from which expedition the photographs originate. Some of them could be identified on the basis of a new documentation of *Claude Vibert- Guigue* (2007).

Recently we discovered several unpublished photos of Amra  s interior in the inheritance of Musil  s relatives. One of them shows now already disintegrated small wall which adjoined with the building of Bath.

Comparison of Musil  s description of Bath with a latter researches:

From Musil  s description of the building is evident, that he did not recognized Bath with functions of individual parts of the complex.

-The part, which Musil described as a hallway with supposed wooden ceiling, was in reality an unroofed enclosure which served evidently as the stoke area and for the storage of fuel. Unroofed space should allow to blowing of wind induce the hot air to through the furnice.

- Connected corridor with a barrel vault was in fact space with stoke- hole and furnice with plaster water tank above passage.

- What Musil considered as originally a first room was in fact caldarium.

-Hot air coming from nearby furnice room was circulate in the hypocausts and terracotta tubes and heating the caldarium and tepidarium rooms.

-Musil saw and described supports for raised floor and flues in corners, but he did not proposed any function of it.

Geolocation:

Modern state: **Jordan**

GPS: **31.8021, 36.585**

Geolocation:

Category:

Early Islamic - Umayyad - castle

Archeologist: **Musil Alois**

Action:

Archeologist:

The newest is the project of conservation of the Umayyad site of Qusayr 'Amra. This is the collaborative project of the Departement of Antiquities of the Hashemite Kingdom of Jordan, the Italian Instituto Superiore per la Conservazione ed il Restauro and World Monument Fund which aims to conserve both the exterior and the interior mural paintings.

Action:

Archeologist: **Genequand Denis**

Visit during July and August in 2001: A short exploration of Qusayr 'Amra by Denis Genequand in the summer 2001 executed within the archaeological project „Implantations umayyades de Syrie et de Jordanie“, was focused on issues of relations among Umayyad localities and on the economic and the environmental aspects of the structure of population among Umayyad foundations (41-132 HD/661-750 AC). The foundations of a mosque was the most important discovery of this mission.

Action:

Archeologist:

In 1989 the Franco-Jordanian team under the direction of Gazi Bisheh from the Jordanian Department of Antiquities and Claude Vibert-Guigue from 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. This sheets were then photographed at the one quarter of the original size. The project were finished in 1995. By this way was precisely recorded not just frescoes themselves, but also all damaged areas and numerous graffiti. Due to this work everybody could know that there has been quite frequent and extensive repairing, obvious especially in the main hall, where figures have been resketched. Also the writings have been substantially retouched, which made them illegible or of doubtful interpretation. Architect Thierry Morin contributed to the topographic knowledge of this site and he created the plan of surroundings of access into Qusayr 'Amra. Besides he participated in the examination of the hydraulic structures and reconstruction of saqiyya.

Action:

Archeologist: **Almagro**

From 1971 to 1974 a Spanish team cleaned and conserved the frescoes and they made also some excavation in order to find out, how the hydraulic system of the bath's worked. In 1975 Martin Almagro with the team of authors published Qusayr 'Amra: Residencia y baños omeyas en el desierto de Jordania, a summary description of the complex and its decoration. Later it became clear, that the Spanish team led by Martin Almagro not only cleaned the the frescoes, but they also rather unhappily reworked some of them.

Action:

Archeologist: **Musil Alois**

Duration: **1909-06-14 17:47:00 - 1909-06-14 18:14:00 (00:27:00)**

4) a) arrival on 14th of June 1909 at 5: 47 (PM) - A. Musil with R.Thomasberger. b) departure on 14th of June 1909 at 6,14 (PM); Musil returned back from camp to Qusa'ir 'Amra on 15th of June to copy the inscription; he remained until the afternoon. On 14th of June 1909, Musil after eight years entered the site. 15.6.1909: Musil went back to Amra from camp to photograph the important inscriptions. The neighborhood had changed very much since he saw it for the first time. All the bushes were cut out and burned four years before. The vicinity resembled an arid desert. The Amra painting suffered great damage as well. In the year 1901 Musil and Mielich had to remove the patina, clean the paintings, and wash and daub them with various chemicals. Through this process the colors had been temporarily refreshed, but the particles of paint were falling off and the pictures were vanishing. The painting opposite the one Musil had taken from the wall (Musil 1907, Kusejr Amra, vol.I, 98) had disappeared. Intending to take that with them too, they had plastered canvas over it, cut the canvas in sections, and by rapping the plaster had tried to get the picture from the stone of the wall. Unable to separate it, however, they had to leave the work unfinished, with the canvas still over 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. Musil during this visit intended to study the Arabic and Greek inscriptions under the pictures of the individual rulers (Musil 1907, 220), but the most important parts had crumbled and fallen. The principal inscription (Musil 1907, 214) suffered a good deal from the washing in 1901. Musil wanted to photograph it, but he found that no easy task. The arch containing it was above three meters above the ground in a recess that had no window, and since the room itself was very dark, the inscription could not be photographed from the ground. Hence he piled stones into a heap about 2 m high, upon which he placed the camera and photographed the inscriptions in parts. Because the letters were small and because he photographed from a distance of a meter and a half, he had to keep shifting the camera and focus very accurately upon a base of sliding stones. The work came to nought, for not even one of the twelve photographs proved good. He made one more exact copy of the inscription.

Action:

Archeologist: **Musil Alois**

Duration: **1901-05-26 14:53:00 - 1901-06-09 13:45:00 (334:52:00)**

3) a) arrival on 26th of May 1901 at 2:53 pm b) departure on 9th of June 1901 at 1:45 pm (on 8th of June 1901, at 6,00 Musil left for a trip and came back); A. Musil + A. Mielich - copying of the frescoes

Action:

Archeologist: **Musil Alois**

Duration: **1900-07-10 11:15:00 - 1900-07-13 20:43:00 (81:28:00)**

2) I. according to Musil's reports (Musil 1902a, b, 336) a) arrival on the 10th of July 1900 after 11,15 (AM) b) departure on 13th of July 1900 at 20,43 (to the WSW), "after 3 days (Musil 1902, 346). 2) II. according to Musil's Arabia Petraea I. a) arrival on 6th of July 1900 after 11,15 (AM) b) departure on 13th of July 1900 at 20, 43 (8,43 PM). Musil worked in Qusa'ir '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.

Action:

Archeologist: **Musil Alois**

Duration: **1898-06-08 09:15:00 - 1898-06-08 09:40:00 (00:25:00)**

date and time of arrival and departure: 1) a) arrival on the 8th of June 1898 about 09,15 (AM) : just very short visit due to the attack of the enemies (hostile Bedouin tribe)

Musil's action time total: 417:12:00

ComComponeponentnt::

Archeologist: MuMussiill AlAlooiiss - Musil 1907a, vol.II./ taf.II.; Genequand

2002, 134

Quarries

Component:

Archeologist: - Musil 1902b, 337; Vibert-Guigue- Bisheh 2007, 7

Saqīyya and hydraulic structures in immediate vicinity of the bath

Component:

Archeologist: MuMussiill AlAlooiiss - Musil 1902a,b; Vibert-Guigue- Bisheh 2007; Genequand 2002

Early Islamic - Umayyad - bath

Bath- construction of the bath, decorated with frescoes, included a reception hall. - the main rectangular building (1292 m x 1039 m; longitudinal axis from north to south).

Component:

Archeologist: Musil Alois - Musil 1902b, 337; Genequand 2002, 134

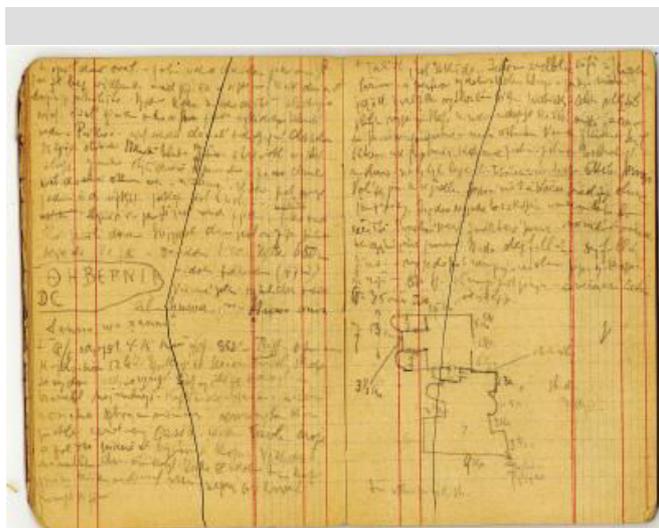
a small fortified building - ruins of with towers in corners in distance of 750 paces from construction of the bath.

Component:

Archeologist: **Genequand Denis** - Genequand 2002, 135

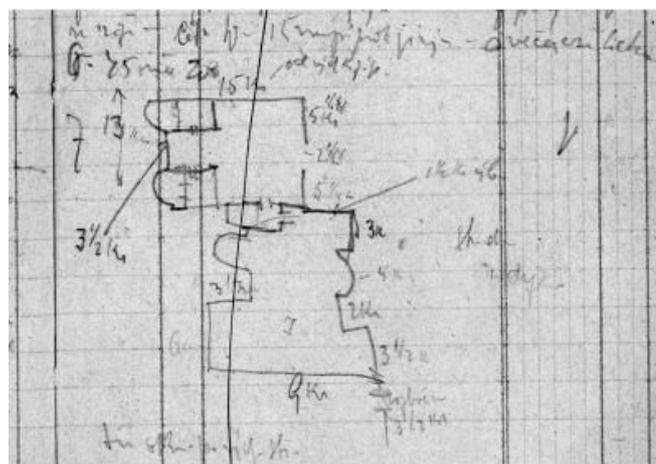
Early Islamic - Umayyad - mosque

The Mosque discovered by Denis Genequand during the summer 2001



Quşayr ʿAmra

A

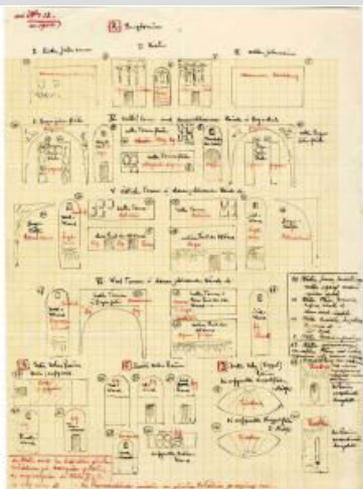


Quşayr ʿAmra

(Musil Alois - The Literary archive of The
Museum of Czech Literature, Château Staré
Hradý)

(Musil Alois - The Literary archive of The
Museum of Czech Literature, Château Staré
Hradý)

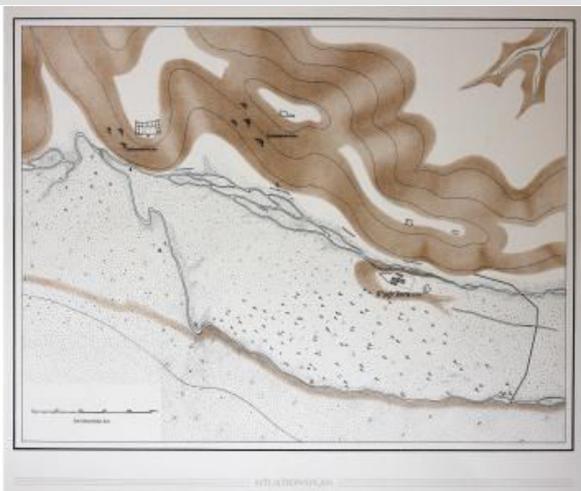
A1



Qusayr °Amra

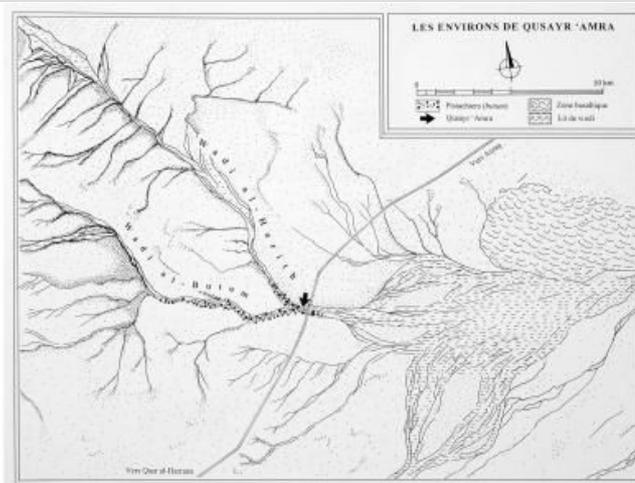
(Mielich Alfons - AVV - Archiv der Österreichischen Akademie der
Wissenschaften Wien)

B



Qusayr °Amra

(Musil Alois - Musil 1907/II.,pl.II.)



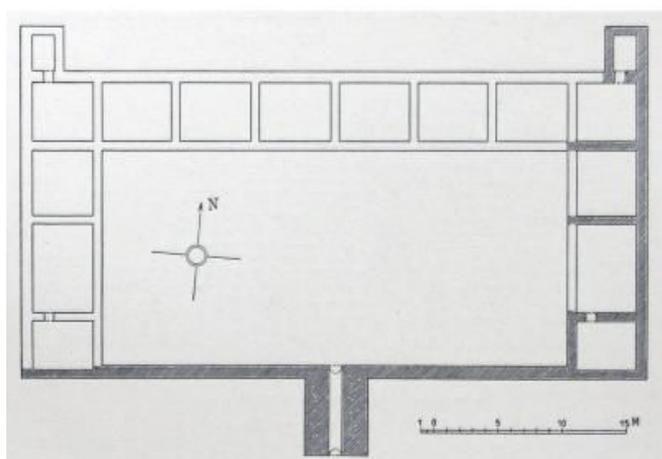
Qusayr °Amra

(Vibert-Guigue Claude - Vibert-Guigue 2007, pl.1)

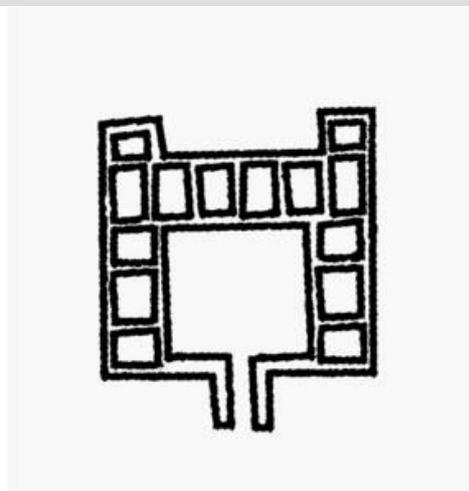


Qusayr ʿAmra_and environs
(Trillen Wilfried - after Almagro, in: Genequand 2010, 135/fig.229)

C

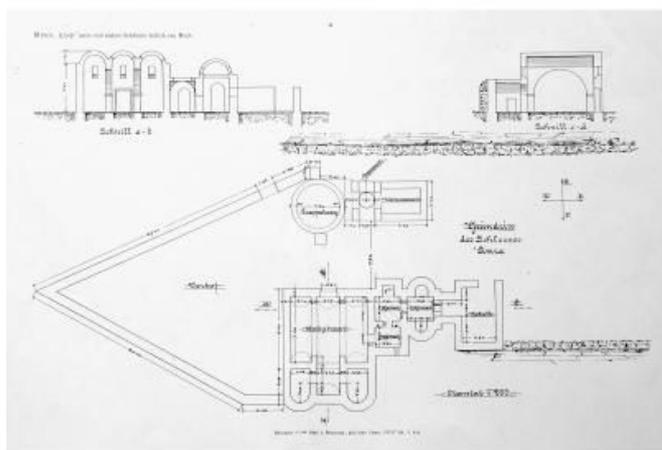


Qusayr ʿAmra_courtyard
(Musil Alois - Musil 1907b, 223/fig. 99)

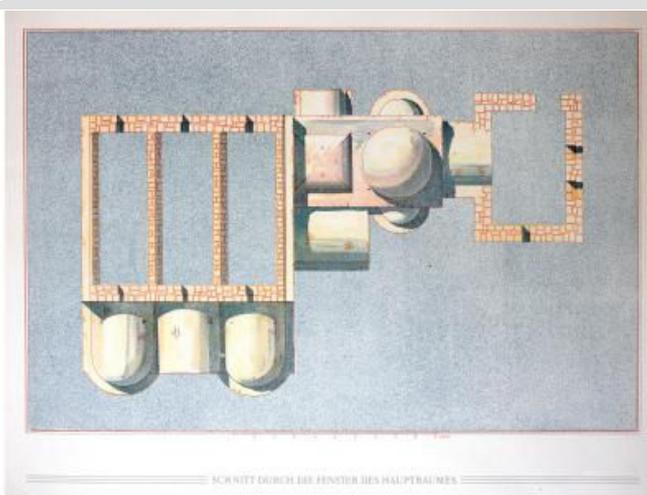


Qusayr ʿAmra_residence
(Almagro - Almgro 1975)

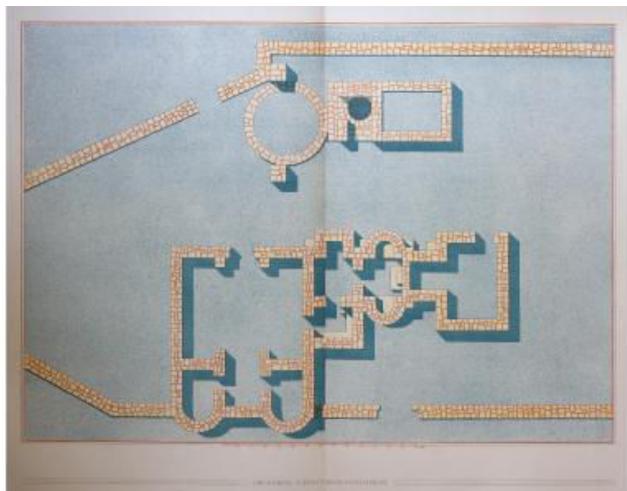
D



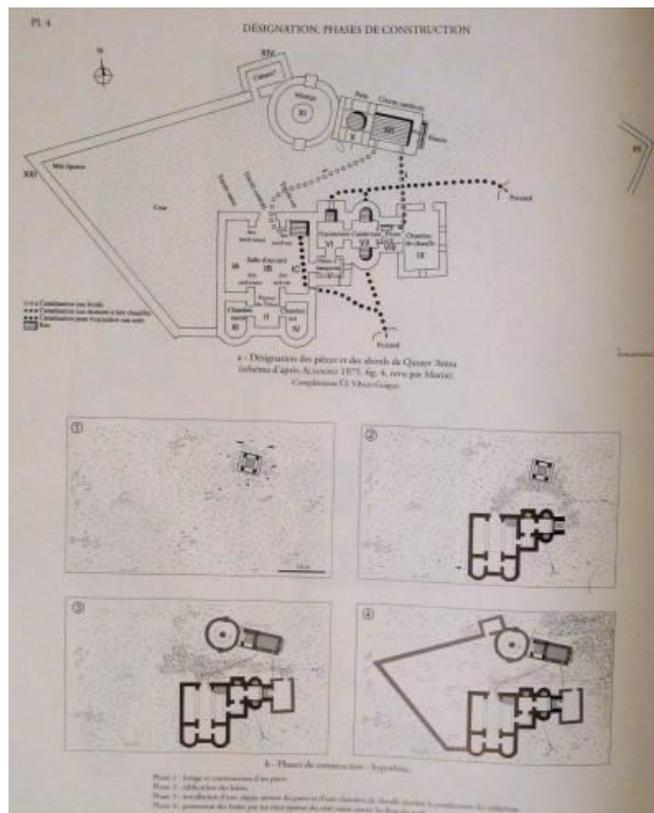
Qusayr ʿAmra
(Pallat Alois - Musil 1902b)



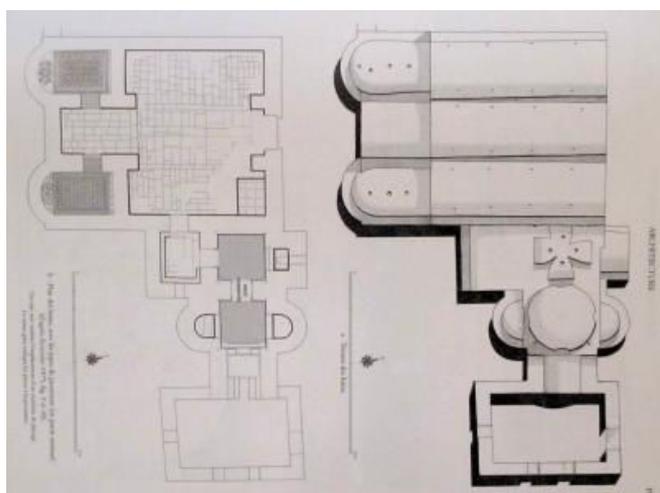
Qusayr ʿAmra
(Mielich Alfons - Musil 1907a)



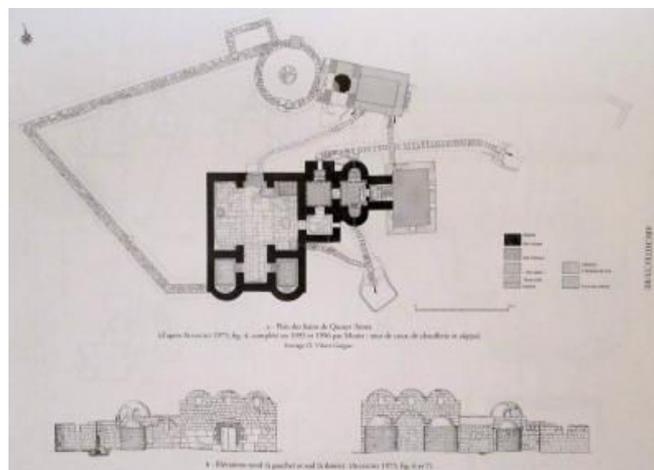
Qusayr ʿAmra
(Mielich Alfons - Musil 1907a)



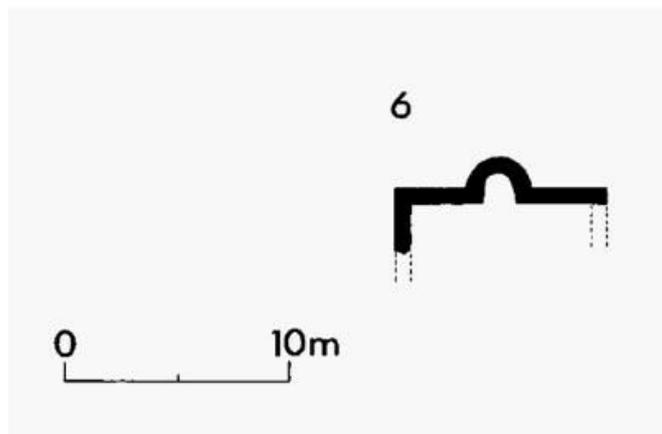
Qusayr ʿAmra phases of the construction
(Vibert-Guigue Claude - Vibert-Guigue 2007, pl.4)



Qusayr ʿAmra
(Vibert-Guigue Claude - Vibert-Guigue 2007, pl.5)

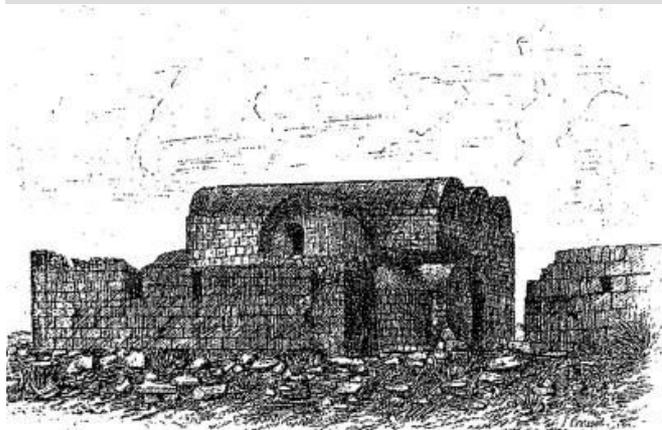


Qusayr ʿAmra_interior
(Vibert-Guigue Claude - Vibert-Guigue 2007)



Quşayr °Amra_mosque
(Trillen Wilfried - in: Gennequand 2010, 124/fig. 211/6)

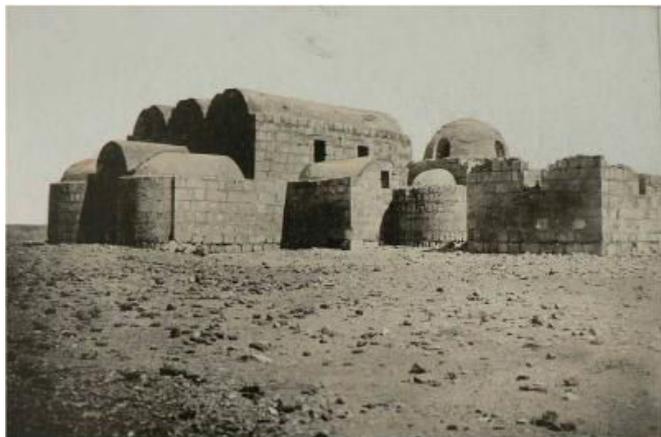
E



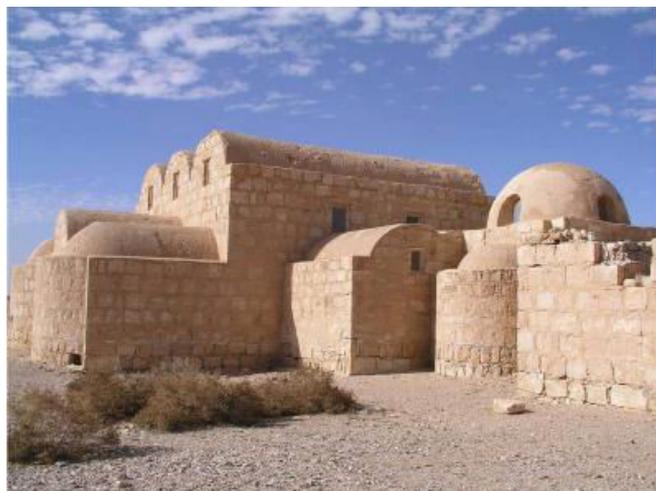
قصر عمرة (عنة)

Quşayr °Amra
(Musil Alois - after Musil in:Lammens 1898)

F



Qusayr ʿAmra_from southwest
(Musil Alois - Musil 1932, 219/fig. 54 - The Literary archive
of The Museum of Czech Literature, Château Staré Hradý)



Qusayr ʿAmra_interior
(Veselá Martina)



Qusayr ʿAmra_from southwest
(Musil Alois - Musil 1932, 219/fig. 54 - The Literary archive
of The Museum of Czech Literature, Château Staré Hradý)

G



Qusayr 'Amra_from the northwest
 (Musil Alois - Musil 1932, 227/fig. 55 - The Literary archive
 of The Museum of Czech Literature, Château Staré Hradý)



Qusayr 'Amra
 (Musil Alois - The Literary archive of The Museum
 of Czech Literature, Château Staré Hradý)



Qusayr 'Amra_from the northwest
 (Musil Alois - Musil 1907b, 225/fig. 101 - Private archive of Musil's
 Family)



Qusayr 'Amra_from the northeast
 (Musil Alois - Musil 1907b, 231/fig. 105; Musil 1907a, 57/fig. 44;
 Musil 1032, 203/fig. 52 - Private archive of Musil's Family)



Qusayr ʿAmra_from southeast
(Musil Alois - Musil 1907b, 221/fig. 97)



Qusayr ʿAmra_from the northeast
(Musil Alois - Musil 1907b, 227/fig. 102)



Qusayr ʿAmra_from the northeast
(Musil Alois - Musil 1907b, 231/fig. 105; Musil 1907a, 57/fig. 44;
Musil 1032, 203/fig. 52 - Museum of Vyskov region, in Vyskov)



Qusayr ʿAmra_the dome from the east
(Musil Alois - Musil 1907b, 229/fig. 103)



Qusayr ʿAmra
(Musil Alois - Musil 1907a, fig. 46; Musil 1932, fig. 56)



Qusayr 'Amra_interior

(Musil Alois - Musil 1907b, 231/fig. 105; Musil 1902a, fig. 17; Musil 1932, fig. 62 - The Literary archive of The Museum of Czech Literature, Château Staré Hradý)

H



Qusayr 'Amra_interior

(Musil Alois - Musil 1907b, fig. 122; Musil 1902a, fig. 16; Musil 1932, fig. 63 - The Literary archive of The Museum of Czech Literature, Château Staré Hradý)



Qusayr 'Amra_interior

(Musil Alois - Musil 1902b, fig. 18 - The Literary archive of The Museum of Czech Literature, Château Staré Hradý)



Qusayr 'Amra_interior

(Musil Alois - The Literary archive of The Museum of Czech Literature, Château Staré Hradý)



Qusayr 'Amra_interior

(Musil Alois - The Literary archive of The Museum of Czech Literature, Château Staré Hradý)



Qusayr 'Amra_interior

(Musil Alois - The Literary archive of The Museum of Czech Literature, Château Staré Hradý)



Qusayr 'Amra_interior

(Musil Alois - Musil 1907b, fig. 124; Musil 1902a, fig. 13; Musil 1932, fig. 65 - The Literary archive of The Museum of Czech Literature, Château Staré Hradý)



Qusayr 'Amra_intrerior

(Musil Alois - The Literary archive of The Museum of Czech Literature, Château Staré Hradý)



Qusayr 'Amra_interior

(Musil Alois - The Literary archive of The Museum of Czech Literature, Château Staré Hradý)



Qusayr 'Amra_interior

(Musil Alois - The Literary archive of The Museum of Czech Literature, Château Staré Hradý)



Qusayr 'Amra_interior
(Musil Alois - The Literary archive of The Museum of Czech Literature, Château Staré Hradý)



Qusayr 'Amra_interior
(Musil Alois - The Literary archive of The Museum of Czech Literature, Château Staré Hradý)



Qusayr 'Amra
(Musil Alois - The Literary archive of The Museum of Czech Literature, Château Staré Hradý)



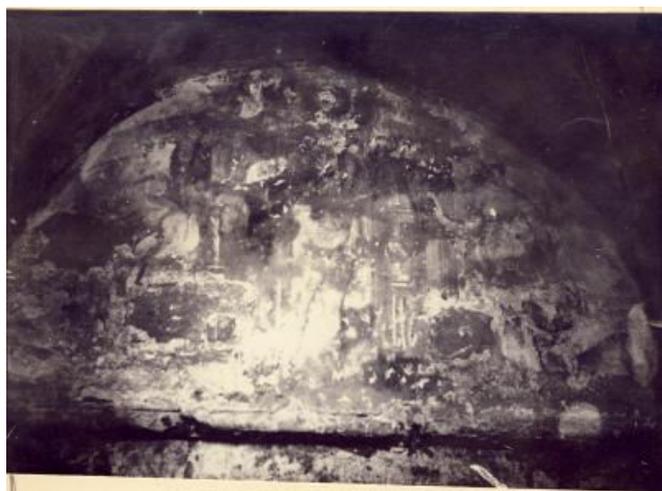
Qusayr 'Amra
(Musil Alois - The Literary archive of The Museum of Czech Literature, Château Staré Hradý)



Qusayr 'Amra_interior
(Musil Alois - The Literary archive of The Museum of Czech Literature, Château Staré Hradý)



Qusayr 'Amra_interior
(Musil Alois - Musil 1902a, fig. 14 - The Literary archive of The Museum of Czech Literature, Château Staré Hradý)



Qusayr °Amra_interior
(Musil Alois - The Literary archive of The Museum
of Czech Literature, Château Staré Hradý)



Qusayr °Amra_interior
(Musil Alois - The Literary archive of The Museum
of Czech Literature, Château Staré Hradý)



Qusayr °Amra_interior
(Musil Alois - The Literary archive of The Museum
of Czech Literature, Château Staré Hradý)



Qusayr °Amra_interior
(Musil Alois)



Qusayr °Amra_interior
(Veselá Martina)



Qusayr °Amra_interior
(Musil Alois - Musil 1907b, fig. 118; Musil 1032, fig. 60 -
The Literary archive of The Museum of Czech Literature,
Château Staré Hradý)

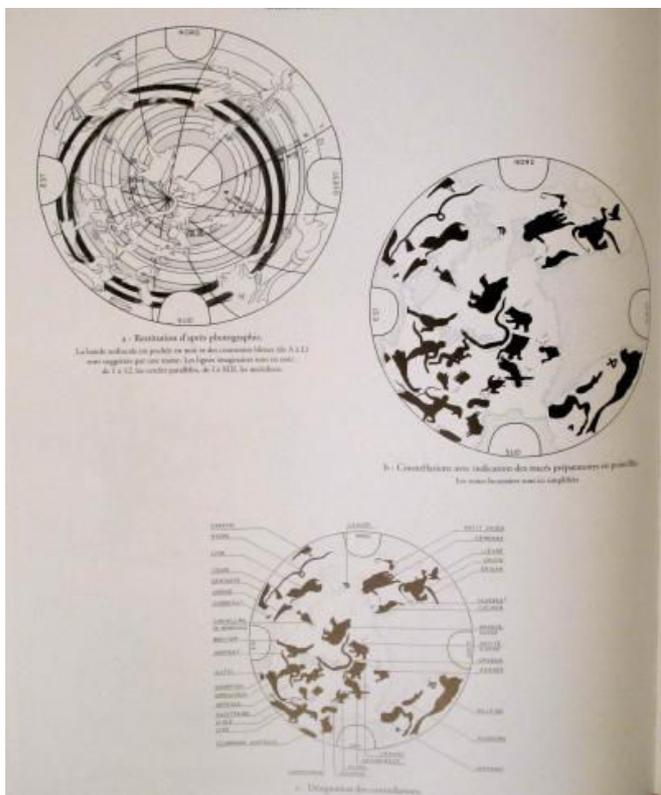


Qusayr °Amra_interior
(Musil Alois - Musil 1907b, fig. 120; Musil 1902b, fig. 16 - The
Literary archive of The Museum of Czech Literature, Château
Staré Hradý)

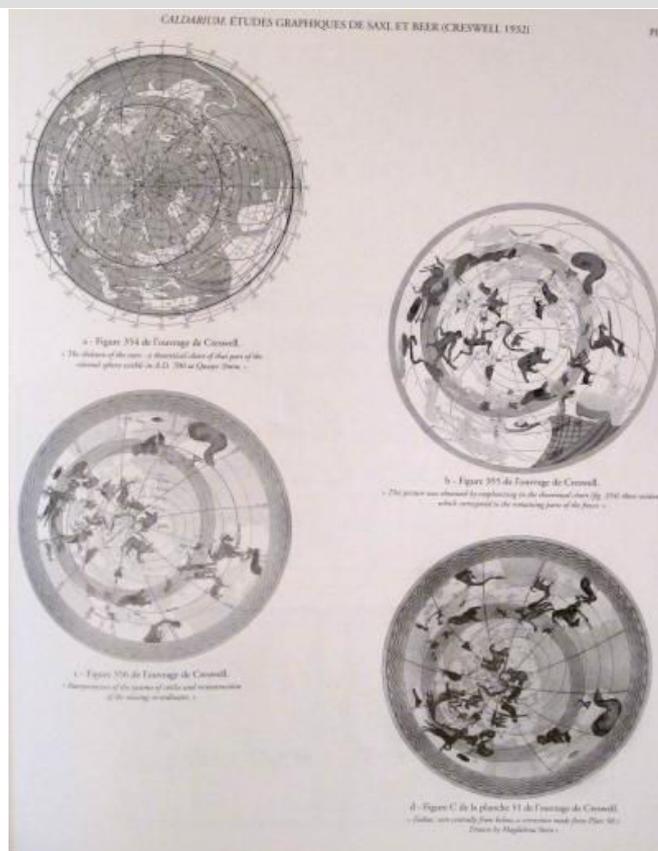


Qusayr ʿAmra_interior
 (Musil Alois - Musil 1907b, fig. 119; Musil 1932, fig. 59 -
 The Literary archive of The Museum of Czech Literature,
 Château Staré Hradý)

J



Qusayr ʿAmra_interior_the dome
 (Vibert-Guigue Claude - Vibert-Guigue 2007, pl.82)



Qusayr ʿAmra_interior_the dome
 (Vibert-Guigue Claude - Vibert-Guigue 2007, pl.83)

al-Ruṣāfa/ Sergiopolis

ARABIC: الرصافة

ANCIENT: **Sergiopolis**

MUSIL EN: **Ar- Reṣāfa**

MUSIL CS: **Resáfa**

Periods

At least 9th century BC to the 13 th century AD (Gregory 1997).

Date of surviving remains

According to Antonin Mendl, al-Ruṣāfa was a typical hellenistic town, built between 275- 27 BC (Mendl 1925, 11).

Musil wrote that origin of the town is problematic and that it's also possible that the Martyry was built either shortly before or soon after in 524 A.D. From this time also may date the decoration of the northern gate. According to the quoted reports it is probably, that all larger churches inside of town had been built before Justinian had ar-Resafa fortified (Musil 1928).

The date remained uncertain. Perhaps two phases - under Anastasius and under Justinian's town was rebuilt.(for ex. Harrison 1984)

The irregular street plan and positioning of the four main gates suggest that the walls were built after the town had developed. (Gregory 1997, vol. Xx, 180).

Verified by modern research

al-Ruṣāfa became the subject of archaeological research under the direction of **Johannes Kollwitz**, beginning in the 1950s.

Aims:

- possibility to investigate there the coexistence and transitions between Christian and Islamic culture.
- archaeological investigations in the large churches (the "Zentralbau", Basilica B)
- one area of streets leading to the north gate
- a comprehensive documentation of the city wall by **Walter Karnapp**
- a study of the immediate surroundings that had been settled after the establishment of Islam made by **Katharina Otto-Dorn**

Since 1975 investigations have been continued under the direction of **Tilo Ulbert**.

- the work was focused upon Basilica A, further buildings in the city, such as the Great Mosque investigated by **Dorothee Sack**, the water supply studied by **Werner Brinker**.
- trial trenches were made pertaining to the street system by **Stephan Westphalen**, neighbouring complexes that belonged to the limes were recorded by **Michaela Konrad**.
- a field survey of the surroundings and built structures investigated by **Michael Mackensen, Herbert Tremel**

Since 1983 the architectural structures have been classified by **Dorothee Sack**.

In 1997-2001 augmentative geophysical prospection was carried out by **Helmut Becker** in the immediate surroundings to the south of the city.

- digital elevation models of the terrain and rectified aerial photographs were completed by **Manfred Stephani**

Al-Ruṣāfa was a part of the so-called 'limes project' focused on 40-km long section of the Roman eastern frontier.

Results of previous researches: documentation of four Christian basilicas, the city wall, subterranean cisterns.

Since the 1980s research on the Islamic city of al-Ruṣāfa have been intensified. The residence of Caliph Hisham b. Abd al-Malik, located south of the city, consists of several palace complexes. They conform generally with the type of complexes that are defended by towers and have inner courtyards. The palace complexes include subsidiary building of very different form, however there is neither a mosque nor a bath.

Investigations confirmed the Great Mosque located within the defended city was the Umayyad construction.

The German Archaeological Institute in addition to the scientific inquiry in this site, included also conserving and restoring the architectural structures.

The project directed by Dorothee Sack commenced in 2006.

Aims (2006-2011) DAI:

- drawing up an archaeological map which should demonstrate the emergence of buildings and the changes made on them as well as the urban development from its beginnings until its abandonment in the 13th century.

- investigations on the residence of Caliph Hisham b. Abd al-Malik on the outskirts of al-Ruṣāfa and verifying of the results by geophysical prospection conducted in 1997-2001.

- creation of digital models of the terrain

- detailed investigations of the construction of the city wall

- preparing plans for the consolidation, restoration and cleaning of structures (espec. of Basilica A).

(<http://www.dainst.org/en/project/resafa?ft=all>)

Description

Musil's description of the site, published in Palmyrena: (Musil 1928)

"The site of the town enclosed by walls 577 m long on the north, 361 m on the east, 591 m on the south, 417 m on the west, enforced by powerful towers at each corner, smaller ones on all sides. The walls are narrower above than below and carry a parapet about two m high, with loopholes, behind which the defenders could walk about and repulse the attackers.

From the town side the walls were ascended by numerous stairways. On the north, east and south sides stately led into the town, the most splendid being the northern gate.

Both to the right and left of the gate in the northern wall is a narrow passage, allowing to walk around the entire fortification (propugnaculum) which protects the gate on the north side.

Within the walls were the huge ruins of 3 Christian churches and some dwelling places. Apart from these everything has been completely demolished and strewn about.

Avenue 28 m wide is running from the north to the south gate.

Arcades lined it on the both sides, each arcade having once been covered by an arched roof supported by columns rounded on the sides toward the avenue and forming rectangular pillars on the opposite sides. Between arcades and the houses were sidewalks 1.8 m wide. From the main avenue to the west and east are traces of streets with ornamental columns + in 2 places remains of triumphal arches.

The roof of the latter was originally supported by 22 columns, only eastern part of the building is left standing + vaulted roof of the three apses at the end.

Farther south the ruined tower of the largest church rises. East of the main avenue on an extensive level surface above huge vaulted crypts, which may have been used as cisterns, was built a basilica with five aisles, each ending on the east with ornamental apses. Unfortunately the only parts of this church that have been preserved are the southern end of the main apse, the two southern apses, and the tower, ruins of which are

about 15 m high. Of this tower 25 layers of stone masonry, each 45 to 65 cm thick, are still standing. A spiral stairway in the tower led to rooms above the domed vaulting of the main aisle and above the apses. The ceilings of these rooms as well as the roof were supported by timber rafters. The windows were grated. As far as could be judged, the tower was originally at least 25 m high and afforded a splendid view over the vast plain.

East of this basilica stands the largest monastery of Sergiopolis. Together with its church, it is best preserved of all the monuments in the town. The church of today shows unmistakably two or three kinds of building material. It has three aisles originally separated merely by piers on which rested high arches. Some times after the building was completed in its original form the support of these high arches was reinforced by the insertion within each of two smaller arches resting in each case on three porphyry columns 2,1 m in circumference. Of the bases of these porphyry columns no traces whatever have been left. These smaller arches supported horizontal tiers of stonework, and the spaces between these tiers and the high arches were filled with bricks. Timber rafters upon which rested the ceilings of the side aisles were supported by lesser arches. Each side aisle originally ended on the east in a high, vaulted apse built of bricks (each 49x37x3,5 cm) separated by layers of white sepiolite. Above the concha of the southern apse 22 rafters (each about 25 cm thick) supported a layer of sepiolite bricks 4 cm thick, forming the floor of a large room, the roof of which was also supported by rafters. Subsequently, within each of the high apses there was inserted at a lower level a vaulted ceiling made of rubble and decorated with colored garlands.

Both aisles were painted, and a panel in the southern apse was ornamented with pink and white mosaic, in which the letter A, made out of the white stones, has been preserved. In front of the apse of the main aisle there was a tomb, to which the relics of St. Sergius were transferred. This tomb was encased with slabs of porphyry 3 cm thick.

The main aisle projects as a clerestory above the side aisles, the clerestory windows being ornamented with small columns 35 cm in diameter and the clerestory itself being built of bricks (24x24x4 cm). Both the north and south walls of the side aisles of the church as well as of the monastery are propped up by huge buttresses filled with rubble. In the inner west wall of the church, above a walled-in door, a stone was placed with an inscription stating that the monastery church was repaired by the metropolitan Simeon in 1093. In that year all the relics of the earlier ecclesiastical edifices of Sergiopolis were undoubtedly brought to this church. The porphyry slabs, with which the tomb of St. Sergius is encased, as well as the porphyry columns supporting the vaulted ceilings of the side aisles, came from the martyr. The bases of the large porphyry columns are still visible in the martyr, and that the columns were rolled away from here to the monastery church can be easily proved, since some of the fragments and one capital are still lying in the road over which they were rolled.

The less strongly built martyr was destroyed by earthquakes in the tenth and the eleventh centuries, and, even if it had been restored, it could not have withstood another shock of that kind. Therefore it was not again repaired after the earthquake of 1068. It was then that the columns were rolled into the monastery church and the new tomb of St. Sergius decorated with the plates and ornament from his older tomb.

Among the Moslem buildings a mosque east of the martyr is still partly visible. It looks as if it had been vaulted. Both the roof and parts of the upper walls have fallen in, filling the inside two metres deep with débris.

The cisterns are without number. Usually two or three are close together, over four meters deep, and vaulted, with small round holes in the vaults through which the water was drawn. The south gate was walled in and the space between it and its outer defensive walls converted into a reservoir, the vaulting of which was supported on five brick pillars. Cisterns of gigantic size were built in the southwestern part of the town, and those about 80 paces from the southwest corner are still well preserved. The northern cisterns are of an earlier date than the southern ones. They were filled with water from a rain pool constructed 450 paces west of the walls. This pool forms a square of 160 paces and is enclosed by a wall 80 cm in thickness. Southwest from it stretches a dam over 600 paces long. Here the rain water was checked and made to flow into the pool and thence into a canal, which led it off again to the moat, over 5 m wide. The water was then carried across the moat on an arch protected by two towers. Thence it flowed through an opening in the wall north of the third tower from the southwest corner, whence it fell into the cisterns. In the wall above the inlet is a niche with the inscription, no longer legible.

Outside the town, in front of the north gate, is a small church, the northern part of which is in ruins. It had three aisles running into apses, vaulted over by four small domes and one high one. The nave did not have a flat timber roof, but a vaulted one which had been painted. Above the windows of the main apse is a short Greek inscription imploring victory for Alamundarus, a Christian king of the Ghassanians. South of the church was either a well or a very deep cistern, and north of it was once either a big caravansery or a monastery. To the east extends a large Christian cemetery. This was still intact in 1908, but in 1912 we found all the graves opened and plundered.

North of the town both to the right and left of the Roman road are the remains of numerous tombs. I found the Moslem cemetery northwest of the northwest corner of the town. Many graves are encased with slabs of burnt clay, on which are incised maxims from the Koran, such as are also found on the tombstones. For the most part, these graves had been rifled before 1908. They were overgrown with nejtul, in which and under the stones hide countless adders.

East and southeast of the town are the stone quarries from which the white, alabaster-like building material was taken for the walls and most of the houses."

(Musil 1928, 155- 211)

History

As late as 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; Mendl 1925; Musil 1928).

Musil wrote, that origin of the town is very problematic. Towards the end of 9th century BC al-Ruṣāfa was of such importance, that its governor was included among those Assyrian Officials after whom the year was designated. Musil assumed, that Al- Ruṣāfa could be founded in that century as a fortified camp of the Assyrian army and was a residence of Assyrian governor. Musil also thought that new Assyrian town a settlement of the same kind was had existed before, as the location was very important to the commercial caravans (Mendl 1925, 9; Musil 1928).

Musil stated that in Al- Ruṣāfa was neither brook, spring or natural well in it or in the vicinity, only rain water and brackish water at the depth 75 m as the soil contains much gypsum (from alabaster) (Musil 1928, 260).

X Shelagh Gregory described al-Ruṣāfa as an Oasis with plentiful underground water (Gregory, 1997, vol. 3, 174).

Historical notes

Pre-Christian:

- Ptolemy, Geography, V, 14: 19 : mentioned Rasapha as one of the towns of Palmyrena.
- Peutinger Table, segm.10, Risapa was situated on the Roman road from Damascus to the Euphrates
- The anonymus Ravenna geographer, Cosmographia, II, 15 (Pinder and Parthey, p. 89) calls it Risapha.
- after 293 Rosapha belonged to the province of Augusta Eufatensis, it was garrisoned by the equites promoti indigenae (Notitia dignitatum, Oriens 33, No.5; spelled Rosafa, ibid., 33, No.27).

Christian era:

- Al- Ruṣāfa became famous due to the grave of St. Sergius (according to the records in Bedjan, Acta martyrum (1890- 1897), vol. 3, pp.283-322, and Liber chalipharum (Land), p.18, ST. Sergius died in 232 A.D.

According to Alexander's statements (the metropolitan of Hieropolis in Syria) not long before 431 a great basilica had been built in ar-Resafa. At the same time high walls and various buildings had been put up. Therefore the present walls must be ascribed to that of the metropolitan Alexander, the second decade of the fifth century (Elijah of Nisibis, Opus chronologicum /Chabot/, p.101).

-several columns from the martyry bear inscriptions which make it evident, that they were erected in the time of a bishop Sergius and of an assistant or rural bishop Maronius. Musil wrote that it's also possible that this bishop Sergius was identical with the bishop Sergius who was sent to al-Hira in 524 and that the Martyry was therefore built either shortly before or soon after that date. From this time also may date the decoration of the northern gate. According to the quoted reports it is probably, that all larger churches inside of town had been built before Justinian had al-Ruṣāfa fortified.

Procopius (De bello Persico, II) mentions Sergiopolis in connection with military campaigns of Chosroes.

Early Islamic Period: During the reign of Umayyads al-Ruṣāfa became known all over the Moslem world as the residence of the caliph Hishām. Al- Tabarī states that reason why Hishām settled there was that caliphs and their sons liked to live in the country, thus escaping of contagious diseases. Hishām moved to al-Ruṣāfa in the desert, where he built two manors. (at-Tabari , Ta'rih, Ser. 2, p.1737-38). He also died in al-Ruṣāfa on February 6, 743 (at-Tabari , Ta'rih, Ser. 2, p.1729f.)

After the abbasid conquest in 750, al-Ruṣāfa suffered from vengeance of the new regime's troops who destroyed Hishām's tomb in the city.

In 902 A.D. the sons of Zikrwaib, the head chief of the Carmathians with some other tribes pillaged a number of settlements (at-Tabari , Ta'rih, Ser. 2, p.2217-19) and also burn the mosque at al-Ruṣāfa.

Musil assumed that al-Ruṣāfa probably suffered from the same earthquake mentioned by Ibn Taġrī Birdī, al-Nujūm al-Zāhira (Popper), vol. 2, p.198 in 1042- 1043 in connection with earthquake in Tadmur.

Ibn al-Atīr, al- Kāmil (Tornberg), vol.10, p.39) mentioned a great earthquake in 1068. Musil supposed al-Ruṣāfa was also demolished that year, after which date the monastery basilica alone was rebuilt. This work was done in 1093, since there is written on the stone set into the western wall of the church: „renovated in the time of Symeon, the metropolitan of Sergiopolis, in the month of June, 6601 after the Creation of the World.“ Musil believed, that after the martyry was destroyed by the earthquake St. Sergius was moved to basilica, where a tomb was built for him partly of the marble slabs and columns from the old tomb.

Guyer, Rusafah (1920), p.15 argues that these columns were taken from the corridors of the old atrium of the basilica, but Musil's wrote that an inscription calling on St. Sergius to grant peace to all testifies that they were taken from his martyry. Musil's also claimed that the fragments excavated there also confirm this.

Yakut (Mu' gam, Wustenfild, Vol. 2, pp.784f.)d. 1224 A.D., writes that Hishām's al-Ruṣāfa was supposed to be built by Hishām for his summer residence when contagious diseases were ravaging Damascus. He believed al-Ruṣāfa existed long before the birth of Islam and that all that

Hishām built were its walls and his own residence.

(Musil 1928)

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Notes - Discussions

The general plan in Musil's Palmyrena was created in collaboration with architect Antonín Mendl, whose reconstruction was based on Musil's plan, table surveys, photographs and descriptions, as well as on the historical data related to this site.

Antonín Mendl in his habilitation thesis holds at that time classical opinion that al-Ruṣāfa is an ideal site for the exploration of development of Eastern Christian architecture, mainly for the reason, that the site belongs to the region where all construction activity was interrupted by Arab occupation (Mendl 1925, 7).

According to Antonín Mendl, al-Ruṣāfa was established as an typical planned town. On the defence of his argument Mendl quotes Musil's description of a 28 m wide street, lined by arcades, intersecting the town from the northern to the southern gate. Musil on the contrary quotes Guyer, according to his description a part of the town was covered by ruins in such way, that in contrast to other Hellenistic towns here the network of street is not apparent.

Mendl quotes Musil's opinion, that the town walls were built during Justinian's rule, after the construction of the church *intra muros*.

Documentation:

In Musil's photos documentation both the southern and the western gate are missing. The eastern gate is documented by 2 pictures, the northern gate is documented best.

From the buildings *intra muros* Musil documented the best the three-aisled basilica, which was also the best preserved building.

To the five-aisled basilica Mendl had for his reconstruction at disposal Musil's description, the ground plan of the church, the overall photo of ruins and the detailed view of the apse and the lateral rooms to the south of the apse.

The southern church: The five – aisled basilica described by Musil as southern church was not mentioned in Guyer's *Rusafah*; Spanner designates it as Basilica B.

Martyrion: Musil's photos catch the richly decorated décor of archivolts of the main apse as well as lateral apses.

Buildings *extra muros*: Mendl made the ground plan of the building on the base of Musil's field diary. As for the roof construction Musil disagreed with Guyer's opinion. Musil believed, that the centre of the building was provided with a large dome. Guyer by contrast stated, that there was a lack of debris from a vault and he came on the base of Herzfeld's drawing to the conclusion, that there was a "tent" roof.

Mendl thought, that Musil's opinion is more probable and he agrees with Musil's conclusion, that the building served as a tomb.

The inscription put the construction to the rule of al-Mundhir (569-582 AD), that means into the 6th century, but according to Mendl it clearly

shows Byzantine ground plan composition.

Construction extra muros: Guyer described it as something of a mystery, inasmuch as the building of ar-Resafa ought to be placed in the sixth century at the latest, whereas Byzantine architecture of the type of the structure beyond the walls flourished in the ninth century. According to information published in Palmyrene (Musil 1928) Musil spent in this site during his two visits altogether 5 days (in total 117 hours). Unfortunately results of work from both expeditions were completely lost, with the exception of several sketches and entries in diaries, almost one month later, when the expedition was ambushed and robbed by a Bedouin tribe, the Shammar (Musil 1928, 166).

However al-Ruṣāfa is on the base of published works aside Quṣayr ʿAmra the best documented and the best recorded of Musil's sites.

A great merit was his cooperation with doctor of technical sciences engineer architect Antonín Mendl, who was commissioned from 1924 by lectures about the Middle Ages architecture on ČVUT, where he later defended successfully his habilitation thesis on the topic of the reconstruction of al-Ruṣāfa.

He executed his reconstruction primarily on the base of results of Alois Musil and German travellers S. Guyer and H. Spanner published in Berlin (Guyer 1920, Spanner-Guyer 1926).

Besides of several field ground plans from a travel diary Musil provided Mendl with altogether 51 photographs.

Geolocation:

Resafa is located in northern Syria, some 50 km southwest of Raqqa and 25 km from the Euphrates River.

Modern state: **Syria**

GPS: **35.5858, 38.5675**

Geolocation: (Musil 1928)

Ar-Resafa lies at the very point, where the undulating plain of al-Kwar merges into the lowland of al-Hora.

Category:

Byzantine - unidentified - fortified town

Archeologist: **Musil Alois**

Musil wrote that it's also possible that the Martyry was built either shortly before or soon after in 524 A.D. From this time also may date the decoration of the northern gate. According to the quoted reports it is probably, that all larger churches inside of town had been built before Justinian had al-Ruṣāfa fortified.

Action:

Archeologist: **Musil Alois**

Duration: **1912-03-29 14:30:00 - 1912-04-01 01:25:00 (58:55:00)**

1912 (cca 3 days= 70, 95 hours) 1912, 29 March, Musil + Sixtus de Bourbon & Parma and their companions arrived 2.30 PM, (preparing of bed etc.) 1912, 30 and 31 March, they examined ground plane + scatches made in 1908, prepared the elevation of some buildings, made a detailed plane of the whole town and it's vicinity, drew and photographed various ornaments (unfortunately all get lost later in Irak, on May 28, during the atteck by Sammar; only sketches and memoranda in diaries were saved).

Action:

Archeologist: **Musil Alois**

Duration: **1908-10-22 05:20:00 - 1908-10-24 03:45:00 (46:25:00)**

1908 (cca 2 days = 46, 25 hours) 1908, October 22 – Musil + Thomasberger sketched a plan of St.Sergius, Musil copied the inscription and took a photographs; Thomasberger Made drawings of ornaments; then they worked in the southern Basilica 1908, October 23 – M+T finished the plan of southern basilica+ survey of town walls; they made a drawing of the martyr (south of northern gate); 1908, October 24 - Musil copied a Greek inscription in the monastery church nord of the town – north of the northern gate; then sketched 2 mausoleums north of this church + copied several adders Arabic inscriptions in the old cementary northwest of the town; back in the town he examined the reservoirs + larger buildings North of them – there were several inscriptions -problem: Musil's companions were afraid of ghosts

Musil's action time total: 105:20:00

Component:

Archeologist: **Musil Alois** - Musil 1928

- **church**

ALAMUNDARUS CHURCH: small church in front of the north gate with Greek inscription imploring victory for Alamundarus, a Christian king of the Ghassanids

Component:

Archeologist: **Musil Alois** - Musil 1928

Islamic - Early - mosque

MOSQUE (east of Martyry) + moslem buildings

Component:

Archeologist: **Musil Alois** - Musil 1928

Byzantine - unidentified - basilica

FIVE AISLED BASILICA (= Musil's SOUTHERN CHURCH) -largest church (due to the north of southern gate rises ruined tower of this church) = east of the main avenue on an extensive level surface above huge vaulted crypts (used as cistern?) was built a basilica with 5 aisles, each ended on the east with ornamental apses (but only southern end of the main apse rest preserved, the 2 southern apses, and the tower, the ruins of which are about 15m high. Of this tower twenty- five layers of stone masonry, each 45 to 65 cm thick, are still standing; a spiral stairway in the tower led to rooms above domed vaulting of the main aisle and above the apses; the ceilings of these rooms + the roof were supported by timber rafters; windows were grated; Musil presumed the tower was 25 m high

Component:

Archeologist: **Musil Alois** - Musil 1928

Byzantine - unidentified - martyr

MARTYRY (destroyed by earthquakes in the 10th or 11th century)

Component:

Archeologist: **Musil Alois** - Musil 1928

Byzantine - unidentified - basilica

3 NAVED BASILICA of St. SERGIUS: largest monastery of St. Sergiopolis, together with its 3 naved church (was best preserved). Church showed 2 or 3 kinds of building material; has 3 aisles originally separated merely by piers on which rested high arches. (a memorial stone with inscription stating that monestary church was repaired by the metropolitan Simeon in 1903)

Component:

Archeologist: **Musil Alois** - Musil 1928

Byzantine - unidentified -

FORTIFICATION: walls and the gates

Component:

Archeologist: **Musil Alois** - Musil 1928

-

big caravansary or monastery (north of church)

Component:

Archeologist: **Musil Alois** - Musil 1928

- cisterns

cisterns - numbers (usually 2 or three are close together; over 4 m deep, vaulted, with small round holes in the vaults through which the water was drawn); reservoir in space between walled in of the south gate and its outer defensive walls) ; gigantic sized cisterns were built in the southwestern part of the town; canal, moat

Component:

Archeologist: **Musil Alois** - Musil 1928

- well

well or deep cistern

Component:

Archeologist: **Musil Alois** - Musil 1928

-

stone quarries - east and southeast of the town (white, alabastre-like building material for the houses and for the walls)

Component:

Archeologist: **Musil Alois** - Musil 1928

Byzantine - unidentified - cemetery

large Christian cemetery (intact in 1908, but 1912 all the graves were opened and plundered)

Component:

Archeologist: **Musil Alois** - Musil 1928

Islamic - Early - cemetery

moslem cemetery northwest of the northwest corner of town; many graves were encased from with slabs of burnt clay, on which are incised maxims from Koran, such as are also found on the tombstones (most of graves were rifled before 1908)

Component:

Archeologist: **Musil Alois** - Musil 1928

-

numbers of town houses

Component:

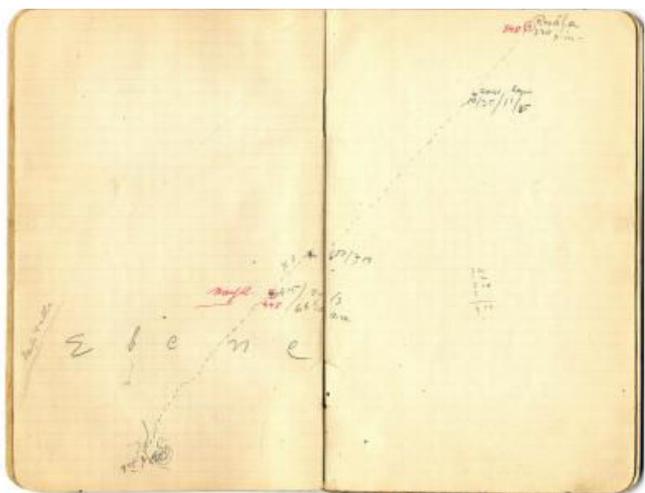
Archeologist: **Musil Alois** - Musil 1928

- tombs

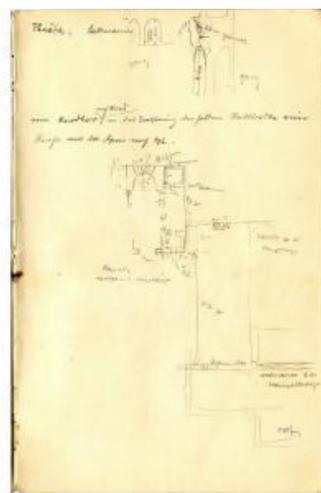
tombs (north of town, both to the right and to the left from roman road)



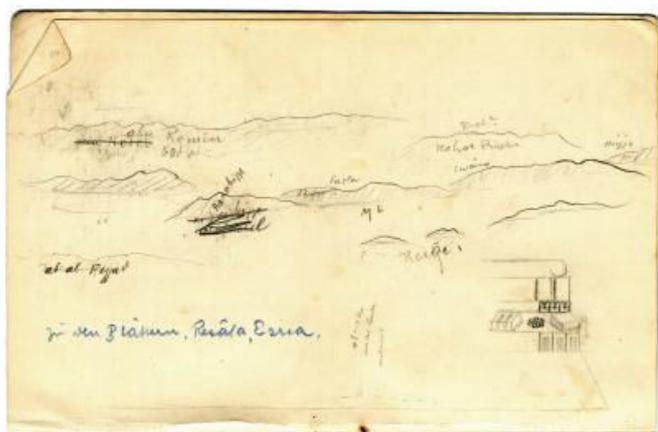
Al-Ruṣāfa_general plan
(Sack Dorothée - Sack 2008)



Al-Ruṣāfa
(Musil Alois - Private archive of Musil's Family)



Al-Ruṣāfa
(Musil Alois - Private archive of Musil's Family)

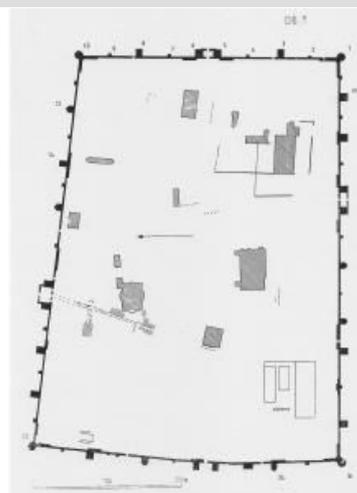


Al-Ruṣāfa
(Musil Alois - Private archive of Musil's Family)

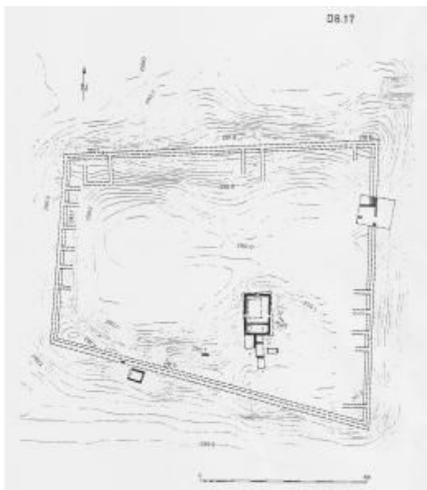
A



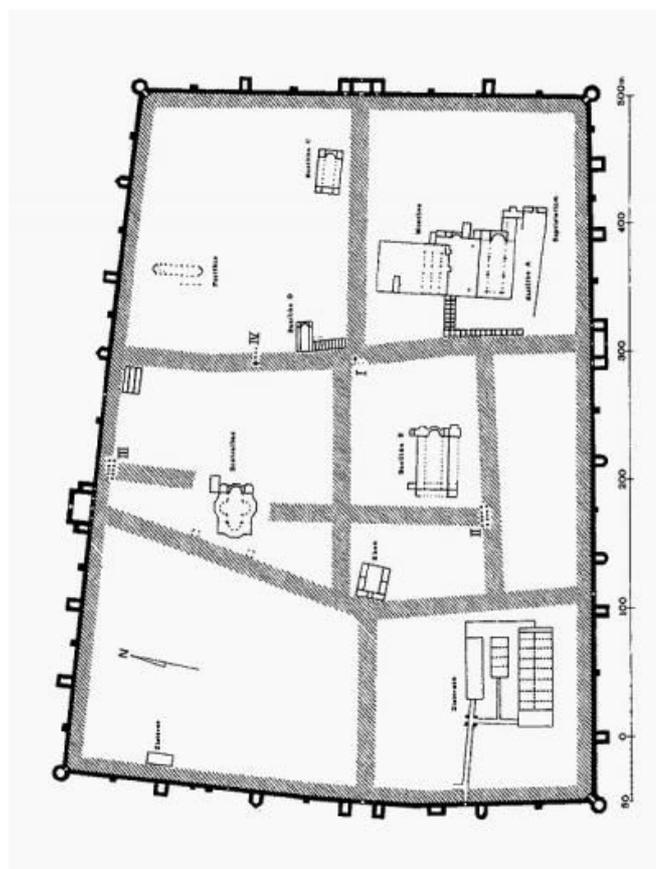
Al-Ruṣāfa: general plan
(Mendl Antonín - Musil 1928, 301/fig.91)



al-Ruṣāfa/ Sergiopolis
(Karnapp Walter - Karnapp 1976/ fig. 3)

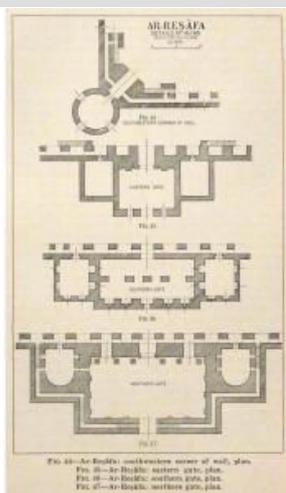


al-Ruṣāfa/ Sergiopolis
(- Mackensen 1984/fig. 3)



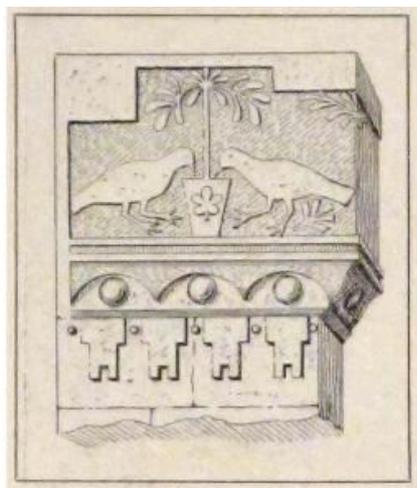
Al-Ruṣāfa
(Ulbert Thilo - Ulbert 2008)

A2



Al-Ruṣāfa
(Musil Alois - Musil 1928, 158/fig. 44-47)

B

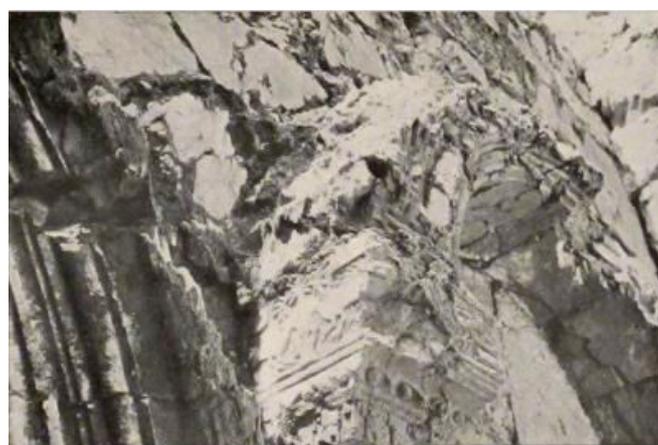


Al-Ruṣāfa; eastern gate, a capital
(Musil Alois - 1928, 160/fig. 50)

BA

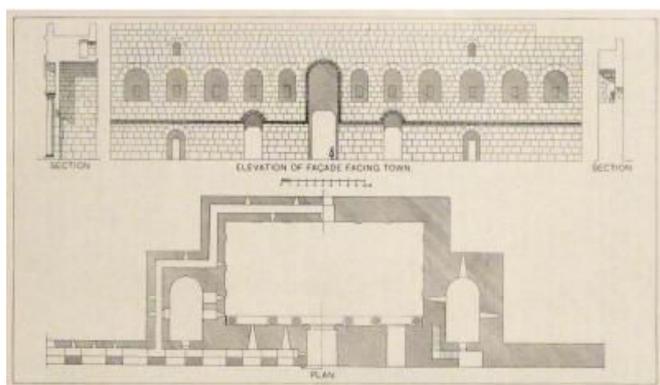


Al-Ruṣāfa: eastern gate from the east
(Musil Alois - 1928, 159/fig. 48)

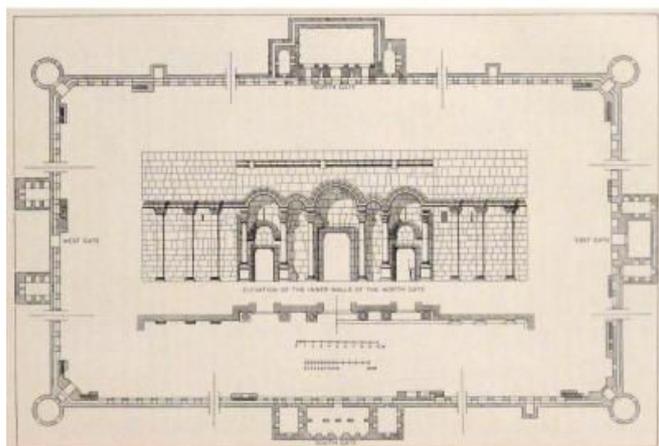


Al-Ruṣāfa: eastern gate, a capital
(Musil Alois - 1928, 159/ fig. 49)

C

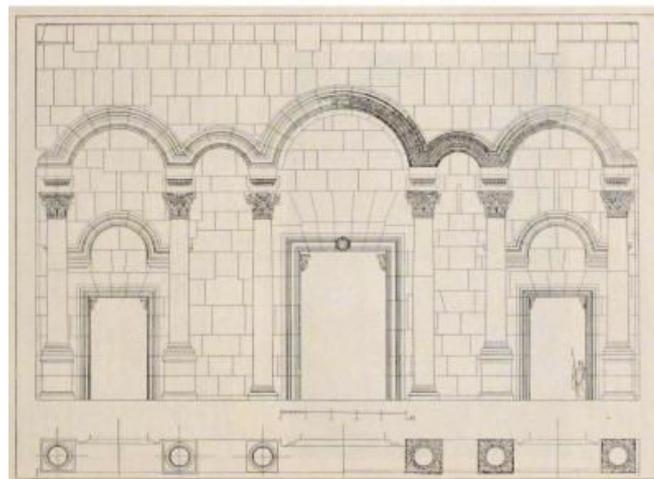


Al-Ruṣāfa: north gate, ground plan; elevation of facade
(Mendl Antonín - 1928, 304/fig. 93)

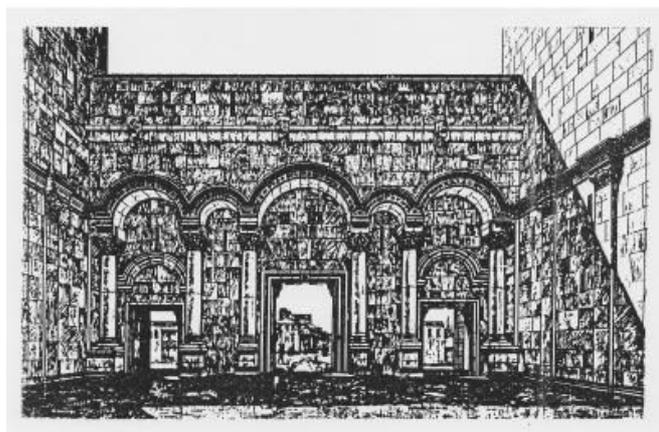


Al-Ruṣāfa: northern gate and
schematic plan of the city
(Mendl Antonín - 1928, 302 /
fig.92)

C



Al-Ruṣāfa: north gate
(Mendl Antonín - 1928, 306/fig. 95)

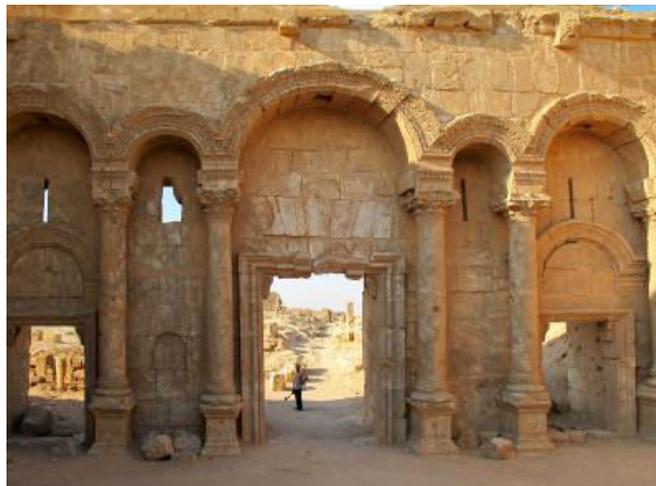


al-Ruṣāfa/ Sergiopolis
(Karnapp Walter - Karnapp 1976/ 211,fig. 115)

DA gates - north gate 1



Al-Ruṣāfa: northern gate
(Musil Alois - 1928, 162/fig. 51)



Al-Ruṣāfa: northern gate
(Veselá Martina - 2012)

DB gates - north gate 2 A



Al-Ruṣāfa: northern gate
(Musil Alois - 1928, 163/ fig. 52)



Al-Ruṣāfa: northern gate
(Veselá Martina - 2012)

DC gates - north gate 2



Al- Ruṣāfa: gates northern gate, details
(Musil Alois - 1928, 164/fig.53)



Al-Ruṣāfa: northern gate
(Veselá Martina - 2012)

DD gates - north gate 2



Al-Ruṣāfa: gates northern gate, east portal
(Musil Alois - 1928, 164/fig. 53)



Al-Ruṣāfa: gates northern gate, east portal
(Veselá Martina - 2012)

DE gates - north gate 2



Al- Ruṣāfa: gates north gate_ east interior wall of the propugnaculum
(Musil Alois)



Al- Ruṣāfa: gates northern gate, propugnaculum
(Musil Alois - Musil 1928, 165/fig.55)

DF walls

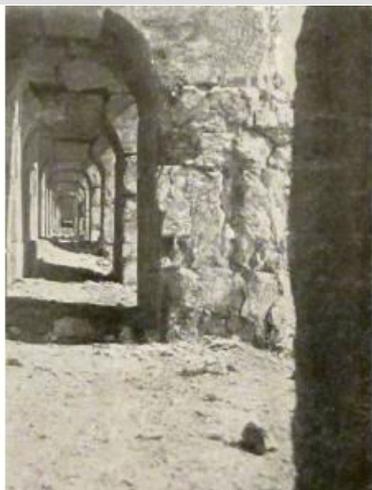


Al- Ruṣāfa: northeastern part walls from southwest
(Musil Alois - 1928, 156/fig.43)



Al- Ruṣāfa: northeastern part walls from southwest
(Veselá Martina - 2012)

DG walls

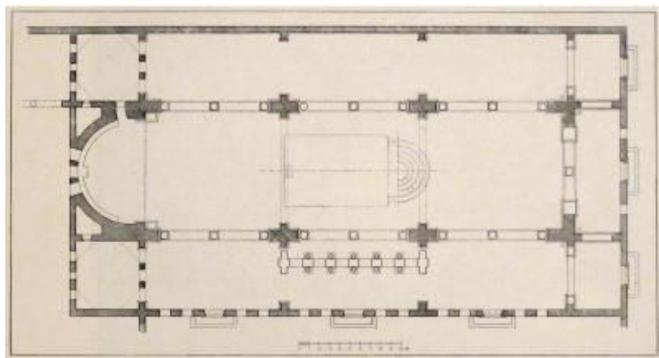


Al- Ruṣāfa: passage along northern walls
(Musil Alois - 1928, 166/fig. 56)



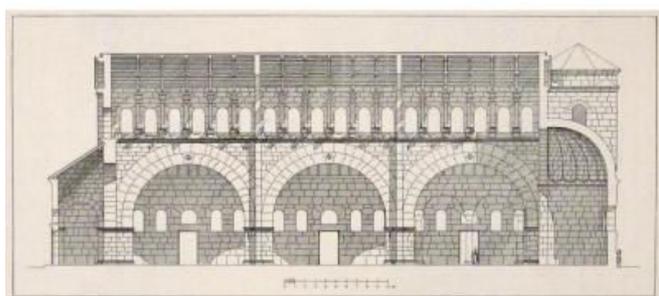
Al- Ruṣāfa: passage along northern walls
(Veselá Martina - 2012)

E Sergilius

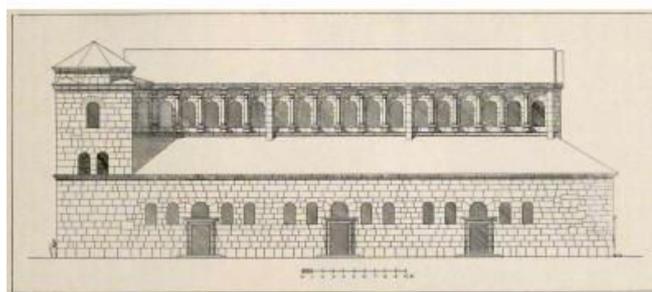


Al- Ruṣāfa: basilica of St Sergius, ground plan (church of Holy Cross)
(Mendl Antonín - 1928, 316/ fig.91)

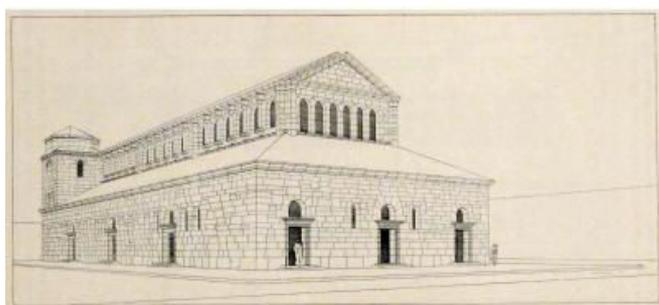
E Sergilius



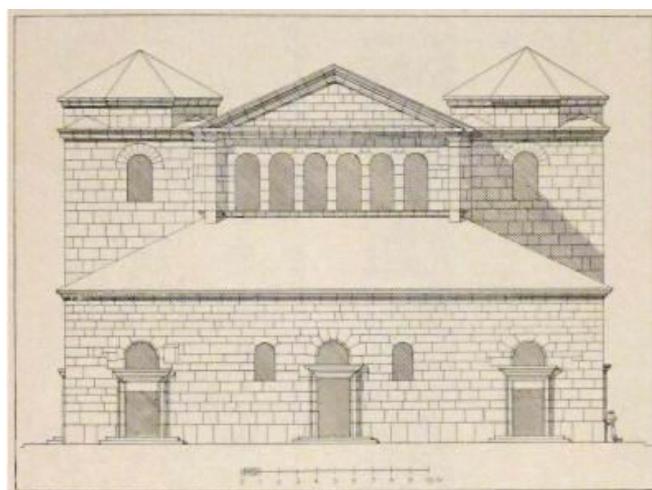
Al- Ruṣāfa: basilica of St Sergius_longitudinal section
(Mendl Antonín - 1928, 317/ fig. 106)



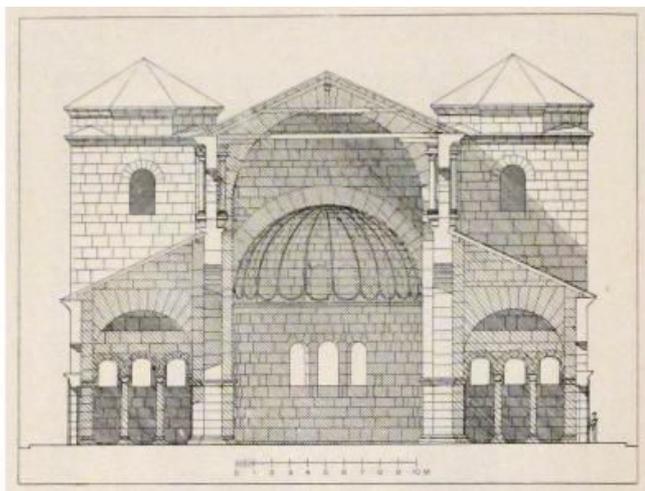
Al- Ruṣāfa: basilica of St Sergius_reconstr elevation of north front
(Mendl Antonín - 1928, 320/fig. 110)



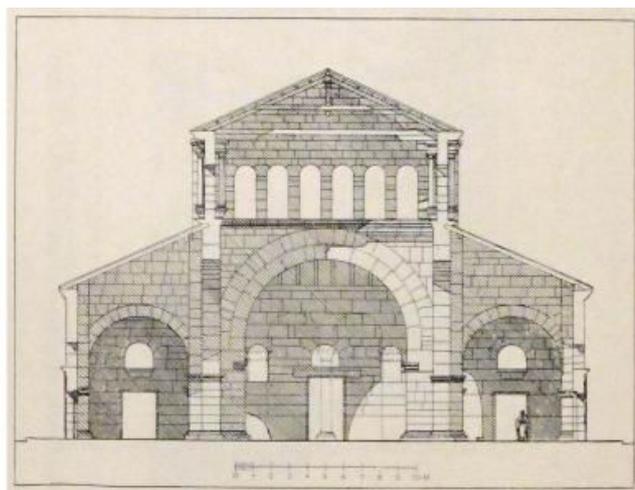
Al- Ruṣāfa: basilica of St Sergius, perspective reconstr exterior
(Mendl Antonín - 1928, 322/ fig. 112)



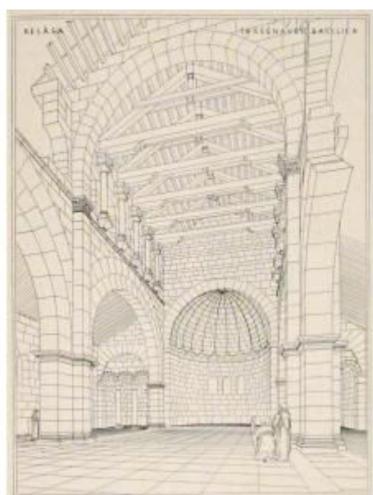
Ar- Reṣāfa: basilica of St Sergius_reconstr elevation of west front
(Mendl Antonín - 1928, 319/fig. 109)



Al- Ruṣāfa: basilica of St Sergius_transverse section_looking east
(Mendl Antonín - 1928, 318/fig. 107)



Al- Ruṣāfa: basilica of St Sergius_transverse section, looking west
(Mendl Antonín - 1928, 318/fig. 108)



Al- Ruṣāfa: basilica of St Sergius_reconstr inter, looking east
(Mendl Antonín - 1928, 321/fig. 111)

E Sergilius



Al- Ruṣāfa: basilica of St Sergius_from the southwest
(Musil Alois - 1928, 182/fig. 65)



Al- Ruṣāfa: basilica of St Sergius_from the southwest
(Veselá Martina - 2012)



Al- Ruṣāfa: basilica of St Sergius_nave_looking east
(Musil Alois - Musil 1928, 184/fig. 66)

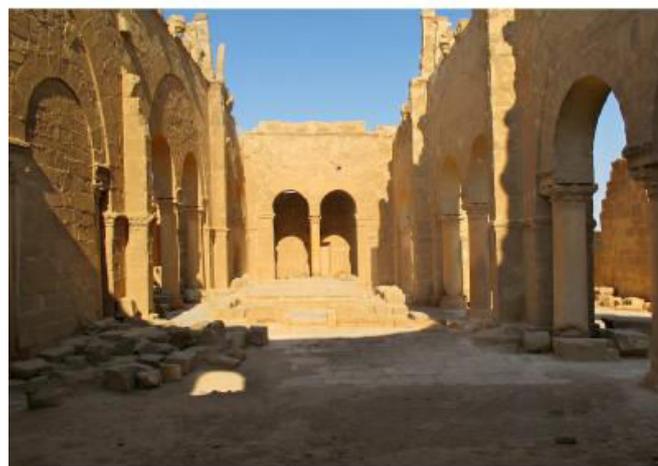


Al- Ruṣāfa: basilica of St Sergius_nave_looking east
(Veselá Martina - 2012)

EB Sergilius



Al- Ruṣāfa: basilica of St Sergius, nave looking west
(Musil Alois - 1928, 185/fig. 67)



Al- Ruṣāfa: basilica of St Sergius_nave, looking west
(Veselá Martina - 2012)



Al- Ruṣāfa: basilica of St Sergius_nord aisle_looking west
(Musil Alois - Musil 1928, 185/ fig. 68)



Al- Ruṣāfa: basilica of St Sergius_nord aisle_looking west
(Veselá Martina - 2012)

EBA Sergilius



Al- Ruṣāfa: basilica of St Sergius_squinches in the north aisle
(Musil Alois - 1928, 194/fig. 71)



Al- Ruṣāfa: basilica of St Sergius_squinches in the north aisle
(Musil Alois - 2012)



Al-Ruṣāfa: basilica of St Sergius_a capital
(Musil Alois - 1928, 194/fig. 72)



Al-Ruṣāfa: basilica of St Sergius_a capital
(Musil Alois - 2012)

EBB Sergilius



Al- Ruṣāfa: basilica of St Sergius, south side
(Musil Alois - Musil 1928, 195/fig. 73)

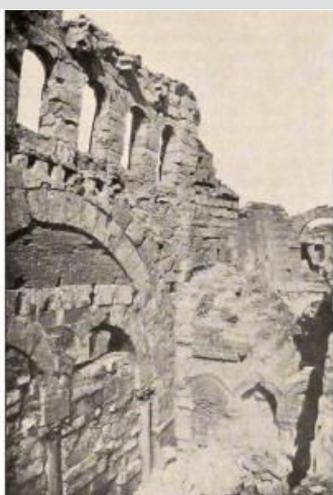


Al- Ruṣāfa: basilica of St Sergius, south side
(Veselá Martina - 2012)



Al- Ruṣāfa: basilica of St Sergius, the apses from the east
(Musil Alois - Musil 1928, 195/fig. 74)

EBC Sergilius

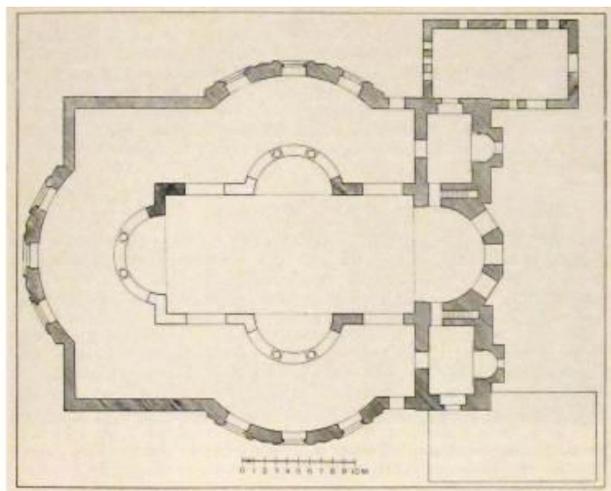


Al- Ruṣāfa: basilica of St Sergius_south aisle_looking east
(Musil Alois - Musil 1928, 191/ fig. 70)



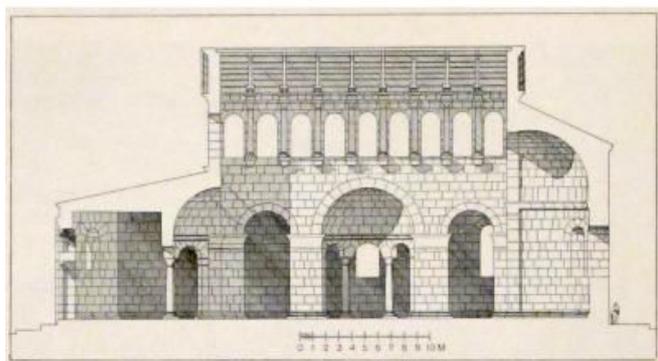
Ar- Reṣāfa: basilica of St Sergius_south aisle, looking west
(Musil Alois - Musil 1928, 190/fig. 69)

F

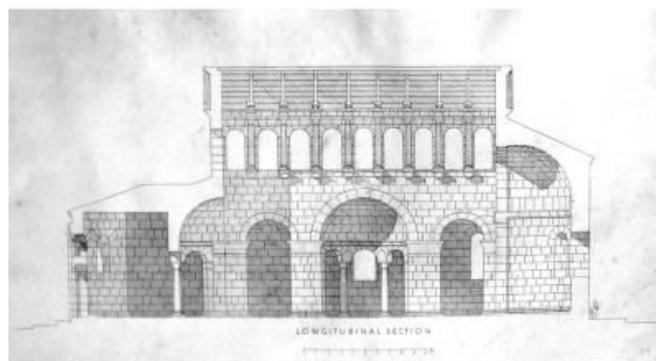


Al- Ruṣāfa: martyrium_ground plan
(Mendl Antonín - Mendl 1928 307/fig. 96)

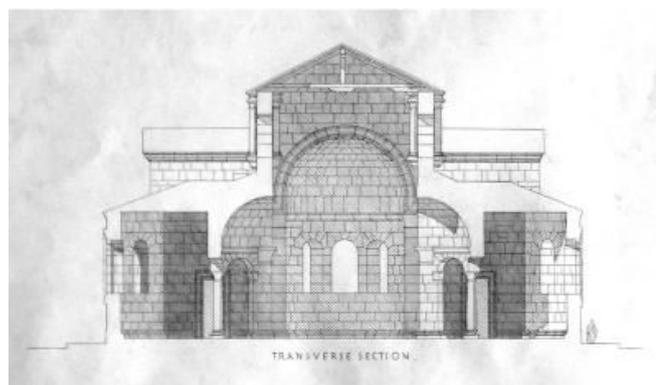
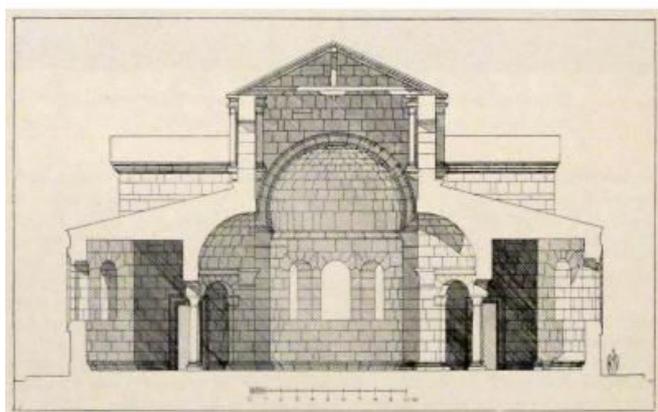
F



Al- Ruṣāfa: martyry_longitudinal section
(Mendl Antonín - Musil 1928, 310/fig. 98)



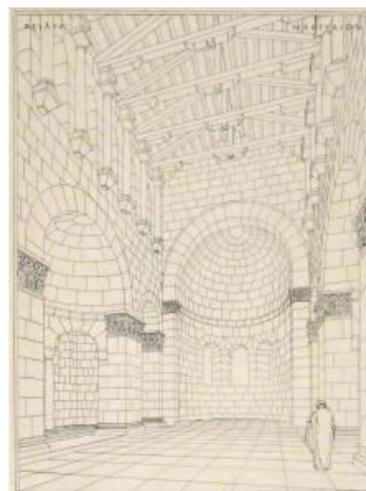
al-Ruṣāfa/ Sergiopolis_Martyry
(Mendl Antonín - The National Technical Museum in Praha)



Al-Ruṣāfa: martyry_transverse section
(Mendl Antonín - Mendl 1928, 310/ fig. 99)



al-Ruṣāfa/ Sergiopolis_Martyry_transverse
(Mendl Antonín - The National Technical Museum in Praha)



Al-Ruṣāfa: martyrium_perspective reconstr of the exterior (Mendl Antonín - Mendl 1928, 312/ fig. 101)

Al-Ruṣāfa: martyry_reconstr interior look east
(Mendl Antonín - Mendl 1928, 321/111)

F



Al-Ruṣāfa: martyry from the west
(Musil Alois - Musil 1928, 171/fig. 59)

Al- Ruṣāfa: martyry_from the southwest
(Musil Alois - Musil 1928, 170/fig. 58)

FA

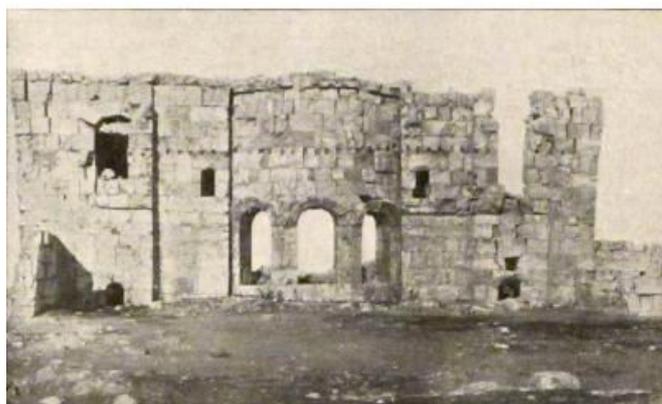


Al-Ruṣāfa: martyry from the west B
(Musil Alois - Musil 1928, 171/fig. 59)



Al-Ruṣāfa: martyry from the west B
(Veselá Martina - 2012)

FB



Al-Ruṣāfa: martyrium_the apse from the east (Musil Alois - Musil 1928, 170/fig. 57)



Al-Ruṣāfa: martyry_the apse from the east
(Veselá Martina - 2012)

FC



Al-Ruṣāfa: martyry_arch and vaulting above diaconium
(Musil Alois - Musil 1928, 171/fig. 60)



Al-Ruṣāfa: martyry_arch and vaulting above diaconium
(Veselá Martina - 2012)

FCA

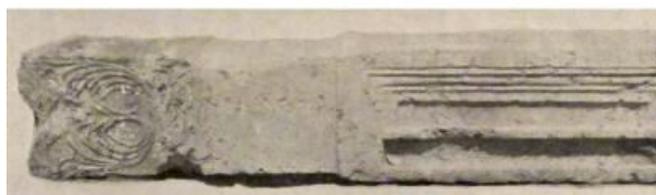


Al-Ruṣāfa: martyrion_detail of the southern apse
(Musil Alois)

FCB



Al-Ruṣāfa: martyrion_porphyry columns
(Musil Alois - Musil 1928, 197/fig. 75)

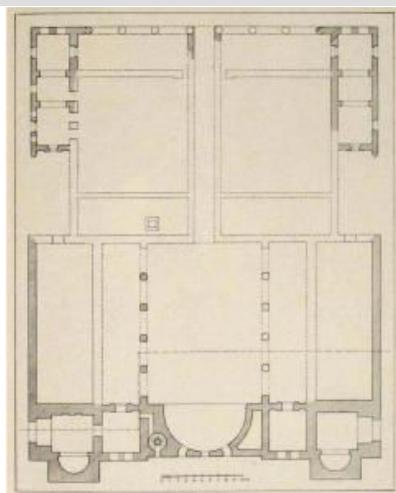


Al-Ruṣāfa: martyrion_marble pillar
(Musil Alois - Musil 1928, 199/fig. 76)



Al-Ruṣāfa: martyry capital
(Musil Alois - Musil 1928,201/fig. 77)

G



Al-Ruṣāfa: southern church_ground plan
(Musil Alois - Musil 1928, 313/fig. 102)

G



Al-Ruṣāfa: southern church from the southwest
(Musil Alois - Musil 1928, 173/fig. 61)

Al-Ruṣāfa: southern church from the southwest
(Veselá Martina - 2012)

GA



Al-Ruṣāfa: detail of a structure adjoining the southern church
(Musil Alois - Musil 1928, 181/fig. 64)



Al-Ruṣāfa: southern church_right diaconium
(Musil Alois - Musil 1928, 175/fig. 63)



Al-Ruṣāfa: southern church_apse from the west
(Musil Alois - Musil 1928, 174/fig. 62)

H

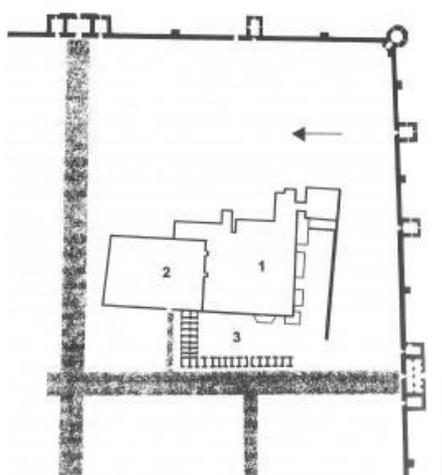


Al-Ruṣāfa: looking southwest from the southern church
(Musil Alois - Musil 1928, 205/fig. 79)



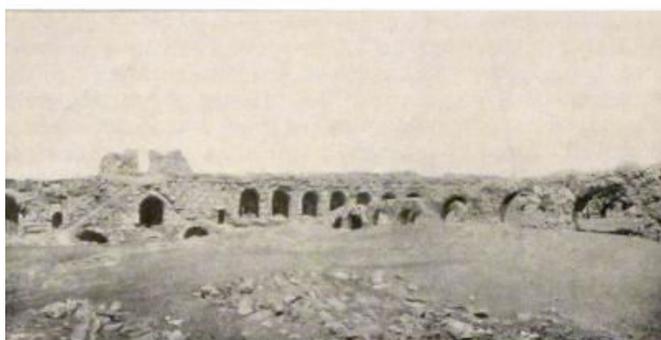
Al-Ruṣāfa: looking southwest from the southern church
(Veselá Martina - 2012)

I

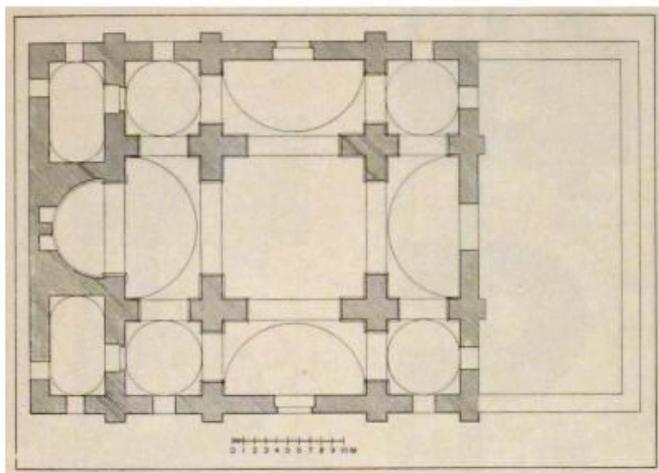


al-Ruṣāfa: 1)Church 2) Mosque 3)Suq complex
(Ulbert Thilo - Ulbert 1997; Walmsley 2007, 82/fig. 8)

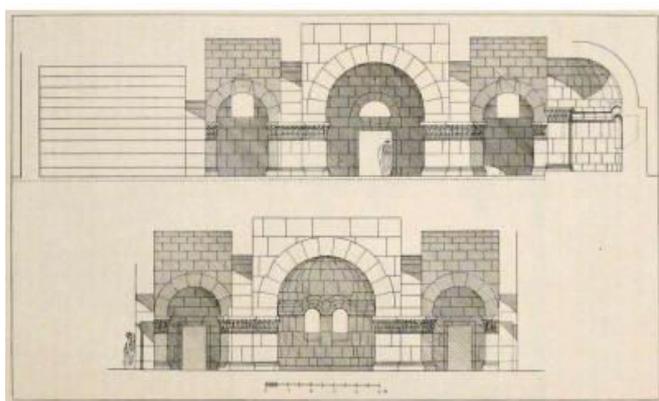
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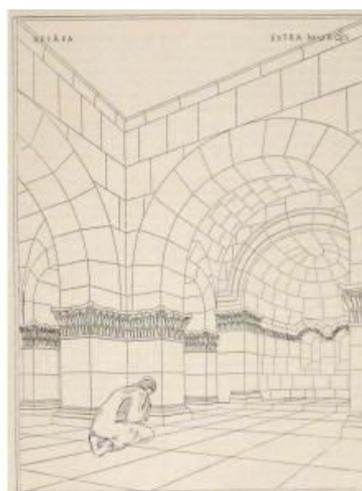
Al-Ruṣāfa: the mosque_from the southwest
(Musil Alois - Musil 1928, 204/ fig.78)

Ja

Al-Ruṣāfa: Alamundarus church
(Mendl Antonín - Mendl 1928, 323/fig. 113)

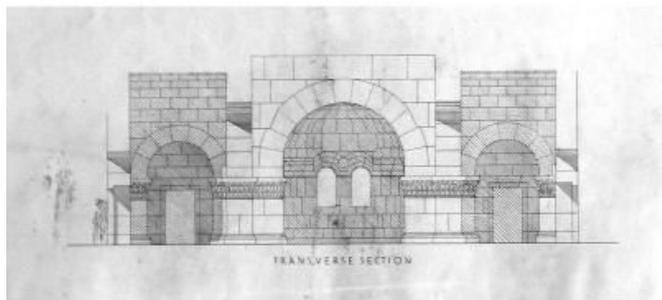
Jb

Al-Ruṣāfa: Alamundarus church_above longitudinal_below transverse section
(Mendl Antonín - Mendl 1928, 324/fig. 114)

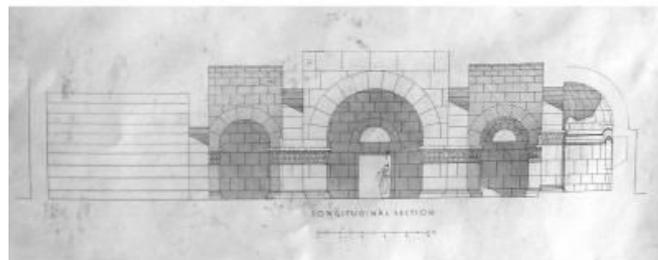


Al-Ruṣāfa: Alamundarus church_reconstr interior_looking east
(Mendl Antonín - Mendl 1928, 325/ fig. 115)

Jc



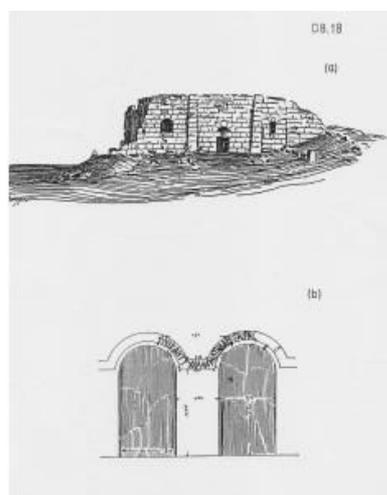
Al-Ruṣāfa: Alamundarus church
(Mendl Antonín - The National Technical Museum in Praha)



Al-Ruṣāfa: Alamundarus church
(Mendl Antonín - The National Technical Museum in Praha)

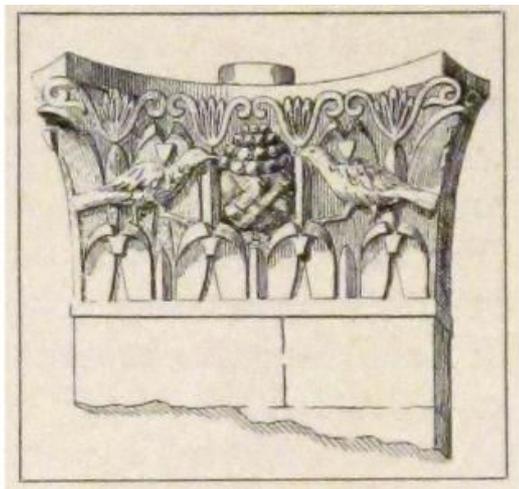


al-Ruṣāfa/ Sergiopolis
(Herzfeld Ernst - Sarre-Herzfeld 1920/fig. 150,151)



al-Ruṣāfa/ Sergiopolis
(Herzfeld Ernst - Sarre-Herzfeld 1920/fig. 150,151)

Jd



Al-Ruṣāfa: Alamundarus church_a capital
(Musil Alois - Musil 1928, 209/ fig. 82)

Jd



Al-Ruṣāfa: Alamundarus church_a capital
(Musil Alois - Musil 1928, 208/fig. 80)

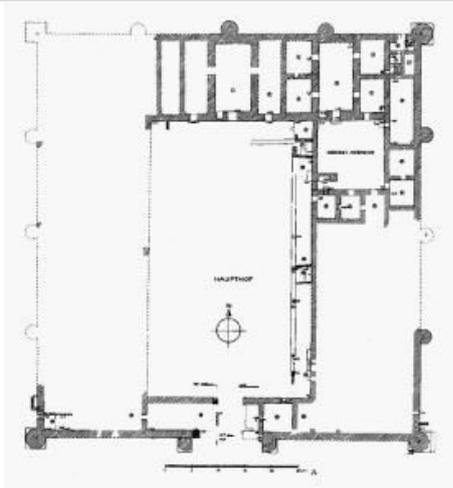
Je



Al-Ruṣāfa: Alamundarus church_above longitudinal_interior of the
main apse

(Musil Alois - Musil 1928,208/ fig. 80)

K



Al-Ruṣāfa
(Otto-Dorn - Otto-Dorn 1957)

Qaşr al-Ḥayr al-Sharqī/ Al-°Arīza ?

MUSIL EN: **Ḳaşr al-Ḥēr**

ANCIENT: **probably Al-°Arīza/al-°Urđ (not certain)**

MUSIL CS: **Hēr (= large enclosure) and Huér**

Periods

Despite the fact, that Musil found the Arabic inscription, he dated the site to the Roman period.

- modern researches date this site to the Islamic period. The small enclosure was identified as Umayyad castle (qaşr), the large enclosure was determined as "new town" (madīnat).

- Grabar supposed the site was destroyed by earthquake and rebuilt again in VII./13.th century.

-this hypothese was disproved by a recent research carried out by D. Gennequand. A new stratigraphy showed, that there are two different principal phases of the construction. After the founding of the site by Hishām b. °Abd al-Malik (728- 729 AD); dated by the inscription on the pillar of the Mosque), the different phase of the occupation appeared at the beginning of the IX. century. The occupation of the "castle" lasted until the beginning of the X. century, as well as the occupation of the large enclosure. In the Xth century the site was destroyed, probably by an earthquake.

Date of surviving remains

Verified by modern research

- 1) First serious prospection was carried out by the architect A. Gabriel in 1920 (Gabriel 1927). He published a schematic plan and attributed small enclosure to Late Antiquity (V. or VI. century), the large one he dated to the Umayyad period.
- 2) H. Seyrig made a prospection of the hydraulic system and excavated the gates of exterior enclosure (Seyrig 1931, 1934).
- 3) K. A. C. Creswell on the base of the architectural analyses dated both enclosures into the Umayyad period (Creswell 1969, 522-544).
- 4) The research of this site was led by Oleg Grabar in 1960. He described the site as a complex of two enclosures, a bath, a settlement consisting of buildings built from unfired bricks, which has its origin in the period of the Umayyad rule, and a large enclosure of stone, which he identified as a fortification. The small enclosure, which occupies an area of approximately 66 square meters and is built from high-quality stones and fired bricks, is a typical Umayyad fortified castle of a square ground plan, so called qasr.

According to Grabar the small enclosure was rather a khān or a caravanserai than a castle. He founded his assertion on the geographical location, which was situated on the main road from central Syria to the Euphrates and also on the minimal decoration of the building (Grabar-Holod-Knustad-Trusdale 1978, 32; Northedge 1994, 235). He described the complex of the large enclosure, an approximately square of 163 m a side, as a planned urban entity containing the basic units of Islamic towns in the Middle Ages. Among these components belong a mosque, a market place, a bath and a residential quarter. Grabar identified it as a madīna, evidently on the basis of the foundation inscription, which was found in the mosque (Grabar-Holod-Knustad-Trusdale 1978, 79-80).

5) A. Northedge does not consider this interpretation as satisfactory.

He agrees with Grabar, that the Umayyads liked a rich decoration of the interior, however he does not consider the amount of decoration as a criterion for a decision, if a building belongs into the category of qaṣr or not. He states several reasons, which could influence a lack of the internal decoration, as was a shortage of money, a preference of the founder for the minimal decoration etc. It cannot be reliably dated without a probe of the settlement from unfired bricks, which was classified as the Umayyad only on the base of a surface survey. Altogether he considers the whole spectrum of the settlement Qaṣr al-Ḥayr al-Sharqī as vaguely interpreted. The small fortification could be the qaṣr as a high-quality of construction shows, and the large fortification a residential unit, but this connection was later divided into two separate complexes. The term madīna could be valid for the residential unit. One of the possible interpretation consists of the fact, that the qaṣr could be build as the first and the madīna – in this case a large fortification – completed additionally (Northedge 1994, 235-236).

6) Donald Whitecomb presents the large enclosure recorded on this site as an example of an early Islamic urban founding of the type amsār. He puts it on the base of a typological comparison into the same group as Ayla and 'Anjar. These type of sites connect residential, religious and political functions and are therefore real town centres. He considers these centres in the material conception as an example of a functional structural experiment, in the social conception as an example of new Muslim foundings in the 7th and the 8th century (Whitecomb 1994, 167-168). Northedge characterizes amsār as garrison towns on the newly captured territories, emerging in the period of the initial spreading of Islam, when for the first time a large amount of members of various Arabian tribes settled in an urban environment (Northedge 2000, 35).

7) In the 1990s a new prospection was carried out under the direction of

K. al- As 'ad. The congregational mosque in the southeast corner of the Large enclosure, as well as large surface of both enclosures were restored by DGAM in Palmyra.

8) In 2002 the massive and unsuitable reconstruction was interrupted and Syro-swiss team under the direction of Denis Genequand started project focused on archaeological prospection of the site in order to examine the both the Umayyad fundation and the general structures of the site.

They verified:

- a) the building of the castle: quadrangle ground plan 70m x70m, which is preserved until to 11m (two floors). It contains the groups of (bayt/ apartments buyūt) typical for classical Umayyad castles.
- b) The large enclosure - madīna (square ground 167m x167m).
- c) the Bath (typical plan for Late Antiquity and Early Islam in Bilād al-Shām.
- d) The northern establishment - identified as the zone of local people in Umayyad and Abbasid period.
- e) The southern establishment: the group of buildings; the southern castle
- f) hydraulic structures
- g) The irregular enclosure

Description

Musil's description (Palmyrena):

Two forts.

1) The outside dimensions of the larger one are approximately 160 m long from east to west by 150 m wide.

It has round towers on each corner and smaller towers on each side - 20,7 m apart from the east and west sides and 22, 6 m apart from the north and south sides.

In the center of each side there was a gate flanked by two towers and leading into a spacious court, where a few remains of old walls could be seen.

Five brackets ornamented with human faces project above the western gate. About in the middle of the court there is a reservoir with a door shaped like a horseshoe, with an Arabic inscription: „Al-Malek Sa'id ib n Gemaleddin... *tīšrin* the second, 810. Mansur wrote this.“ **Thus the inscription dates from November 1407, yet the fort itself is unquestionably of Roman origin** (Musil 1928, 77).

In the southeast corner of the fort a mosque was built, with three aisles resting on pillars. The walls above the arches are constructed of brick, and among the débris lay various capitals.

2) The smaller fort, 42 m east of the eastern gate. This is approximately 65 m square on the outside. There is a round tower at each corner, on each side except the west two smaller equidistant ones serve as buttresses.

On the west the towers are a little nearer together, and gate between them leads into a court full of débris. Abutting against each wall a row of rooms of unequal size is still to be seen.

In the southeast and northwest corners there are stairs leading up to the ramparts. Some of the towers are topped by brick domes and ornamented all around with pairs of semi-columns connected by arches. The columns, as well as the spaces between them, are covered with decorations.

3) Between the two forts there is a well with a high tower above it.

(Musil 1928, 77-79)

History

- several travellers have visited the site, like for. example French consul J.- B. Rousseau (Rousseau, 1899, 146-154; 151) stationed in Aleppo in 1808, who discover the inscription on the pillar of Mosque, dated the site to 728 AD.

- The inscription was later published by Clermont- Ganneau (1900, 285-293).

Nevertheless it did not prevent other travellers in dating the site to the Roman period, as was the case of Musil.

Historical notes

"A"Addaaddaa (var. Adda) is identical with the Roman military station of the same name"(Musil, 1928, 233).

Musil identified the above mention Roman camp with al- Ḥēr. He wrote, that this camp stands on the western foot of the hillocks of ad-Dīdi, the name which reminded him one of the old Adada. This identification was however wrong.

Musil references

Musil, A. 1928a: *Palmyrena*. New York.

OtOthheerrss seselleecctteedd rerefefererencnceess

Gennequand, D. 2002: *Project „ Implantations umayyades de Syrie et de Jordanie“ - Rapport sur une campagne de prospection et reconnaissance*. Amman.

Grabar, O.- Holod, R.- Knustad, J.- Trousdale, W. 1978: *City in desert*. Qasr al- Hayr East.

Notes - Discussions

Musil printed in his book *Palmyrena* the ground plan of the large as well as the small enclosure, five sketches of details and 3 photos of this site (Musil 1928, 72/fig. 15; 73/ fig. 16; 74/ fig. 17; 75/fig. 18; 77/fig.19, 20; 78/ 21, 22; 79/23; 80/ 24).

After comparison Musil's results with results of revisional surveys it's evident, that in case of this site Musil was mistaken in the datation of the monuments. In spite of considerable lack of clarity in the accurate datation of all components, which persist even after Grabar's research, it is evident, that the complex originated only in the Middle Ages and the most structure is reliably dated into the the Umayyad period. Musil's

identification with an ancient site Adaba is thus incorrect. Musil evidently came to the conclusion, that utilization of this site in the time of Arabian dominance was secondary and the water reservoir in the middle of the court with a large fortification was completed additionally. According to my view Musil came to the conclusion, that kasr al-Hér was originally a Roman border fortress, because of inaccurate identification of the Roman limes and also because of the fact, that by him made ground plans of both buildings were similar to the ground plans of Roman fortresses, which he visited and measured. The typological development of Islamic fortresses and towns was not known in his time, moreover the early forms of Umayyad castles and town were in a considerable extent influenced by the architecture of Roman fortresses. It is difficult to date correctly a building only on the base of formal attributes even nowadays.

From the comparison of ground plans of both fortifications made by Musil and ground plans made on the base of Grabar's survey follows (Grabar-Holod-Knustad-Trusdale 1978, příloha 23D, 8D), that Musil caught quite correctly the course of the fortifications. Inner structure adjoining with the small fortification were caught approximately correctly, but the inner division in individual rooms differs from the exact division captured by later research. The structure of the large enclosure of the court was not captured in Musil's plans at all, with the exception of indicated, correctly situated columns of a three-aisled mosque in the south-eastern corner of the fortification.

Musil also didn't mentioned other structures of this site.

Musil measured the length of the peripheral masonry with a relative exactness, it differs approximately only by 5-7 m. He spent there about 4 hours.

Geolocation:

cca 110 km to the East-north -east from Palmyra in direction to al-Ruṣāfa

Modern state: **Syria**

Category:

Roman - unidentified -

Archeologist: **Musil Alois**

1) Large fort (150x 160m) included a mosque; arabic inscription 2) small fort 65x 65 3) well

Category:

Early Islamic - Abbasid -

Archeologist: **Genequand Denis**

Category:

Early Islamic - Umayyad -

Archeologist: **Genequand Denis**

Period: Umayyad, Abbasid: 1) madina 2) castle 3) the Bath 4) hydraulic system 5) The southern structures (group of the buildings) with the southern castle 6) the northern structures (group of the buildings)

Action:

Archeologist: **Musil Alois**

Duration: **1908-10-26 11:52:00 - 1908-10-26 15:50:00 (03:58:00)**

1) a) arrival on 26th of October 1908 at 11:52 am b) departure on 26th of October 1908 at 3: 50 pm

Musil's action time total: 03:58:00

Component:

Archeologist: **Genequand Denis**

Islamic - unidentified - agricultural features

Component:

Archeologist: **Genequand Denis**

- houses

Component:

Archeologist: **Genequand Denis**

Early Islamic - Abbasid -

Component:

Archeologist: **Genequand Denis**

Early Islamic - Umayyad - castle

Component:

Archeologist: **Musil Alois**

Roman - unidentified - enclosure - large

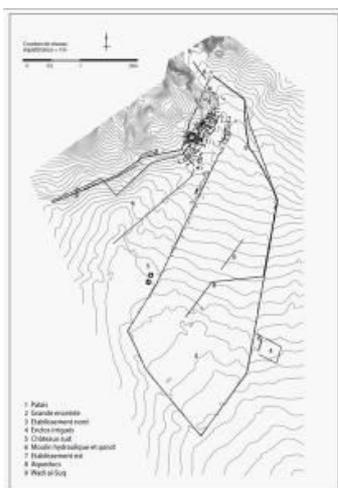
Component:

Archeologist: **Musil Alois**

Roman - unidentified - fort



Qaṣr al-Ḥayr al-Sharqī
(Musil Alois - Private archive of Musil's Family)



Qaṣr al-Ḥayr al-Sharqī plan general
(Genequand Denis - Genequand 2010, vol.II./ 48/fig.66)



Qaṣr al-Ḥayr al-Sharqī with northern establishment
(Reynard Sophie - after Berti-Reynard in: Genequand 2010, vol.II./ 57/fig.82)

1

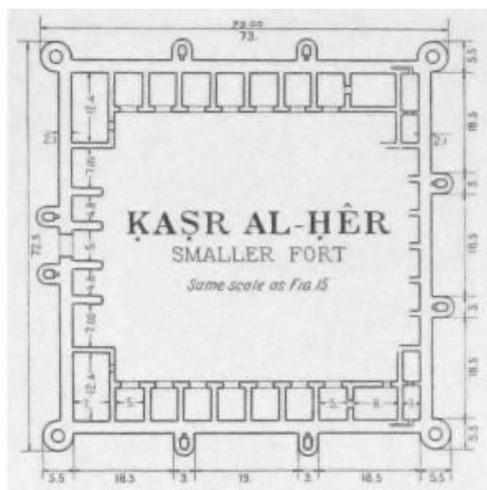


Qaṣr al-Ḥayr al-Sharqī- larger enclosure
(Musil Alois - Musil 1928, 72/ fig.15)

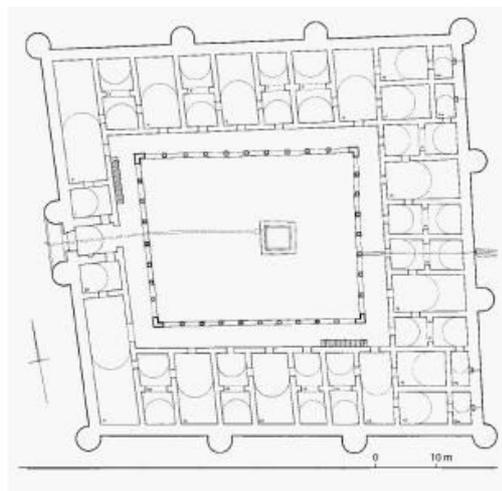


Qaṣr al-Ḥayr al-Sharqī larger enclosure_
(Grabar Oleg - Grabar 1978)

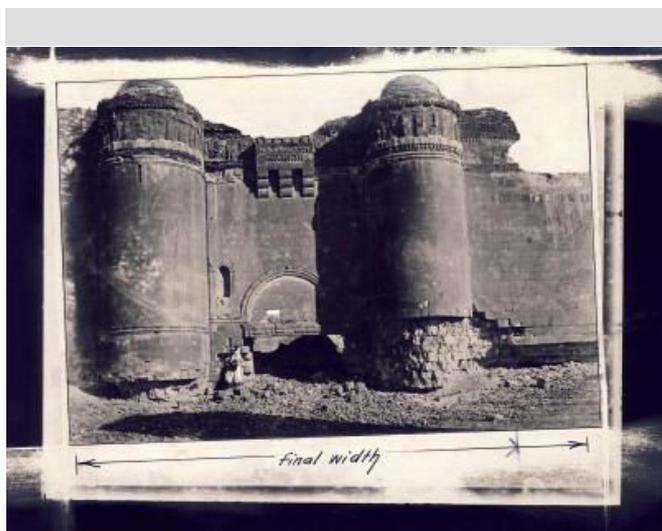
1a



Qaṣr al-Ḥayr al-Sharqī -smaller enclosure
(Musil Alois - Musil 1928, 73/ fig.16)

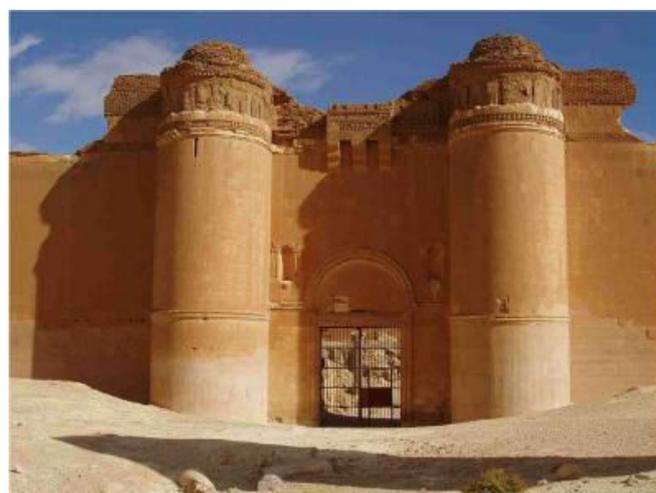


Qaṣr al-Ḥayr al-Sharqī -smaller enclosure_castle
(Grabar Oleg - Grabar 1978)



Qaṣr al-Ḥayr al-Sharqī -smaller enclosure
(Musil Alois - Musil 1928, 78/fig. 22 - Musil's papThe Literary
archive of The Museum of Czech Literature, Château
Staré Hradý)

A



Qaṣr al-Ḥayr al-Sharqī -smaller enclosure
(Veselá Martina - 2012)

B



Qaṣr al-Ḥayr al-Sharqī smaller enclosure
(Musil Alois - Musil 1928, 78/fig. 21 - The Literary archive
of The Museum of Czech Literature, Château Staré Hradý)



Qaṣr al-Ḥayr al-Sharqī - smaller enclosure
(Veselá Martina - 2012)

C

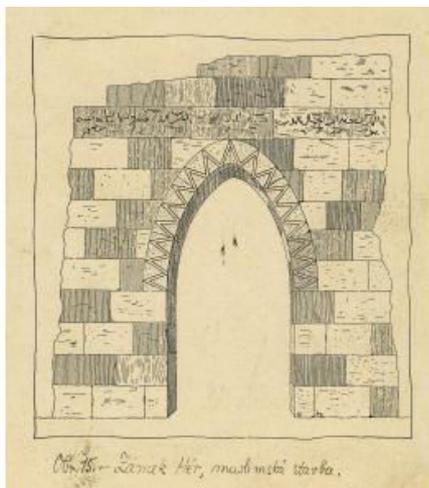


Qaṣr al-Ḥayr al-Sharqī
(Musil Alois - Musil 1928, 75/fig. 18)

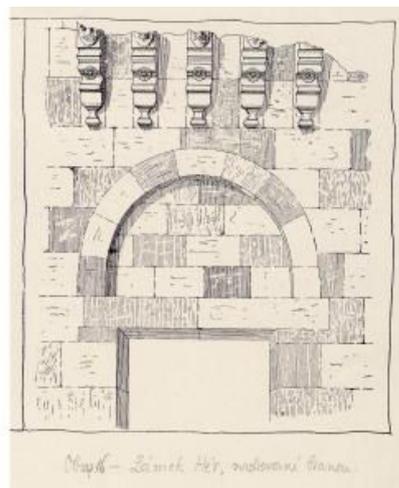


Qaṣr al-Ḥayr al-Sharqī - mosque
(Musil Alois - The Literary archive of The Museum
of Czech Literature, Château Staré Hradý)

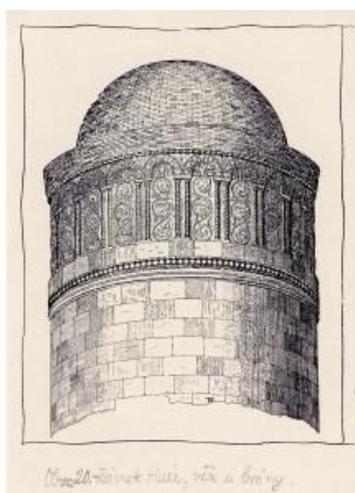
D



Qaṣr al-Ḥayr al-Sharqī
(Musil Alois - Musil 1928, 74/fig. 17)



Qaṣr al-Ḥayr al-Sharqī_larger enclosure
(Musil Alois - The Literary archive of The Museum of Czech Literature, Château Staré Hradý)



Qaṣr al-Ḥayr al-Sharqī_smaller enclosure_(castle)
(Musil Alois - The Literary archive of The Museum of Czech Literature, Château Staré Hradý)



Qaṣr al-Ḥayr al-Sharqī-founding inscription
(Clermont-Ganneau - Clermont-Ganneau 1900)

al- Mushatta

ARABIC: قصر المشتى ,

Periods

Hegira, early 2nd century / AD mid-8th century, Umayyad

Jordanian al- Mushatta was the first discovered Umayyad castle. However nearly hundred years passed from its discovery in 1840, before it was successfully dated (Northedge 2000, 12).

Qasr al-Mushatta was reliably dated on both historical and stylistic grounds. On the basis of stylistic analysis it can be attributed to the reign of Al-Walid II.

It is a well-documented fact that al-Walid II (r. AH 125–6 / AD 743–4) built extensively in the area and that his building program ceased after his death. Creswell and Allan (1989) pointed out, that mixture of brick and stone in architecture, whereby the bricks are much thicker than the stone joints, is an innovation of the Muslim architects. In addition to that, the pointed arches, whereby the two centres are one-fifth of the span, cannot be earlier than the 2nd / 8th century. (Creswell, K. A. C., 1989, 201–14; Najjar, M. 2012).

Date of surviving remains

Verified by modern research

Description

Musil 1907b:

Similar ground plan as in al-Ṭūbā, but is larger and has richer decoration. While peripheral wall of the castle al-Ṭūbā was rectangular, al-Mushatta is a square with sides of 147 m.

Al- Mushatta primarily pays attention to the representation, what is in al-Ṭūbā completely missing. We could say that al- Mushatta is a construction of a higher order. The peripheral wall is in the corners and along sides reinforced by round towers, but the decoration is completed only partly. It had only one portal in the middle of the southern side. This is reinforced by two octagonal towers. The peripheral wall was never completed, but in the original height is preserved. The space inside the peripheral wall is divided by two walls (from north to south) into 3 sections. The larger middle part forms a large square court. On its southern side an entry hall, another court and several larger or smaller rooms were planned, but only foundations were made. To the northern side of the middle court adjoins the second complex of buildings. It seems that from all parts only this one was finished. The construction of this complex consists of three sections. The middle one has a spacious hall with three naves, from which is entry into the central room.

The southern side of the central room is widely opened, on three sides are closed semi-circle niches. It is difficult to decide, if there ever was a

dome. Between it and the peripheral wall are 3 small rooms with barrel vault. Both lateral section of the complex are completely symmetric. They have one larger middle court, from which is from northern and southern side an entry in a smaller court. They were probably never vaulted, similarly as in al-Ṭūbā. From there a door leads with an arched upper fanlight into two other rooms, that means altogether 8 residential buildings with barrel vault, of which every one has 2 rooms. It is the same system and even the same execution as in al-Ṭūbā, only in smaller dimensions. Both outer sections of the whole objects were always completely empty. By this the castle al-Ṭūbā is interesting and on the base of present condition it could be reconstructed.

(Musil 1907b, 199- 208)

Musil references

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. 1907a: Kušejr Amra. Wien.

Musil A.1907b: Arabia Petraea I. Moab. Wien: Alfred Holder.

Others selected references

Creswell, K. A. C.- Allan J. W. 1989: A Short Account of Early Muslim Architecture, pp.201–14, Cairo.

Grabar, O.1973: The Formation of Islamic Art, 197, New Haven.

Khouri, R. G. 1992: The Desert Castles: A Brief Guide to the Antiquities, 11- 12, Amman.

Najjar,M. 2012: Qasr al-Mushatta, in Discover Islamicart Art. Place: Museum With No Frontiers, <http://www.discoverislamicart.org>.

Notes - Discussions

Decorated facade of al- Mushatta was transported to Berlin in 1903 as a gift of Ottoman sultan to Kaiser Wilhem II. It's placed now in Museum of Pergamon.

Musil describes, that Qasr al- Mushatta is not the same as al-Ṭūbā, but very similar to it. It differs from it by its size, by overall disposition and especially by richness of decoration. The peripheral wall of the castle at-Tuba is rectangular, while at the castle of al-Mshatta it is a square with a side of 147 m.

This corresponds to the later survey, which states, that Qasr al-Mushatta is a square structure (144 m x 144 m) with four circular corner towers and five semi-circular interval towers on three of its four sides.

Musil states, that in al-Mushatta not only repeats individual structural elements of residential building activities, but in the central tract were never completed, while those in the side tracts were never started.

Musil states, that the plan of al-Mushatta published in Arabia Petraea (Musil 1907b, 198, fig. 83) comes from A. Mielich. The plan in outlines approximately corresponds with later surveys, but naturally does not contains structures detectable only with use of modern methods.

- In 1889 Musil spent there nearly three hours.

- In 1901 he visited the site again with Mielich. The exact time is not mentioned, but it's evident that they had enough time to make considerably precise sketches and photos of the site.

Geolocation:

Ten minutes of camel ride from the limestone quarries called al-Mushatta, which is situated on the right bank w. al-Mutābba.

Geolocation:

Located 38 km south of Amman

Modern state: **Jordan**

GPS: **31.7379, 36.0102**

Category:

Early Islamic - Umayyad - castle

Archeologist: **Genequand Denis** - Gennequand 2006, 8

cca square 140m x 140m

Category:

Early Islamic - Umayyad - castle

Archeologist: **Musil Alois**

square ground plan 147m x 147m

Action:

Archeologist: **Musil Alois** - (Musil 1902a)

Duration: **1898-06-05 10:12:00 - 1898-06-05 13:15:00 (03:03:00)**

1)a) arrival about 10,12 on 5th June in 1898 b) departure at 13,15 on 5th June in 1898 (Musil 1902a) The information differs in different Musil's publications: a) according to his report (Musil 1902a) and AP I. (Musil 1907b) he visited this site on 5th June 1898 b) according to his report (Musil 1902b) he visited the site on 4th June 1898

Action:

Archeologist: **Musil Alois** - unknown

Duration: **1901-06-11 00:00:00 - 1901-06-11 00:00:00 (00:00:00)**

2a) arrival at ? not mentioned b) departure on 11th.June in 1901 Musil visited the site together with A. Mielich in order to make the most precise description and sketches of some castles, which were identified as "Umayyad castles".

Musil's action time total: 03:03:00

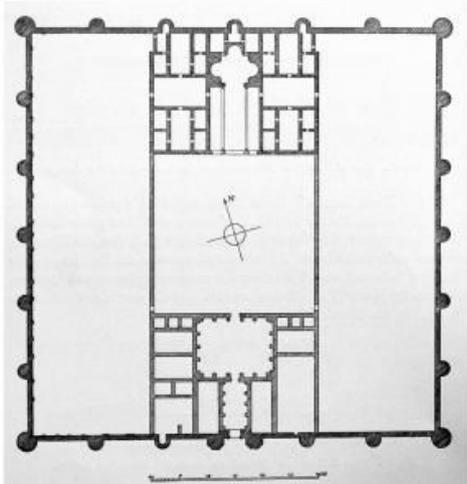
Component:

Archeologist:

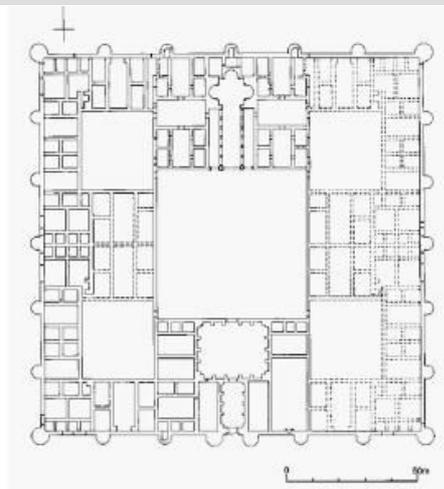
Early Islamic - Umayyad - castle

square ground plan

A



al- Mushatta
(Musil Alois - Musil 1907b, 198/ fig.83)



al- Mushatta
(Trillen Wilfried - in Genequand 2010, 122/fig. 206)

B



al-Mushatta
(Musil Alois - The Literary archive of The
Museum of Czech Literature, Château Staré
Hrady)



al-Mushatta
(Musil Alois - The Literary archive of The
Museum of Czech Literature, Château Staré
Hrady)

C



al-Mushatta
(Musil Alois - The Literary archive of The
Museum of Czech Literature, Château Staré
Hradý)



al-Mushatta
(Musil Alois - Musil 1907b, 208/fig. 92 - The Literary archive
of The Museum of Czech Literature, Château Staré Hradý)

D



al-Mushatta
(Musil Alois - The Literary archive of The
Museum of Czech Literature, Château Staré Hradý)



al-Mushatta
(Musil Alois - The Literary archive of The Museum
of Czech Literature, Château Staré Hradý)



al-Mushatta
(Musil Alois - The Literary archive of The
Museum of Czech Literature, Château Staré
Hradý)



al-Mushatta
(Musil Alois - The Literary archive of The
Museum of Czech Literature, Château Staré
Hradý)



al-Mushatta
(Musil Alois)

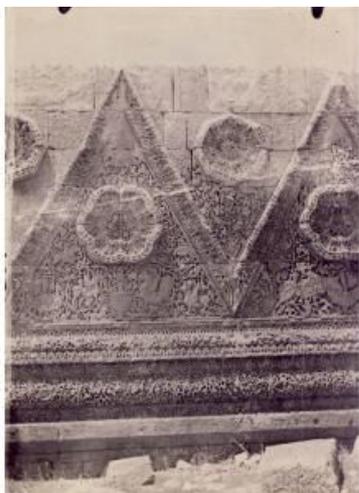
E



al-Mushatta
(Musil Alois - The Literary archive of The
Museum of Czech Literature, Château Staré
Hrady)



al-Mushatta
(Musil Alois - Musil 1907b, 200/fig. 85 - The Literary archive
of The Museum of Czech Literature, Château Staré
Hrady)



al-Mushatta

(Musil Alois - Musil 1907, 199/fig.84 - The Literary archive
of The Museum of Czech Literature, Château Staré Hradý)

al-Ṭūbā

Periods

al-Ṭūbā belongs to the group of Umayyad castles

Date of surviving remains

Verified by modern research

Aerial prospection (Kennedy - Bewley 2004).

Genequand 2001 - prospection: documentation of some visible structures and prospection of

3 saqīya (s) situated to the north at a distance of cca 1 km.

Description

The castle has the form of a quadrangle 155 x 78 m (from east to west), fortified by four round towers. To peripheral walls adjoin wings of buildings and form a large court, which is divided by transverse walls into 3 parts. There is a staircase from the north leading to the west and east courts. Part of the castle to the right from entrance was completed, as well as the most of peripheral walls on the north of others only the foundations remained.

The northern part and the southern part consist of residential buildings, which adjoin by narrower part to the peripheral walls. Each of them has two rooms with barrel vault. Between individual residential buildings were small courts, from where it was possible to enter into other rooms. These courts were connected with large courts and there was a connection with a large courts from towers. On eastern and western sides are no residential buildings.

At-Tuba was built partly from soft white limestone, partly of bricks.

(Musil 1907b, 178- 181)

History

Musil was informed about this castle for the first time in 1896 by the Sheikh of the Ka'ab tribe.

Historical notes

Musil references

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.1907a: Kušejr Amra. Wien.

Musil, A. 1907b: Arabia Petraea I. Moab. 180; 309. Wien: Alfred Holder.

Others selected references

Genequand, D. 2001: Project „Implantations umayyades de Syrie et de Jordanie“-Rapport sur une campagne de prospection et reconnaissance, 146. Amman.

Notes - Discussions

Al-Ṭūbā is the most remote and largest of the Umayyad period castles. It measures 145 m x 70 m.

The castle is dated to 743 -4 AD. The original intention was to built it symmetrical, but as aerial prospection shows, only part was completed. Also barrel vaulted chambers, with courses of baked brick surmounted by mud bricks, were constructed just from one half. Most of the site (including all of the southern part) rests only as the foundation levels. This is very well visible especially on the aerial photos (Kennedy - Bewley, 227).

MuḤussīll visited this site twice. In 1898 and in 1901 he worked there together with A. Mielich. The purpose of their visit was to get data for creation of the most accurate plan.

Ground plan and architectural reconstruction of this „palace“ were made by architect Max Kropf (Musil 1907b, 179, 180, fig. 61, 70).

Musil wrote, that he didn't find any mention about this site in historical sources (Musil 1902b, 23).

According to the prospection of Denis Genequand, the function of the structures in the north and the south of the east part of the castle, which have better preserved analogy in Mushatta, remain not clear, but the group of the buildings is a bit more complex, than it was depicted in plan in Musil's publication.

(Genequand 2001,146).

Geolocation:

Modern state: **Jordan**

GPS: **31.3056, 36.6354**

Category:

Early Islamic - Umayyad - castle

Archeologist: **Musil Alois**

rectangular 145m x 70m

Action:

Archeologist: **Musil Alois**

Duration: **1901-06-13 10:00:00 - 1901-06-13 17:30:00 (07:30:00)**

2) a) arrival after 10,00 on 13th June 1901 b) the time of the departure is not precise, but at 16, 43 Musil went to make a prospection of wells (saqqīya) nearby (to the north from the castle); they didn't stay there for a night. Musil visited the site accompanied by A. Mielich. The aim of their visit was to get data for creation of the most accurate plan.

Action:

Archeologist: **Musil Alois**

Duration: **1898-06-02 17:20:00 - 1898-06-03 05:57:00 (12:37:00)**

1) a) arrival at: 5:20 pm on 2. June 1898. b) departure at: 5:57 am on 3. June 1898. Musil was accompanied by Häyel and Bahit. Due to the expected danger, they left all luggages at camp. They took with themselves just water, cheese, camel milk + Musil took barometer, notebook and small camera. After finding some decorated pieces, Musil intended to dig out some more of them, but his guide got a look of hostile Bedouins, so they left in a hurry

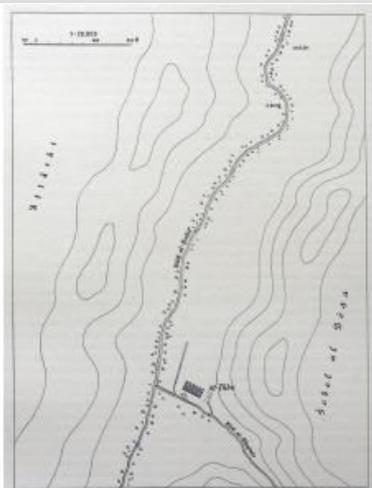
Musil's action time total: 20:07:00

Component:

Archeologist:

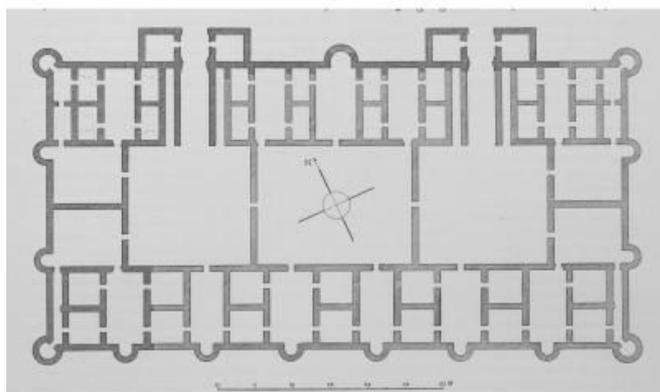
Early Islamic - Umayyad - castle

A

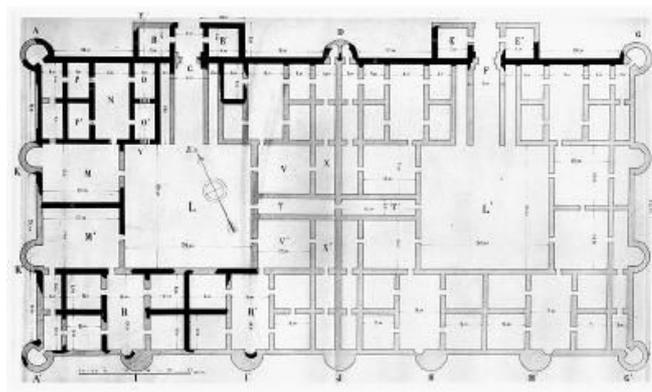


al-Tübā and environ
(Musil Alois - Musil 1907b, 177/fig.59)

B

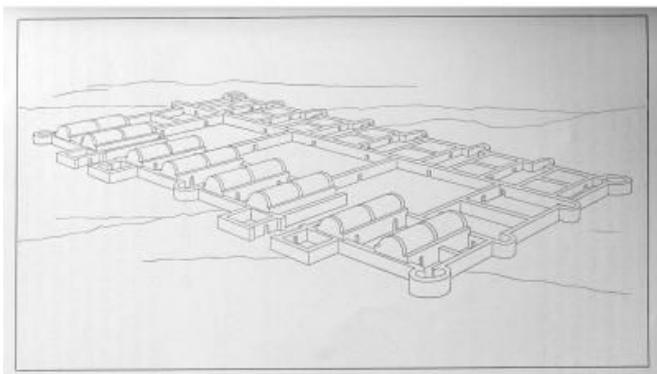


al-Tübā
(Kropf Max - Musil 1907b, 179/fig. 61)



al-Tübā
(Savignac, Raphaël - Jaussen, Antoine - Jaussen-Savignac 1922)

C



al-Tūbā_reconstruction
(Kropf Max - Musil 1907b, 189/fig.70)

D



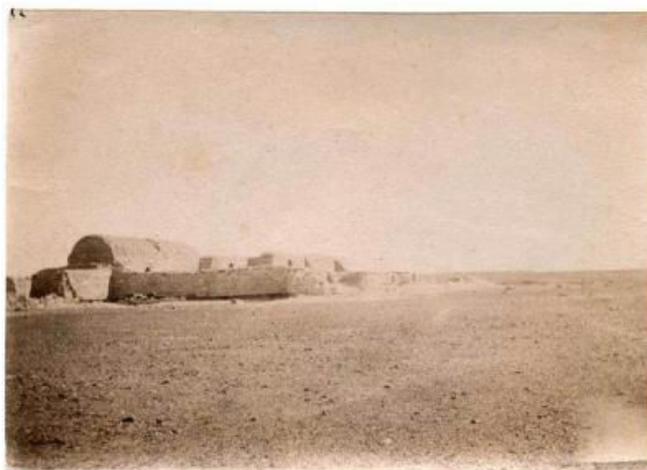
قصر طوبة (نقلًا عن صورة فوتوغرافية للدكتور ل. موسيل)

al-Tūbā
(Musil Alois - after Musil's photo: Lammens 1898)

E



al-Tūbā
(Musil Alois - Musil 1907b, 185/fig. 67 - The Literary archive of The Museum of Czech Literature, Château Staré Hradý)



al-Tūbā
(Musil Alois - Musil 1907b, 180/fig. 62 - The Literary archive of The Museum of Czech Literature, Château Staré Hradý)



al-Ṭūbā
(Musil Alois - The Literary archive of The
Museum of Czech Literature, Château Staré
Hradý)

al-Muwaqqar

MUSIL EN: **al-Mwaḳḳar**

MUSIL DE: **al-Mwaḳḳar**

MUSIL CS: **al-Mwaḳḳar**

ARABIC: الموقر

Periods

al-Muwaqqar belongs to the group of Umayyad castles.

"The palace is contemporaneous with the water reservoir that was dated by an inscription found in 1943. The inscription reads as follows: 'Bismillah [in the name of god ...] has ordered the building of this pool the Servant of God, Yazid, the Commander of the Faithful ... It has been built by the care of 'Abdallah ibn Sulaym in 104' (AD 723)."

[http://www.discoverislamicart.org/database_item.php?id=monument;ISL;jo;Mon01;13;en&cp]

Date of surviving remains

Verified by modern research

- besides *Musil* (1907b, vol.I., 190-195) this site was visited also by *Brünnow and Domaszewski* (1905,182-189)

- the small-scale archaeological investigations conducted by the Department of Antiquities of Jordan in the castle were executed at the end of the eighties and the beginning of the nineties by Mohammad *al-Najjar* (1989) and later by Mohammad *Waheeb* (1993), who made also the revised survey of the cistern in the vicinity, described by Alois Musil.

- a short exploration of Quṣayr ʿAmra by Dennis genequand in the summer 2001 executed in the frame of the archaeological project „Implantation umayyades de Syrie et de Jordanie“, which was focused on issues of bonds among Umayyad localities and on economic and environmental aspects of the structure of population among Umayyad foundations (41-132 HD/661-750 AC)

Description

Musil's description of the site (Musil 1907b):

Complex contains of 3 parts: the castle, several residential buildings in ruins beside several caves, a tower to the west from the castle and finally a water reservoir with a larger building on the foot of the hill.

The castle was almost completely in ruins.

It seemed that it once formed a quadrangle 65 m long (from east to west) and 39 m wide. Peripheral masonry was strengthened by two round and two quadrangle towers. The original building had to be much larger.

The interior of the castle was divided by 1 m thick transverse wall into two uneven parts. The eastern half has in the northern and the southern peripheral walls two 1,5 m wide gates. Inside of peripheral walls are 8 vaults with average width 3,72 m and two more vaults are out of peripheral wall. Above foundations were still visible remnants of columns. Everywhere lay various fragments.

Walls of vault were plastered by mortar and in this plaster were made indentations, in order to hold better. The same method Musil found in kasr al-Ṭūbā and in Quṣayr ʿAmra.

In debris Musil found also a stone slab decorated by this way: a cross dug out in the middle of a circle of a diameter 30 cm with smaller circles between cross' arms. That means for Musil, that there were Christians in this site.

The castle and its vicinity served as a burial ground at the time of Musil's visit of this site. The southern and south-eastern slope of the hill has beside destroyed walls also many onion-shaped cisterns. Against the north-eastern foot of the hillock was a water reservoir 34 m long (from east to west) and 31,5 m wide. Its peripheral wall was 1,9 m thick and a staircase lead into it.

Several meters to the south-east from the water reservoir were wide remains of 13,5-17 m long and 13,26 m wide building with three wide rooms (longitudinal axis in direction from north to south).

Ground plains of the building consisted of three parts. These spaces were covered by barrel vault, in the middle most preserved. Outer walls were 0,6 m thick and they have small window opening.

History

The site was visited in 1889 by the Austrian travellers and researchers R. E. Brunnow and A. von Domaszewski.

On 3th or 4th June 1898 it was revisited by Alois Musil. The monument was already in a very bad state of preservation.

Further destruction of the complex was documented by the American scholar K. A. C. Creswell in 1968. The description of the palace complex is based mainly on the observations of travellers and scholars who examined the site.

Historical notes

- the textual sources and inscriptions attributed the castle to caliph Yazīd b. ʿ Abd al- Malik (101/720-105/724).

Musil References

Musil, A. 1907a: *Ḳuṣejr Amra*. Wien.

Musil, A. 1907b: *Arabia Petraea I. Moab*. Wien: Alfred Holder.

Others selected references

Brünnnow, R. E.-Domaszewski, A. Von, 1905: *Die Provincia Arabia*. Strassburg.

Creswell K. A. C.- Allan J. W. 1989: *A Short Account of Early Muslim Architecture, 131-4*, Cairo.

Genequand, D. 2002: *Project "Implantations umayyades de Syrie et de Jordanie"*-Rapport sur une campagne de prospection et reconnaissance. Zurich..

Notes - Discussions

Prospection of Dennis Genequand in 2001 found out, that only 9 vaults from 10 described by Musil and Brünnnow-Domaszewski remained preserved.

Also tower with square ground plan located by Musil against the southern wall did not survive, as well as number of cisterns around the castle.

An agricultural structure placed by Musil to the east of castle and commented by Sauvaget (Sauvaget 1967,37) were not found, too.

The construction of a modern village and its infrastructure have destroyed and buried ancient monuments in the castle's environs.

Gennequand states, that archaeological structures visible now only from aerial photographs are closer to the Musil's plan than of Sauvaget's one.

Musil's plan remains very valuable, because the most part of the site were completely destroyed by a modern construction.

(Gennequand 2002, 137).

Geolocation: Musil 1902b, 330; Musil 1907b, 190

The excavation is situated on the top of 910 m high mountain from the range of hills of the same name, which stretches from east to west

Geolocation: MEGA-Jordan

in Amman Governorate of north-western Jordan

Modern state: **Jordan**

GPS: **31.8081, 36.1078**

Category:

Early Islamic - Umayyad - castle

Archeologist: **Genequand Denis** - Gennequand, D. 2002, Najjar, M.: 2012

Umayyad castle patron: Yazīd II (AH 101–5 / AD 720–4). date of monument: 723 AD/ 104 Hegira

Action:

Archeologist: **Musil Alois**

Duration: **1898-06-03 00:00:00 - 1898-06-03 00:00:00 (00:00:00)**

1) a) arrival at: afternoon on 3rd June in 1898 (with Hāyel) b) departure at: afternoon on 3rd June in 1898 (Musil 1902a, 12) 2) a) arrival at: afternoon on 4th June in 1898 b) departure at: afternoon on 4th June in 1898 (Musil 1902b, 12; Musil 1907, 190) from above mentioned we can see that time data in individual publications differ again.

Musil's action time total: 00:00:00

Component:

Archeologist: **Musil Alois** - Musil 1902b, I. vol. 190

Early Islamic - Umayyad - tower

to the west direction from the castle was according to Musil a tower

Component:

Archeologist: - Musil 1907b, I. 190

-
several residential buildings in ruins beside several caves

Component:

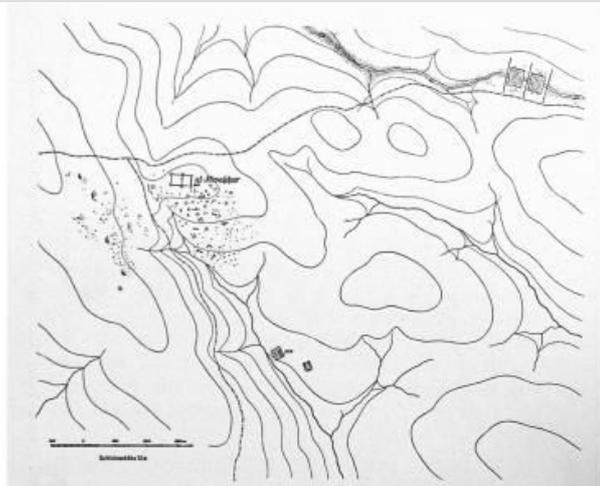
Archeologist: - Musil 1907b, I. vol., 190

-
the castle

Component:

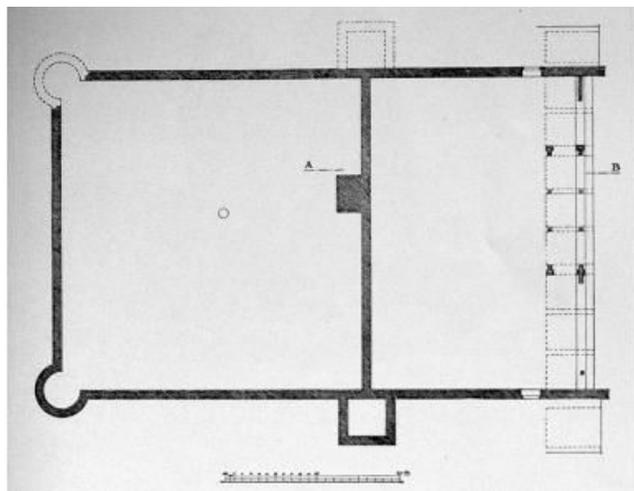
Archeologist: - Musil 1902b, I.vol. 190

-
a water reservoir with a larger building on the foot of the hill

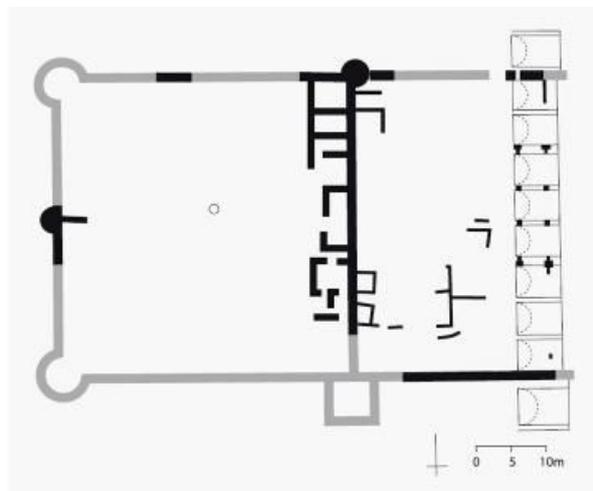
A

al-Muwaqqar and environs
(Musil Alois - Musil 1907b, 190/fig.71)

B

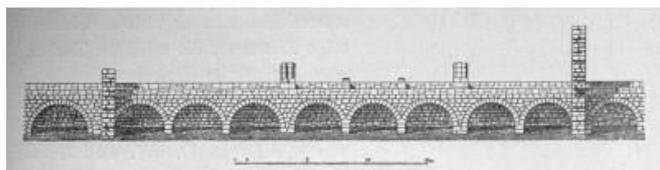


al-Muwaqqar_castle
(Musil Alois - Musil 1907b, 191/fig.72)

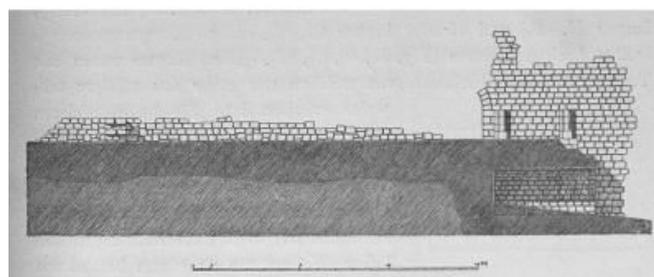


al-Muwaqqar_castle
(Reynier Christian - in: Genequand 2010, 115/fig. 190)

B1

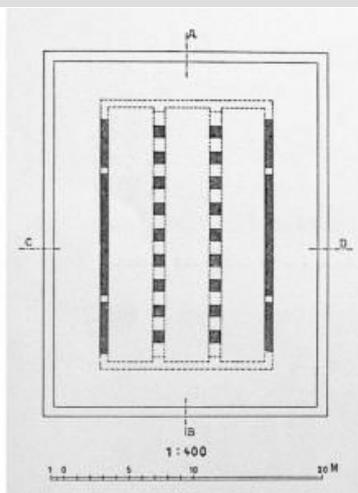


al-Muwaqqar_castle
(Musil Alois - Musil 1907b, 193/fig.74)



al-Muwaqqar_castle
(Musil Alois - Musil 1907b, 193/fig.75)

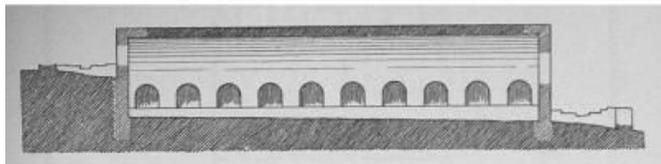
C



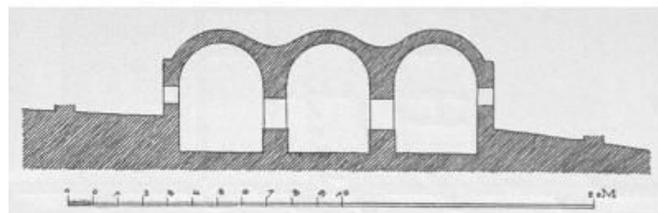
al-Muwaqqar_three-vaulted hall
(Musil Alois - Musil 1907b, 196/fig.80)

This building could be probably a reception hall or alternatively it could be a base of multistorey pavilion, similar was in the Caliphal palace in Samarra.

C1



al-Muwaqqar_three part establishment
(Musil Alois - Musil 1907b, 197/fig.81)



al-Muwaqqar_three part establishment
(Musil Alois - Musil 1907b, 197/fig. 82)

al-Bakhrā / Avatha

MUSIL EN: **al-Bḥara**

ANCIENT: **Avatha**

Periods

1) Paleolithic

2) LaLatete RoRomaann, date by inscription chiselled to stèla recycled like pillar in one of the building (a mosque?).

(Bazou 1993, 47-49), one latin inscription and two Greek inscriptions found in prospection during campaign in 2002/2003 (Genequand 2010, 86).

3) Islamic period:

dated on the base of identification in the historical sources (murder of al- Walīd b. Yazīd in 744 AD; site was mentioned yet in XI. century).+ archaeological prospection under direction of D. Genequand (examining of the architectural structures and analysis of the pottery).

Date of surviving remains

Verified by modern research

-no excavation

1) In the 1980s the site was prospected by Thomas Bazou, who made the detailed description of this site and also identified the Ancient name of al-Bakhrā with Avatha (part of La Strata Diocletiana).

2) D.Genequand :

Prospection carried out in 2002/2003 described:

- occupation continual II.- IX. century AD

site has cca 600 m east to west direction and 750 m north to south (cca 40 ha).

a) a military Roman camp (a fort tetrarchique) extended to the North-east placed in the middle of the site al-Bakhrā.

- the Corinth's capital described by Musil and Bazou disappeared

- above mentioned camp is surrounded by buildings, funeral monuments, enclosures and tells of dump.

Roman camp was built on rectangular ground plane (152x98,5m). It was constructed from hard limestone.

b) second rectangular enclosure (156,30m x 35, 30; 5 517 square m)

c) a small church (16,20m x 17, 90)

d) a mosque (closely to the north of the church)

e) buildings

- f) wells
- g) grand necropolis
- h) enclosure
- i) hydraulic structures
- j) dump

Description

Musil's description (Palmyrena):

- ruins of former town Al-Bakhrā, fortified camp

Ruins consist of a fortified camp and a large settlement to the north and south of it. These ruins measure over 1 km in diameter. Quite striking in the ruins are the numerous column heads and ornaments in the Palmyrene style. Also the large, roughly hewn stone blocks which were used in buildings, but which today are so completely scattered that it is impossible to determine even their ground plan with any degree of precision.

The fortified camp is 159 m long from west to east by 105 m wide. From each corner projects a rounded tower. Two similar towers stand on each side. The eastern tower on the south side alone is square, but it seems that it was rebuilt when the inhabitants of the neighbouring settlement put up their huts within the camp itself or close by. The distances between the several towers are not the same. From the east an ornamental gate leads into the yard, where could be seen three wells and heaps of débris both large and small. The largest building, hence the castle (qaṣr), probably stood as usual in the center or somewhat to the south, where the débris is piled up the highest.

South of Al-Bakhrā there are only two small, now ruined settlements – al-Bhera about 2 km to the southwest and al-Mleke about 22 km to the south-southwest (Musil 1928, 141, 142).

History

- 1) The first description of this site came from Alois Musil (1928).
 - 2) After him the site was visited by Wiegand (1932), who called the site "Buharra".
- both descriptions were focused only on the Roman fort, which dominates this site.
- 3) Antoine Poidebard just mentioned the site, but didn't publish any photo.

Historical notes

- 1) **Late Roman** period is documented by 3 inscriptions

A. Musil identified this site with Goaria. He wrote that Goaria was the Aramaic name of the ruins of al- Bhara when the Arabic and the Syriac

reports of the murder of the caliph al- Walīd II. are compared

(Musil 1928, 234).

D. Bazou identified this site with Ancient Avatha.

2) Islamic period:

a) al- Ṭabarī described how caliph al-Walīd b. Yazīd escaped to al-Bakhrā during the revolt of

Yazīd b. al- Walīd. He was killed in this site on April 744 AD.

According to historical sources there was a castle (qaṣr) of Nu ‘mān b. Bashīr. The site was also mentioned among several fortified sites.

al- Ṭabarī also mentioned there were the village (qarya) and camp of tents (fustāt).

b) other sources: Yāqūt, Al- Mas ‘ūdī, Al-Bakrī

Musil references

Musil, A. 1928: Palmyrena. New York.

Others selected references

Wiegand, T. 1932: Palmyra. Ergebnisse der Expeditionen von 1902 und 1917. Berlin.

Genequand, D. 2002: Project „ Implantations umayyades de Syrie et de Jordanie“-Rapport sur une campagne de prospection et reconnaissance. Amman.

Notes - Discussions

The site is today in very poor condition.

Musil identified it with classical Goaria, Poidebard placed it on "exterior limes" (road to Mleke), Wiegand placed it on the road from Palmyra to Bosra.

Musil photodocumentation of Corinthian capital of Palmyra type signifies an important source for datation (which later disappeared).

Musil's plan was measured by pacing, he spent there between two to three hours. Musil's "north" wall corresponds to Wiegand's "intermediate" north wall (described as best preserved part).

Musil notes a larger building at the centre

D. Genequand disagrees with interpretation of A. Musil that qaṣr was built as integral part of fustāt mentioned in al- Ṭabarī, which was also fortified.

Despite of the large scale of this site and various type of the monuments, Musil's plan was focused only on fort. He notes the large building at the centre.

Geolocation:

- the site is located at the southwestern end of Tadmur lowland, on the northeastern spur of the ridge of Abtar, it's in the proximity of the great Roman road from Damascus to the Euphrates

Geolocation:

21 km south of Palmyra

Category:

-

Archeologist: **Genequand Denis**

Roman, Umayyad part of structure of Umayyad castles

Category:

-

Archeologist: **Musil Alois**

Roman, Umayyad Roman fort, Umayyad fortified town, qaṣr

Action:

Archeologist: **Musil Alois**

Duration: **1912-03-21 13:28:00 - 1912-03-22 03:52:00 (14:24:00)**

21.3.1912 2) a) arrival at 1:28 pm on 21th March 1912 b) departure at 3:52 am on 22nd March 1912

Action:

Archeologist: **Musil Alois**

Duration: **1908-10-29 00:00:00 - 1908-10-29 10:30:00 (10:30:00)**

29.10.1908 1) a) no exact time about arrival b) departure at 10:30 am

Musil's action time total: 24:54:00

Component:

Archeologist:

- **well**

Component:

Archeologist:

Roman - unidentified - fort

Component:

Archeologist:

Early Islamic - Umayyad - castle

Component:

Archeologist:

- **enclosure - unidentified**

Component:

Archeologist:

- **mosque**

Component:

Archeologist:

- **church**

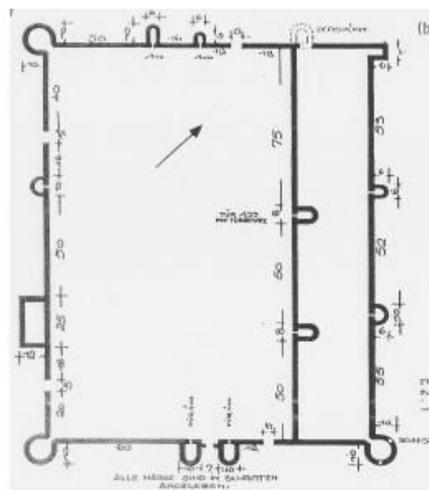
Component:

Archeologist:

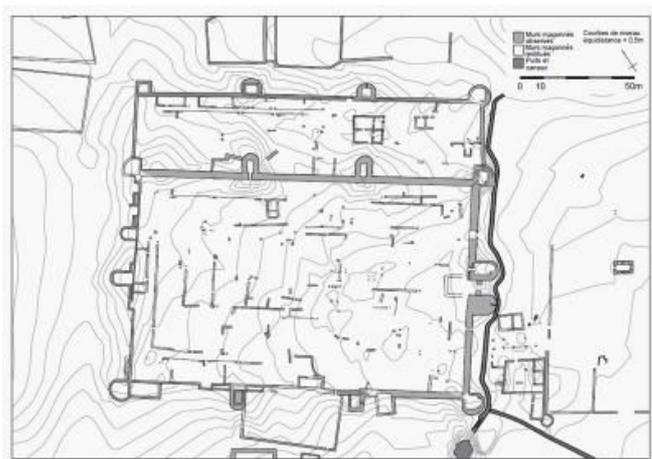
- **service building(s)**



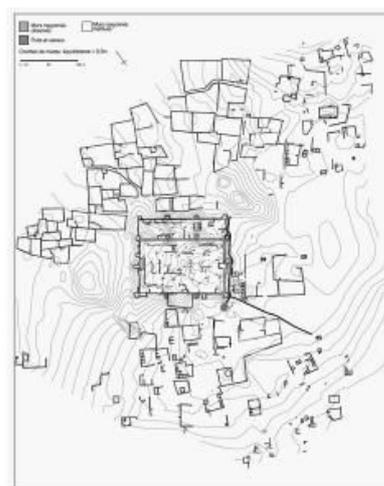
al-Bakhrā
(Musil Alois - Musil 1928, 141/fig. 38)



al-Bakhrā
(Wiegand, T. - Wiegand 1932, fig. 18)



al-Bakhrā
(Genequand Denis - Genequand 2003, 33/fig.2)



al-Bakhrā
(Genequand Denis - Genequand 2010, vol.II./ 34/fig.43)



al-Bakhrā_church and Mosque
(Genequand Denis - Genequand 2010, vol.II./ 42/fig.55)

B



al-Bakhrā
(Veselá Martina)



al-Bakhrā
(Veselá Martina)



al-Bakhrā
(Veselá Martina)



al-Bakhrā
(Veselá Martina)



al-Bakhrā
(Veselá Martina)



al-Bakhrā
(Veselá Martina)

al-Baṣīrī/Avira, Aviraca

ANCIENT: **Abira (Avira), Aviraca**

MUSIL EN: **al-Baṣīri**

Periods

- considered as Roman fort (Musil, Poidebard, van Berchem)
- Bazou ascribed it on the base of architectural analysis to the Umayyad period (Bazou 1989)
- Roman period, Byzantine, Umayyad - dated on the base of architecture of the site, pottery and historical sources (Gennequand 2002)

Date of surviving remains

- Roman fort
- +
- Umayyad castle

Verified by modern research

1) **Bazou, T.** - (Bazou 1989, 315 - 317)

- Identified as the first archeologist the Umayyad period in this site (based on architecture)

2)2) **Genequand, D.** - (Genequand 2002, 53).

- they took measurements of some structures, prospection (including analyses of pottery and 8 coins, as well as architectural analysis)
- they added new structures to the old plan
- second visit revealed traces of illegal excavations; due to this excavation there were detected two phases of the construction
- he described different phases of the occupation of this site:

the oldest part is on rectangular ground plan (44,7m x 34, 6 m), organised around central courtyard; newly exposed areas are located around it

- the modification of this oldest construction allowed enlargement of the ground plan of later construction (50,7 x 35, 9m) and enlargement of towers as well (From 9m in diameter to 11 m in diameter)

1) Roman fort inside of the enclosure

- it's of rectangular ground plan, constructed from limestone and basalt

2) enclosure

3) a mosque placed inside of second part of enclosure

Description

Musil's visit in 1912 (Palmyrena):

Musil described a visible foundation masonry in the middle of the ruins of a rectangular building 140 m long, 100 m wide with thickness of wall 2 m. The northern wall was connected with similar building, which was 140 m long and 43 m wide. A large fortress 49 m long in east-western direction and 40 m wide stood in a large enclosure with a large tower in each corner with a perimeter 10,7 m. The access into the court was secured by a gate in the middle of the eastern wall. In the court not far from the wall there were disintegrated remains of smaller stone structures. The well is situated in the south-western part of the court

- large cemetery to the southwest of the ruins

(Musil 1928, 129)

Historical notes

Musil identified this site with Ancient Danaba and mentioned al-Ṭabārī notes on Danaba.

Musil references

Musil A. 1928: Palmyrena. New York.

Others selected references

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.

Notes - Discussions

A.Musil visited this site in 1912.

He examined and measured during this visit „extensive, but hopelessly disintegrated buildings“ and he made their ground plan.

Soon he had to leave the site prematurely after arrival of soldiers, who endangered both the group itself and primarily essential instruments and documentation, when they started to demand food. (Musil 1928, 129; 130 obr. 30). Musil's work was interrupted.

Musil found out on the base of historical sources, that the site Basíri was situated on the Roman road connecting Damascus with Palmyra, founded during the rule of Diocletian, and he identified it with Ptolemy's Danaba /Danama, Adanaba (Musil 1928, 234).

-In spite of having visited this site in 1930 **Poidebard** does appear to depend on Musil for measurements of this site. Poidebard just checked the main walls and towers of the main building only.

Sauvaget (1967, 31) determined it as a Roman building, re-used during Early Islamic Period.

- comparison of Musil's and Poidebard's plans with plan based on new prospection of Denis **Genequand** showed, that some their structures (fort) differ from the reality and that their plans were incomplete

- gateway is visible in the middle of the shorter western side x contrary to Musil and Poidebard plan, depicted the gateway in the east side (now destructed)

-the newly adjusted ground plan doesn't fit very well the ground plans of the Roman military forts, but it's closer to edifices of Islamic period from Jazira; the round towers or semicircle towers are not known in the architecture of Roman military forts in Greater Syria and Arabia; the small surface area (0, 18 ha - in the second phase seems too small for the purpose of the Roman garnison)

- discovery of the Mosque inside of the enclosure; a rectangular ground plan (21, 4 m x 19, 6m)- similar to mosque inside of Umayyad castles (for. ex. qaṣr al-Ḥallābāt in Jordan)

-Analyses of the mobile artefacts from the site shows the superiority of the Roman and Byzantine period, but also the Brittle Ware (dated to VI.-VIII. century AD).

- Genequand's hypothesis based on the study of the architecture, the preliminary analysis of the mobile artefacts and historical and epigraphical sources assume that there was a Roman fort first and later Umayyad castle as well

x Musil determined only a Roman fort

Geolocation:

- on Strata Diocletiana (south of Palmyra)

Area: **114.5**

Geolocation:

45-50 km south west of Khān al-Ḥallābāt

Modern state: **Syria**

Category:

1) Roman fort, 2) Umayyad castle

-

Archeologist: **Genequand Denis**

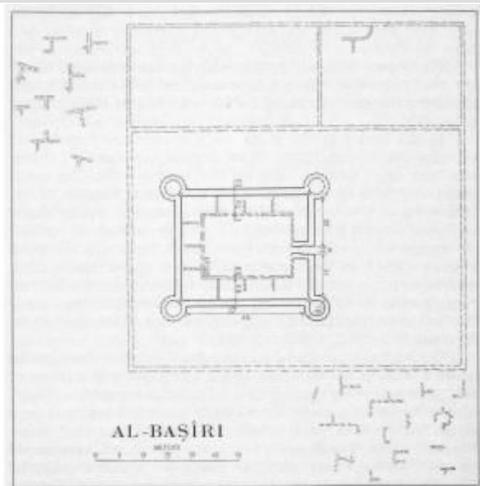
Category:

Roman - unidentified - fortArcheologist: **Musil Alois****Action:**Archeologist: **Musil Alois** - Musil, 1928, 131Duration: **1912-03-18 09:17:00 - 1912-03-19 06:45:00 (21:28:00)**

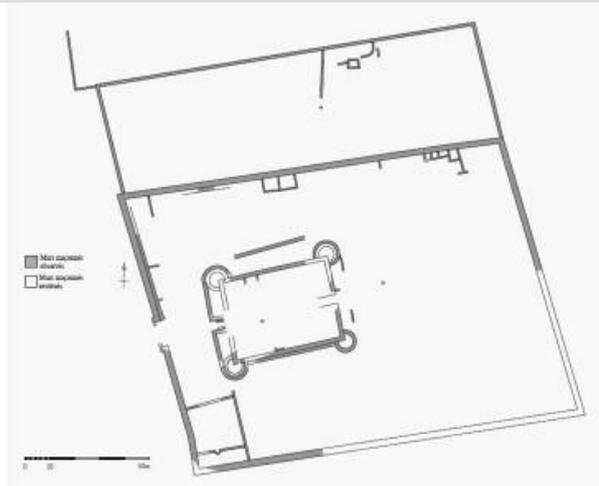
arrival on: 18.3.1912 at 9:17 am departure on: 19.3.1912 at 6: 45 am Musil examined the buildings (extensive, but in a hopelessly ruinous condition) and sketched the ground plan of the largest standing building

Musil's action time total: 21:28:00**Component:**Archeologist: **Genequand Denis****Early Islamic - Umayyad - castle****Component:**Archeologist: **Genequand Denis****Roman - unidentified - fort**

1) Roman fort, 2) Ummayyad castle

A

al-Baṣīrī
(Musil Alois - Musil 1928, 130/ fig. 30)

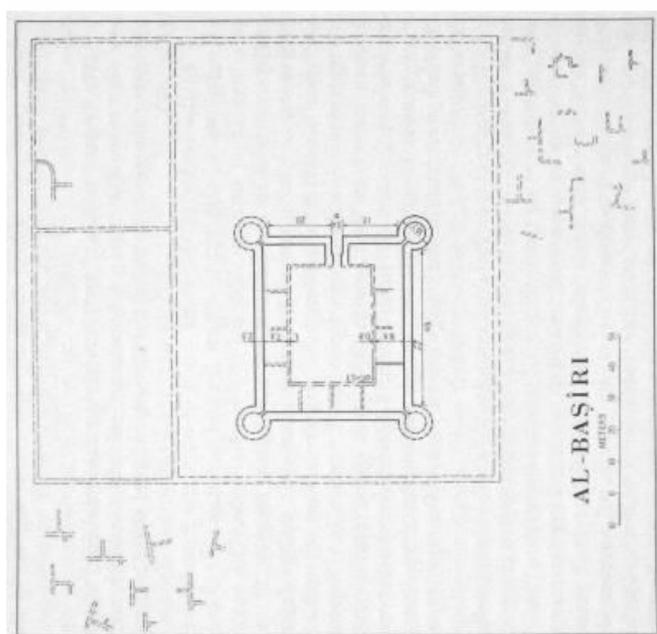


al-Baṣīrī/Avira, Aviraca
(Genequand Denis - Genequand 2003, 53:fig. 36)

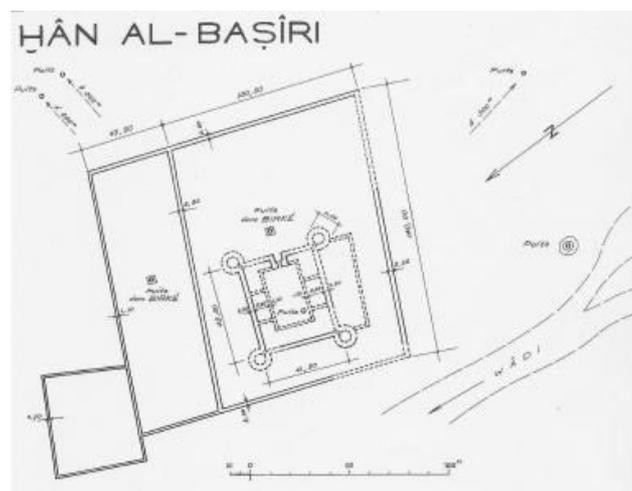


al-Başiri
(Poidebard Antoine - Poidebard 1934, pl. XXXI.)

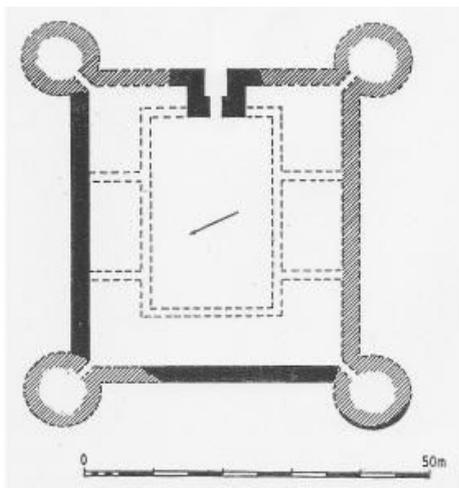
B



al-Başiri
(Musil Alois - Musil 1928, 139/130/ fig. 30)



al-Başiri
(Poidebard Antoine - Poidebard 1934, pl. XXXI.)



al-Baṣīrī
(Poidebard Antoine - Poidebard 1934, pl. XXXI.)

Bāzūriyya

MUSIL EN: **al-Bāzūrijje**

Periods

- preislamic, Byzantine

- an inscription dated to 117 was found in the debris (originally on a door lintel of a tomb, gives the name Shalme daughter of Bolha (Bouni- al-As ʿad, 2000, 122).

Date of surviving remains

- a type of rural Byzantine architecture

Verified by modern research

Bounni - As ʿad:

- the authors published opinion, that 3 "castelli" in this site are caravan stations, built from hard limestone.

In 1976 near by were discovered marble quarries, which were possibly the source of the marble used at Palmyra.

Gennequand 2002:

- the ground plan of the site, as well as structure and technology of construction is very close to that of Sukkariyya.

- No traces of Umayyad settlement were found which could be dated to Umayyad period

- there were found two complexes in Bazuriyya itself, one more (Bazuriyya 3) is placed to the east (local name: Tlal al-Muz).

- the structure of Bazzuriyya 1 is the most similar to Sukkariyya. There is a tower decorated with crosses. On the northern facade of the enclosure are 2 supporting towers.

Description

1) Musil's visit 1908 (Palmyrena)

- ruins

It was a rectangular construction, with sides 53 m and 48 m, the longer side runs in east-southern direction.

"Al-Bazurijje had evidently never been a settlement, but rather a country residence. It was built in the centre of a large garden irrigated from two wells. Solid buildings once stood near the northern well, but of these little remain. The southern well is in the court of a small square fort with a projecting gate and a huge tower".

(Musil 1928, 88-89)

2) Musil's visit 1912 (Palmyrena)

"These ruins consist of several buildings, all of them in a state of great dilapidation. Best-preserved are the foundations of a huge structure at the eastern end of the ruins, which forms a rectangle 53 m long from east to west by 48 m wide. The gate is on the southern side. East of the building a house stands in the form of a square of 17 m to a side, with an entrance at the south. On the west side of the ruins is another building in fair condition. It is a rectangle 63 m long from east to west by 29 m wide. The east and west sides are strengthened by two rounded towers. The arched gate opens from the east into a yard, where there is a natural well. At the southeastern corner is a strong tower and north of it the foundation walls of other ruined buildings. Near the ruins is an old cemetery. All the graves were opened and robbed."

(Musil 1928, 137- 138).

History

Historical notes

Musil references

Musil, A. 1928: Palmyrena. 88- 89, 137-139. New York.

Others selected references

Bazou, T. 1989: A finibus Syriae. Recherches sur les routes des frontières orientales de l'Empire romain. Thèse Université de Paris I.

Genequand, D. 2002: Project „ Implantations umayyades de Syrie et de Jordanie“ -Rapport sur une campagne de prospection et reconnaissance.

Amman

Notes - Discussions

In 1908 **Musil** spent there not determined time in detail (part of the late afternoon).

Musil was preparing to make the plan of the site and its environs, but local Bedouins discouraged him. After they were told, that Musil's group came to make a survey of the landscape, they started to be afraid, that this was another government project, on which base the government will confiscate another land. Musil succeeded at the end to soothe them, however, he preferred not to continue in measuring (Musil 1928, 88-89).

The visit of these places in 1912, when they spent here about two hours, was considerably more calm. The most of buildings was almost completely disintegrated, the most preserved building was situated in the eastern part.

Musil correctly determined the type of the site as the rural residence.

In Musil's Palmyrena besides ground plans of some buildings also two photographs from this site were printed (Musil 1928, 137, 138 obr.33 a 34, 139 obr. 35 a 36, 140).

Plans:

Musil published incompleated ground plan of two complexes in Bazuriyya, but he plotted 2 supporting towers, which at the present time are not perceptible (Musil 1928, 137- 140).

Other plan was later published by **Wiegand** (1932, 11-12)

An exact plan was published by **Gennequand** (2002, 41/ fig.15,16).

Geolocation:

20 km south of Palmyra; in the east from al-Bakhrā and Sukkariyya

Modern state: **Syria**

Geolocation: Musil 1928, 88

1 km farther south at the western foot of the hillock Tell al-Bahra

Category:

Byzantine - unidentified -

Archeologist: **Musil Alois**

"Roman" or Byzantine villa

Action:

Archeologist: **Musil Alois**

Duration: **1912-03-21 09:30:00 - 1912-03-21 11:40:00 (02:10:00)**

2) 21.3.1912 a) arrival at 9:30 am b) departure at 11:40 am

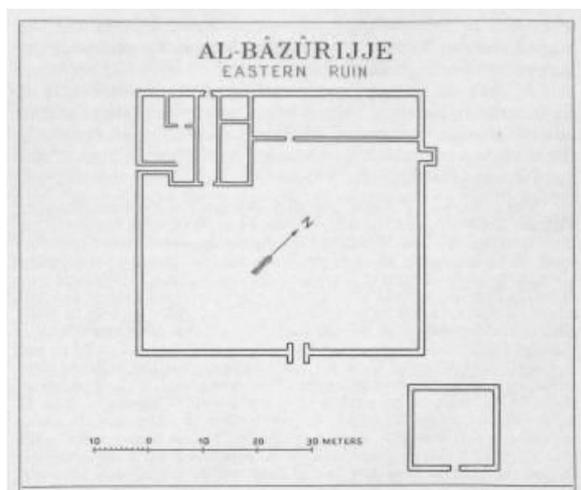
Action:

Archeologist: **Musil Alois**

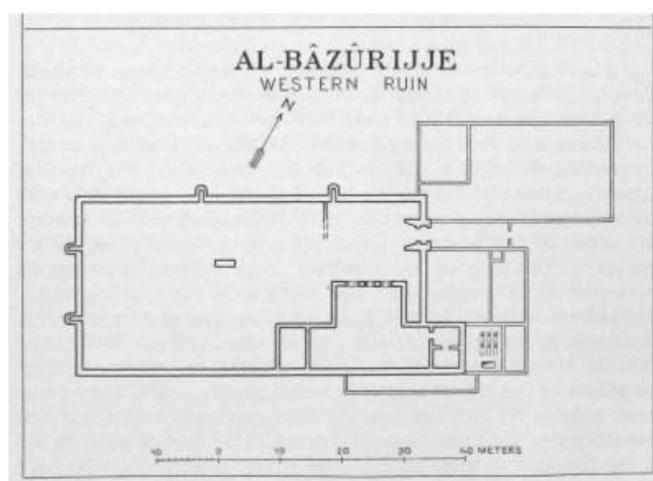
Duration: **1908-10-28 17:00:00 - 1908-10-29 06:20:00 (13:20:00)**

1) a) arrived at 28th October 1908 no exact time of arrival mentioned, but it was late in the afternoon; at 5: 45 pm temperature was 20° C b) departure on 29th October 1908 at 6:20 am (temperature 12° C)

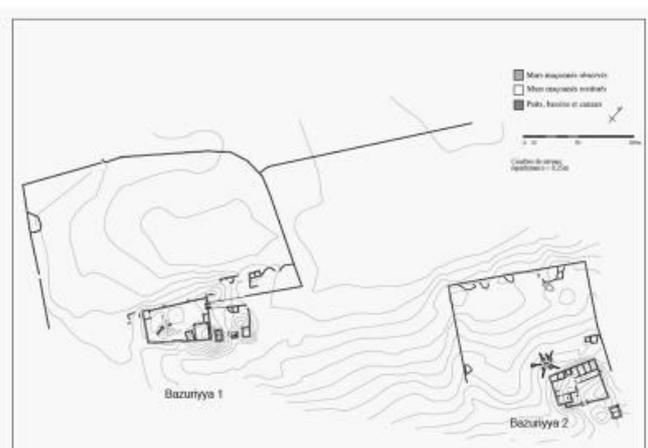
Musil's action time total: 15:30:00



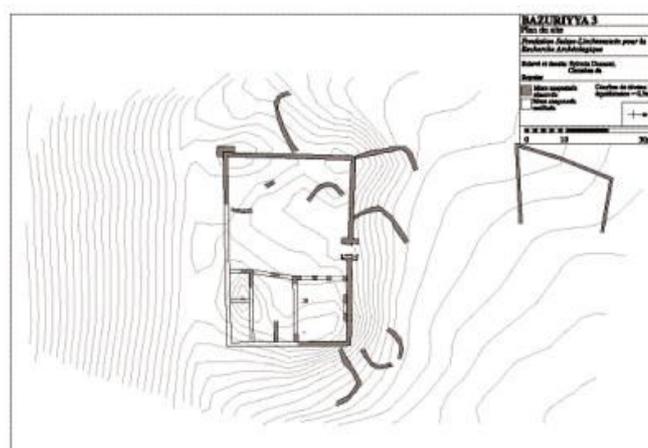
Bāzūriyya - eastern ruins
(Musil Alois - Musil 1928, 138/fig. 33)



Bāzūriyya - western ruin
(Musil Alois - Musil 1928, 138/fig. 34)



Bāzūriyya_plan general
(Genequand Denis - Genequand 2003, 41/fig. 16)



Bāzūriyya 3
(Genequand Denis - Genequand 2003, 41/fig.16)

A



Bāzūriyya - western ruin
(Musil Alois - Musil 1928, 139/fig. 36 - The Literary archive of The Museum of Czech Literature, Château Staré Hradý)



Bāzūriyya - eastern ruins
(Veselá Martina - 2012)

B

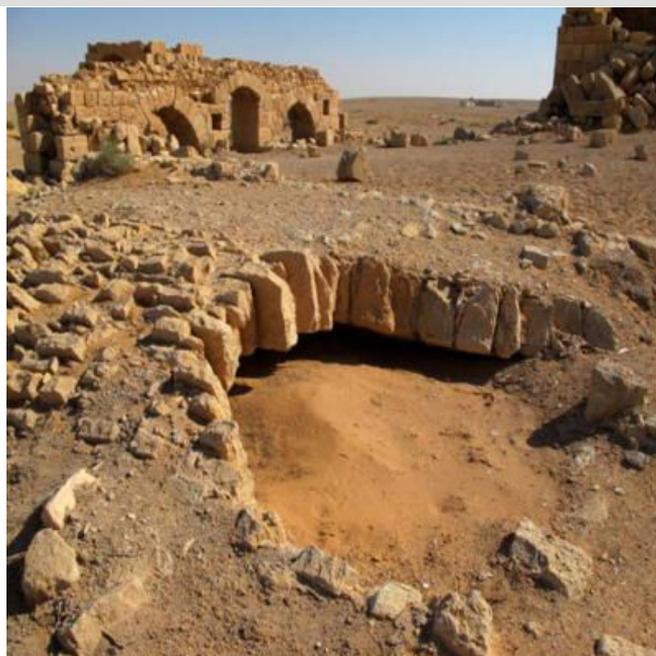


Bāzūriyya - eastern ruins
(Musil Alois - Musil 1928, 139/fig. 35 - The Literary archive
of The Museum of Czech Literature, Château Staré Hradý)

C



Bāzūriyya
(Veselá Martina)



Bāzūriyya
(Musil Alois)



Bāzūriyya
(Veselá Martina)



Bāzūriyya
(Veselá Martina)



Bāzūriyya
(Veselá Martina)

Khān al-Manqūra

MUSIL EN: **Ḥān al-Manḳūra**

Periods

Uncertain.

Date of surviving remains

Probably Tetrarchic in Origin.

Verified by modern research

Description

This Roman fortress in the shape of a rectangle is 90 m long from west to the east, 82 m wide and it has a defensive wall 2,2 m thick. It was reinforced by rounded towers in each corner. On the western and the eastern side was accessible by gates. Both gates were surrounded also by towers, another two towers were in the middle of the northern and the southern sides. Musil describes, that they did not find any traces of masonry inside of enclosed area.

Close to the south-western corner there was a water reservoir 63 m long from north to south and 43 m wide, divided by a wall into two parts of different dimensions. In the smaller northern part rain water was caught and clear water flowed into the southern part of the reservoir (Musil 1928, 31).

History

Historical notes

A. Musil identified it with the Roman military station called in ancient sources Casama or Kusam according to Arabic sources.

Musil references

Musil A, 1928: *Palmyrena*. New York.

Others selected references

Poidebard, A.1934: *La Trace de Rome dans Le désert Syrie. Le Limes de Trajan a la Conquete arabe. Recherches aériennes 1925-1932. I.-II.*

Paris. Gregory, S. 1995 - 1997: *Roman Military Architecture on the Eastern Frontier. From AD 200-600. 3 vol.*, Amsterdam: Adolf M. Hakkert.

Notes - Discussions

Musil visited the site during his stay in Syria in 1908. In his book *Palmyrena* he published both the ground plan of the fortress and its environs

(Musil 1928, 32 obr.3; 33 obr. 4).

Poidebard notes various watch towers and water management structures and houses for soldiers.

At the present time the site is situated approximately 2 km from the main road Palmyra – Damascus, is poorly accessible and from the tourist viewpoint absolutely unsuitable because of furious packs of dogs, which are abundant in the neighbourhood. Only a part of foundations masonry remained and one gate is partly visible.

Geolocation:

Chán Al-Mankúra is situated in the vicinity of the road between Palmyra and Damascus.

Geolocation:

On the Strata Diocletiana, half way (cca 50 km) between al-Bašīri to the north-east and Khān al-Shamāt to the south-west; it crossed the route leading north the Jabal Rawaq and south towards Jabal Says

Modern state: **Syria**

Category:

Roman - unidentified - fort

Archeologist: **Musil Alois**

90,2m square; cca 0,76 ha; wall 2,2m; corner towers cca 10m diameter, interval towers 7?8m wide; all towers project c. 8m.

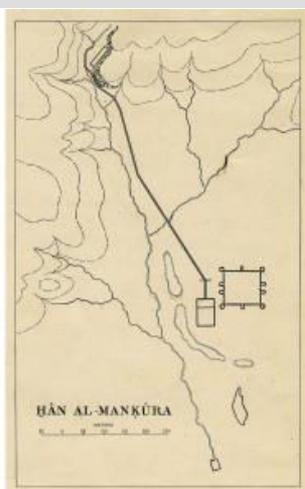
Action:

Archeologist: **Musil Alois**

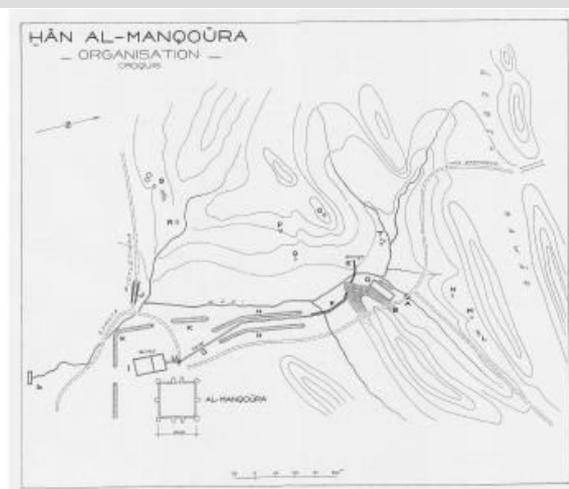
Duration: **1908-10-13 08:50:00 - 1908-10-13 11:48:00 (02:58:00)**

Musil's action time total: 02:58:00

1

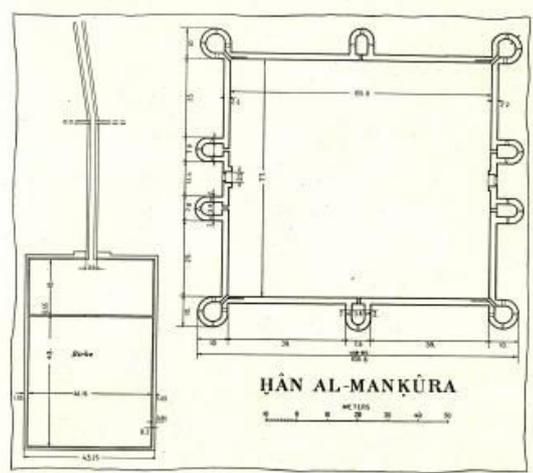


Khān al-Manqūra and environs
(Musil Alois - Musil 1928, 32/fig. 3)

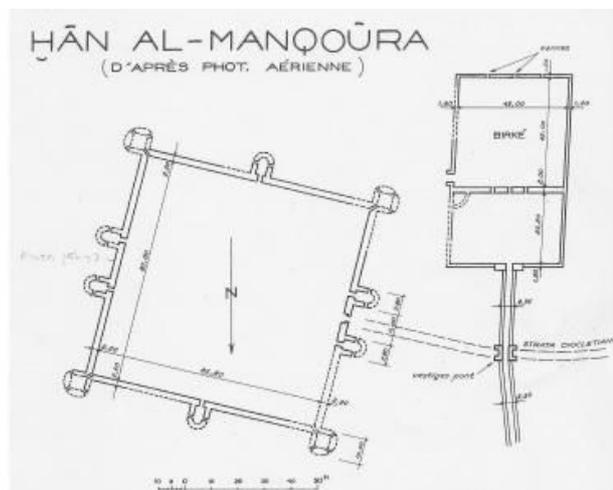


Khān al-Manqūra and environs
(Poidebard Antoine)

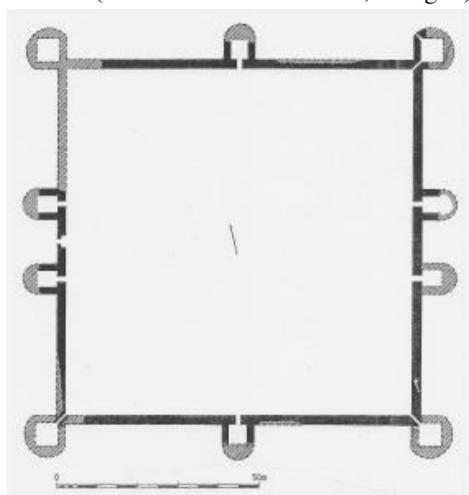
2



Khān al-Manqūra
(Musil Alois - Musil 1928, 33/fig.4)



Khān al-Manqūra
(Poidebard Antoine - Poidebard 1934, pl. XX, XXI.)



Khān al-Manqūra
(Poidebard Antoine - Poidebard 1934, pl. XXI, XX.)

3



Khān al-Manqūra
(Veselá Martina - 2012)

Khān al-Trāb/ Valle Diocletiana

ANCIENT: **Valle Diocletiana**

MUSIL CS: **Chān at- Trāb**

Periods

Date of surviving remains

Uncertain; probably Tetrarchic in origin.

Verified by modern research

Description

The building was made from a soft stone. In the time of Musil's visit was almost wholly crumbled and fallen to the pieces. The ground plan of the building was rectangular 44,8 m long from east to west and 41,5 m wide, with a square tower in each corner. In the middle of the northern side was the entry gate. The court was divided by a narrow wall to many rooms of various sizes. Traces of a staircase leading to the upper part of the gallery were found to the north from the gate. In each tower were four loopholes (Musil 1928, 108-109).

History

Historical notes

Musil according Ptolemy identified Khān al-Trāb with Admana (var. Odmana, Ogmana), (Musil 1928, 235).

Musil references

Musil A. 1928: Palmyrena. New York.

Othersselected references

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.

Gregory, S. 1995 - 1997: Roman Military Architecture on the Eastern Frontier. From AD 200-600. 3 vol., Amsterdam: Adolf M. Hakkert.

Notes - Discussions

Musil visited the site in 1908, when he measured and drew its ground plan (Musil 1928, 108).

It shows remains of buildings leaving only a small courtyard reached by a wide entrance passage. Stairs to wall walk rise against the wall to the

west of the entrance.

The dimensions differ just a little at Musil (44,9 m x 41,5 m) and at Poidebard (43 m square). Poidebard plan was evidently made after an unpublished arial photo.

Geolocation:

On the Strata Diocletiana, cca 30 km south-west of Khān al-Manqūra, at the junction with a route north through the Jabal Rawaq.

Modern state: **Syria**

Geolocation:

Khān al-Trāb stands at an important crossing. The Roman Road stretching from northeast to southwest is cut here by the highway leading from Hawran in the south to Homs in the north.

Category:

Roman - unidentified - fort

Archeologist: **Musil Alois**

Action:

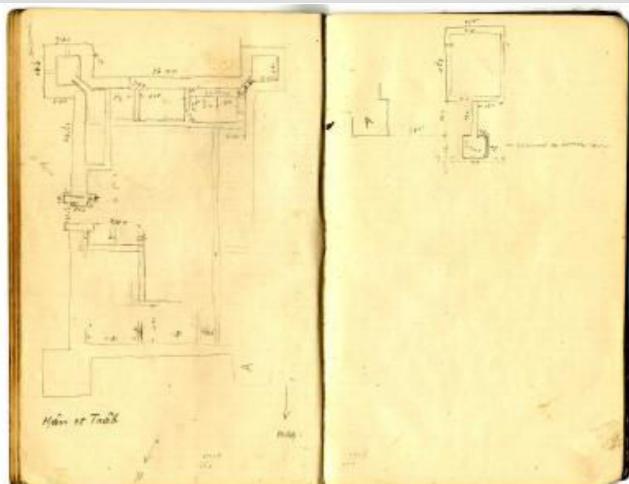
Archeologist: **Musil Alois**

Duration: **1908-11-02 10:52:00 - 1908-11-02 12:56:00 (02:04:00)**

arrival on the 2nd November 1908; from 10:52 to 12:56 Musil sketched a plan of the Khān al-Trāb.

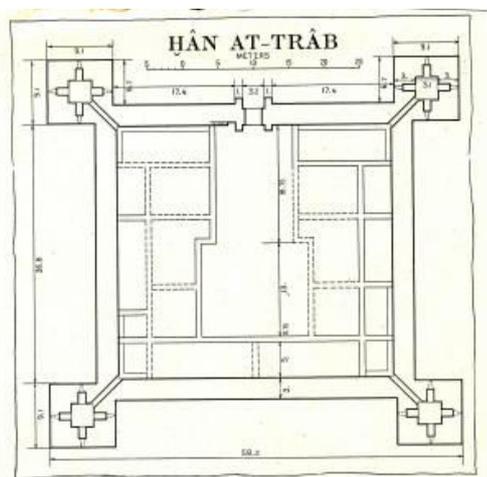
Musil's action time total: 02:04:00

1

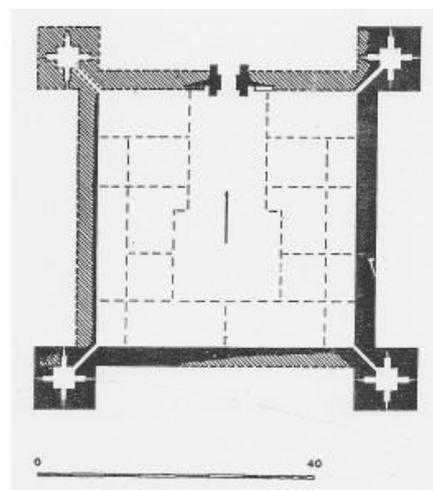


Khān al-Trāb/ Valle Diocletiana
(Musil Alois - Private archive of Musil's Family)

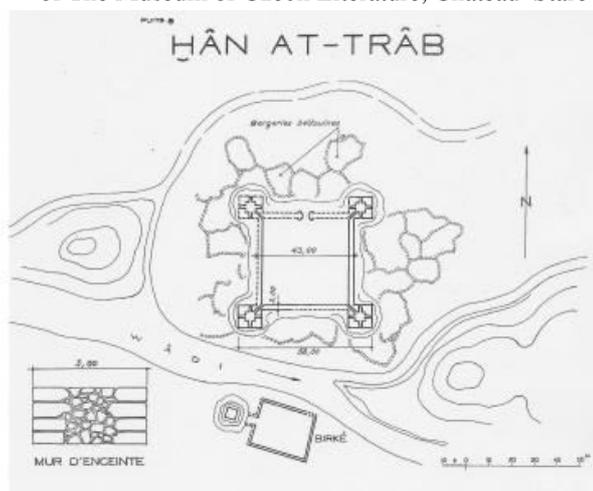
1



Khān al-Trāb/Valle Diocletiana
(Musil Alois - Musil 1928, 108/fig. 28 - The Literary archive
of The Museum of Czech Literature, Château Staré Hradý)



Khān al-Trāb/ Valle Diocletiana
(Musil Alois - Gregory 1997: fig. E 10)



Khān al-Trāb/ Valle Diocletiana
(Poidebard Antoine - Poidebard 1934)

Khān ‘Anaybe

ANCIENT: **Onevatha/'Anabatha**

MUSIL EN: **Ḥān ‘Anejbe**

Periods

Date of surviving remains

Uncertain

-probably Tetrarchic in Origin (Gregory 1997).

Verified by modern research

Description

Musil 1928 (Palmyrena):

- ruined fort

According to Musil there was a ruined watchtower on a high hill north of Khān ‘Anaybe. The fort was ruined. The interior dimensions of Khān ‘Anaybe were 44 m long from south to north by 35 m wide. The walls were 2 m thick.

Square towers were at the corners, the outer sides of each are 9 m in length, project 6,5 m beyond the walls. In the center of the south side the wall is additionally strengthened by a buttress which projects 6,5 m beyond the wall and is 14 m long on the outside. A gate 2,7 m wide in the middle of the east side leads into a court divided into six parts by low walls. North of the gate a stairway leads up to the ramparts. The towers on the east side have five loopholes, the other towers four each. The door in the northern wall opens upon two reservoirs, one of which on the inside is 35 m long from east to west by 11,8 m wide, while the second is 12,6 m long from north to south by 11,6 m wide and extends northward along a ditch in a projection 2,3 m wide by 20,8 m long. Into these the rain water used to flow from several gullies (Musil 1928,104).

History

Historical notes

Musil references

Musil, A. 1928: Palmyrena. New York.

Others selected references

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.

Gregory, S. 1995 - 1997: Roman Military Architecture on the Eastern Frontier. From AD 200-600. 3 vol., Amsterdam: Adolf M. Hakkert.

http://archo.ic-servis.com/admin/ajax/pdf_locality.php?id=23

Notes - Discussions

Musil spent about 3 hours on this site.

After the draft in his diary and the notes he create 2 plans of the site: one of the site with it's environs and another one of the ruins.

Musil's plan is very similar to one of Poidebard.

Musil put one postern in the north wall and south bastion in its east side.

He also reported the remains of internal buildings which were not seen by Poidebard.

Geolocation:

Khān 'Anaybe lies on the southern foot of the an-Nusrani range.

Geolocation:

On Strata Diocletiana cca 27 km south-west of al-Baṣīrī

Modern state: **Syria**

Category:

Roman - unidentified - fort

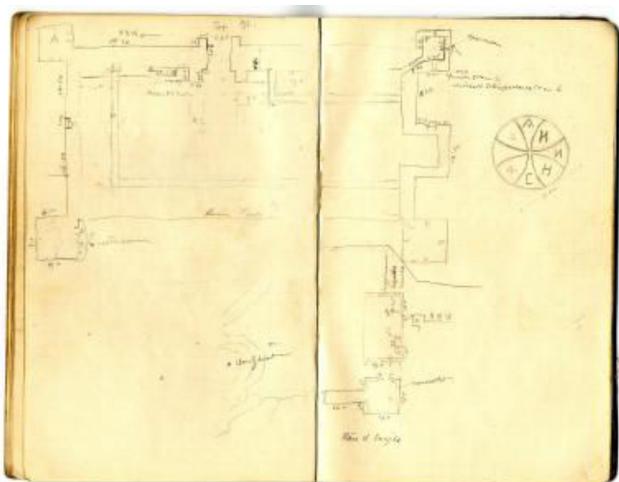
Archeologist:

Action:

Archeologist: **Musil Alois**

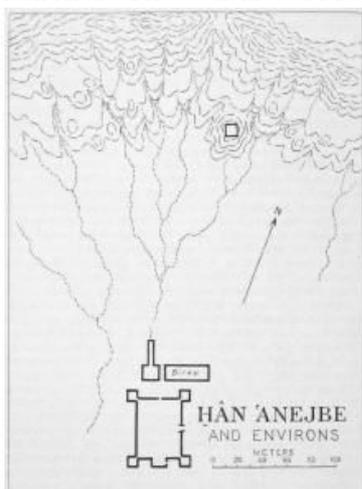
Duration: **1908-11-01 13:38:00 - 1908-11-01 16:46:00 (03:08:00)**

Musil's action time total: 03:08:00



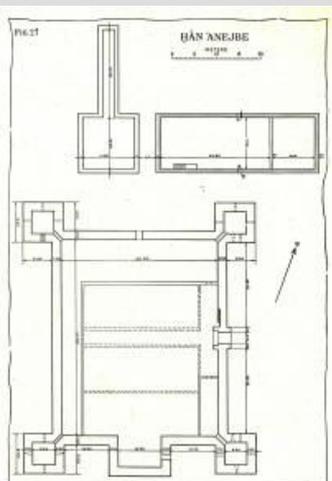
Khān 'Anaybe

(Musil Alois - Private archive of Musil's Family)

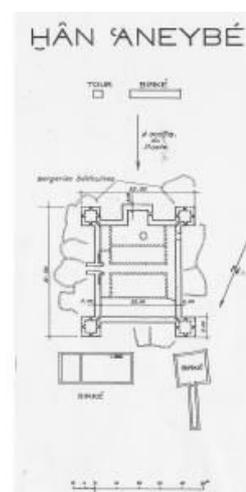


Khān 'Anaybe
(Musil Alois - Musil 1928, 107/fig. 27)

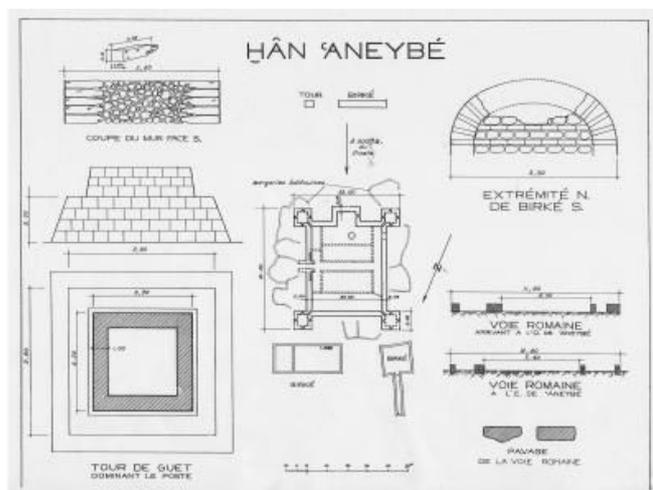
2



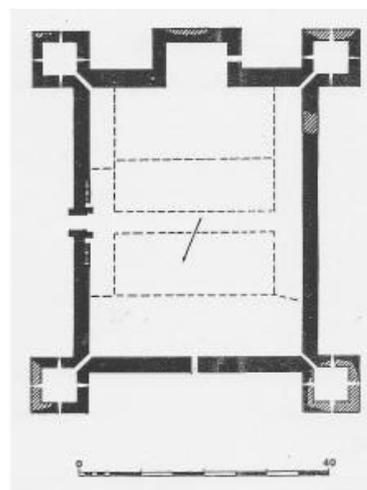
Khān 'Anaybe
(Musil Alois - Musil 1928, 106/ fig. 26 - The Literary archive
of The Museum of Czech Literature, Château Staré Hrad)



Khān 'Anaybe
(Poidebard Antoine - Poidebard 1934)



Khān 'Anaybe
(Poidebard Antoine - Poidebard 1934)



Khān 'Anaybe
(Poidebard Antoine - Poidebard 1934, pl. XXVIII, XXVII.)

Khān al-Ḥallābāt/ Beriaraca

ANCIENT: **Beriaraca/ Veriaraca**

MUSIL EN: **Ḥān al- Ḥallābāt**

Periods

Uncertain.

Date of surviving remains

Uncertain. Probably Tetrarchic in origin.

Verified by modern research

Description

Musil describes it as a building with a square ground plan with 49 m long side, reinforced by a tower in each corner. In the middle of the eastern wall there is a 3,1 m wide wall. There are heaps of debris in the court from ruined rooms. Stairway next to the northern side of the gate led up to the fortification, which is 2,4 m wide. A square room is in every tower with two staircases leading to loopholes (Musil 1928, 91-92).

History

Historical notes

Musil identifies on the base of the study of Peutinger's map (Peutinger Table, Vienna 1888, segm. 10) this Roman camp with ancient Heliaramia (Musil 1928, 93/ note 25).

According to historical sources he believes that the camp was not used in the Byzantine period and it was later rebuilt in a monastery.

Musil references

Musil A. 1928: Palmyrena. New York.

Others selected references

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.

Bounni, A.- Al- AS'AD, K. 2000: Palmyra. Damascus

Gregory, S. 1995 - 1997: Roman Military Architecture on the Eastern Frontier. From AD 200-600. 3 vol., Amsterdam: Adolf M. Hakkert.

Notes - Discussions

Musil wrote that according to Blejhan's explanations the name was given to the ruins, because of old the women from "al-Bḥara" (Al-Bakhrā) used to come there every day to milk the goats and to graze sheep. Consequently it was called „the Castle of the Milking Women“. Musil notes that in this sense people often explained the names of old buildings of which they are ignorant.

According to historical sources Musil believed that the Roman camp was not used in the Byzantine period, but later was rebuilt to a monastery.

Musil during his short stay with lieutenant Thomasberger measured buildings and made the ground plan, which Musil later published in his *Palmyrena*. Musil had in plan to look for old inscriptions, but during the work on a sketch of the environs they were attacked by a group of Bedouins and a long negotiation made impossible to perform this plan (Musil 1928, 92-93, 92 obr. 25).

Plans:

Musil (49 m square), Poidebard (47 m square), 0, 16 ha.

Musil's plan is wrong if it's compared with Poidebard's photo in several respects.

For ex. additions to the wall on the inside are in fact outside, as it's possible to see on photos of Poidebard and G. Bell.

Poidebard's plan shows external additions to the walls, but on the photo it seems to show only addition between the towers.

According to Khaled al- Ass'ad (a former director of museum in Palmyra) in 3rd and 6th centuries the Khān al-Ḥallābāt was restored and was fortified by second contiguous outer wall 3,5 m thick. In 1978 the Khān al-Ḥallābāt was restored.

Unfortunately as it's possible to see now, it's one of the examples of not very "sensitive" restoration. Today is not this kind of "completion" of the ruins in favour.

Geolocation:

On the Strata Diocletiana, 30 km southwest of Palmyra, at the entrance to the valley between Jabal Rawaq and Jabal Abtūr.

Modern state: **Syria**

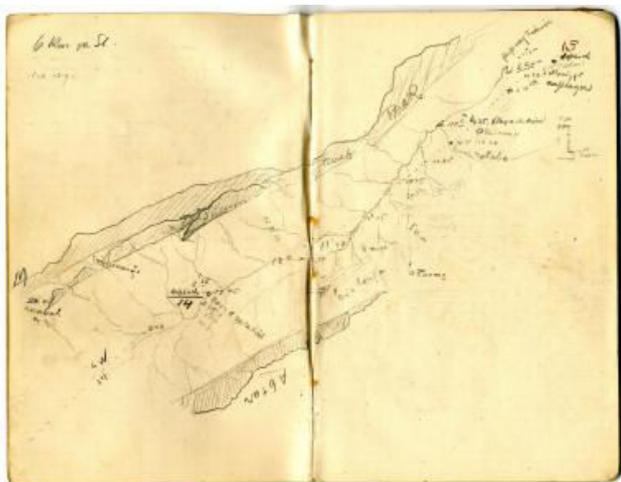
Action:

Archeologist: **Musil Alois**

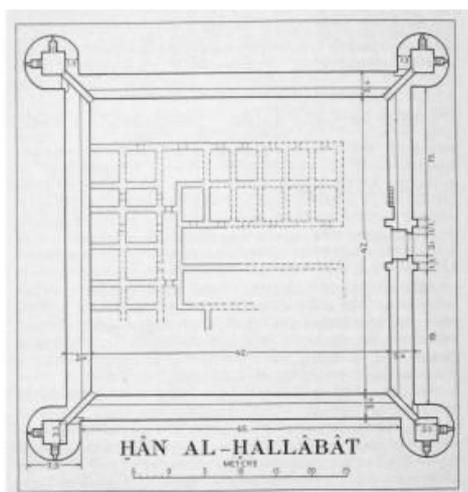
Duration: **1908-10-29 13:25:00 - 1908-10-29 14:52:00 (01:27:00)**

Musil with lieutenant Thomasberger measured buildings and made the ground plan. Other works were interrupted by an attack of a group of Bedouins. Long negotiation made impossible to perform the plan of environs.

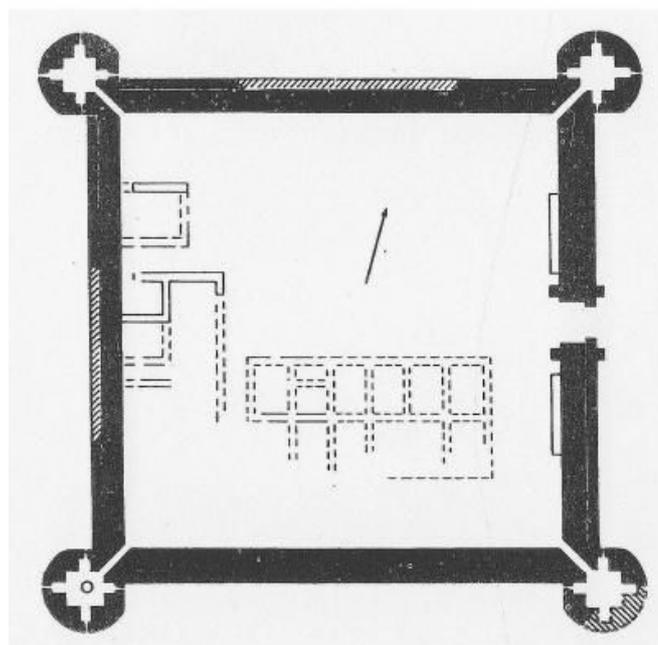
Musil's action time total: 01:27:00



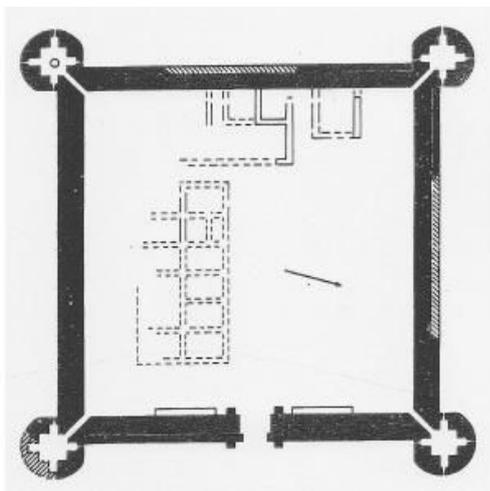
Khān al-Ḥallābāt/Beriaraca
(Musil Alois - Private archive of Musil's Family)



Khān al-Ḥallābāt/Beriaraca
(Musil Alois - Palmyra 1928, 92)

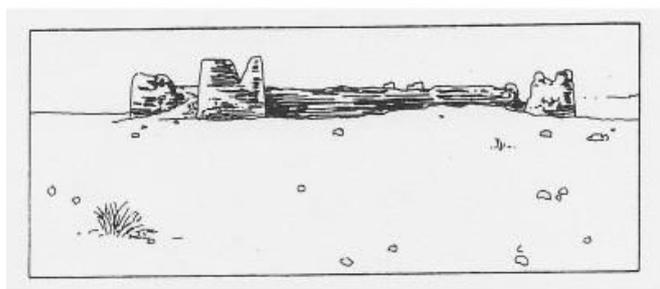


Khān al-Ḥallābāt/Beriaraca
(Poidebard Antoine - Poidebard 1934, pl. XLI.)



Khān al-Ḥallābāt/Beriaraca
(Poidebard Antoine - Poidebard 1934, pl. XLI.)

2



Khān al-Ḥallābāt/Beriaraca
(- Gregory 1997: fig. E 4.2)



Khān al-Ḥallābāt/Beriaraca
(- Gregory 1997: fig. E 4.2 - Gertrudebellarchive)

3



Khān al-Ḥallābāt/Beriaraca
(Veselá Martina)



Khān al-Ḥallābāt/Beriaraca
(Veselá Martina)



Khān al-Ḥallābāt/Beriaraca
(Musil Alois)



Khān al-Ḥallābāt/Beriaraca
(Veselá Martina)



Khān al-Ḥallābāt/Beriaraca
(Veselá Martina)



Khān al-Ḥallābāt/Beriaraca
(Musil Alois)

Khān al- Shāmāt

MUSIL EN: **Ḥān aš- Šāmāt**

ANCIENT: **Thama?**

Periods

Uncertain.

Date of surviving remains

Uncertain. Probably tetrarchic in origin.

Verified by modern research

Description

Musil described the object as a building on the top of a hill, 53 m long in the north-southern direction and 45 m wide. Already during his visit there was preserved only foundation walls and even they were destroyed in many places and often indistinct. He identified the entrance in the western wall. A square tower was situated not far from it. Stairs were in the south-eastern corner and in the north-eastern direction was a deep well.

On the northern side under the hill Musil identified remains of a fortified Roman camp about 50 square meters. A square tower stood in each corner of the huge fortification. Inside the fortification accessible through a gate on two supports is a square enclosure with a side roughly 30 m long. The space between the fortification and the wall is filled by débris of smaller rooms. In the larger enclosure there was another smaller enclosure containing rooms built in two parallel rows. One row was about 20 m long and 8 m wide.

To the north from the gate stairs led to the ramparts. The water reservoir (26 m square) was located to the south-east from the gate outside of the camp (Musil 1928, 8; 10 obr. 1, 2).

History

Historical notes

Musil References

Musil,A. 1928: Palmyrena. New York.

Others selected references

Notes - Discussions

Musil spent here about one hour.

Plans:

Dimension: 1) Musil (53 m x 45 m), Poidebard 45 m x 35 m; walls 1,3 m

Poidebard seems to depend on Musil very much, but he made some corrections and added details (observation points) after unpublished aerial photograph.

At the present time any research of this site is in all probability excluded, because in the close neighbourhood of the Roman camp is situated the base of the army or secret police and no visit is possible without a previous interrogation and a police escort.

Moreover from the ruins of the Roman ruins remained even less than in the Musil's time, because the most of masonry was dismantled and recycled.

Geolocation:

The site is situated on the road from Palmyra to Damascus, several kilometers form Ḍumayr. On the Strata Diocletiana cca 20 km west of Khān al-Trāb.

Modern state: **Syria**

Category:

Roman - unidentified - fort

Archeologist: **Musil Alois**

Action:

Archeologist: **Musil Alois**

Duration: **1914-12-06 11:30:00 - 1914-12-06 12:20:00 (00:50:00)**

Action:

Archeologist: **Musil Alois**

Duration: **1908-10-04 14:30:00 - 1908-10-04 15:42:00 (01:12:00)**

Musil's action time total: 02:02:00



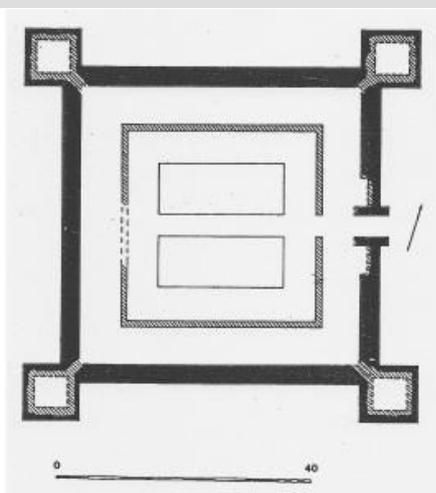
Khān Shamāt

(Musil Alois - Musil 1928, 10/fig. 1 - The Literary archive of The Museum of Czech Literature, Château Staré Hradý)

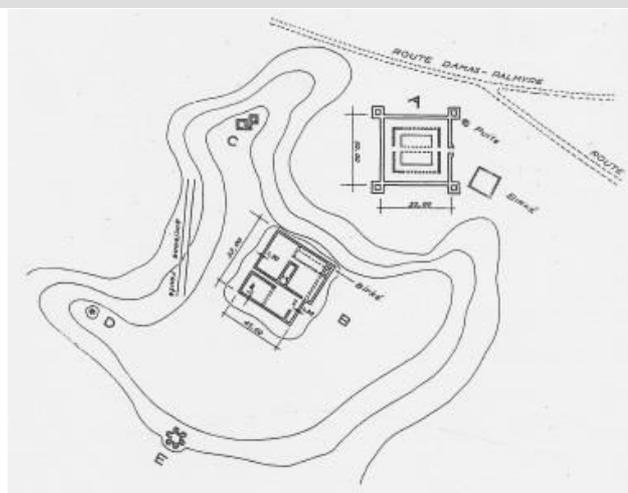


Khān al- Shamāt
(Poidebard Antoine - Poidebard 1934)

2



Khān al- Shamāt
(Musil Alois - Gregory 1997: fig. E 11.1)



Khān al- Shamāt
(Poidebard Antoine - Poidebard 1934, pls. XV.,XVI.)

3



Khān al- Shamāt_upper building- a rosette
(Musil Alois - Musil 1928, 11/fig. 2 - The Literary archive of The Museum of Czech Literature, Château Staré Hradý)

Khān al- Shindāh

MUSIL EN: **Ḥān abu Šindāh**

Periods

Date of surviving remains

Verified by modern research

Description

According to Musil's data walls were about 220 cm wide and the camp had the form of a rectangular with the length of side in north-south axis 45,40 m and the width 41,20. The camp was accessible through the gate in the middle of the southern wall. In the middle of the fortified area there was a deep well, to the west from it a square building. In the western wall was six loopholes, the same amount in the southern wall, in the northern wall only five and in the eastern wall seven. Above one loophole a stone with a carved cross was from outside on a stone (Musil 1928, 43, 44).

History

Historical notes

Musil references

Musil A. 1928: Palmyrena. New York

Others selected references

Notes - Discussions

Musil thought the fort was constructed for protection of the road (al- Tidribe) (Musil 1928, 43).

Geolocation:

According to Musil fort was situated on a high hill.

Modern state: **Syria**

Action:

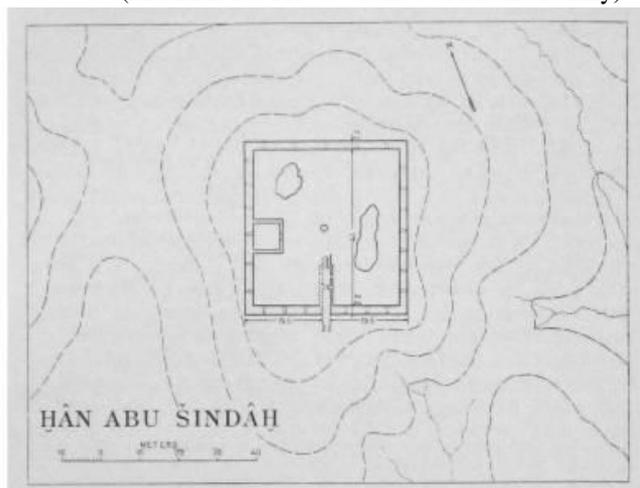
Archeologist: **Musil Alois**

Duration: **1908-10-16 10:05:00 - 1908-10-16 12:15:00 (02:10:00)**

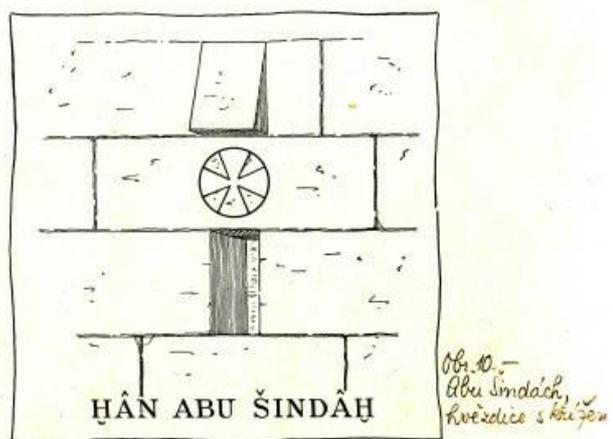
Musil's action time total: 02:10:00



Khān al- Shindāh
(Musil Alois - Private archive of Musil's Family)



Khān al- Shindāh
(Musil Alois - 1928, 44/fig.5)



Khān la Shindāh
(Musil Alois - The Literary archive of The Museum
of Czech Literature, Château Staré Hradý)

al-Kulaybiyya

MUSIL EN: **al- Klejbijje**

Periods

Uncertain.

Date of surviving remains

-Probably Islamic (Gregory 1997 (E 26))

-Islamic (Gennequand 2010)

Verified by modern research

Description

Musil described that the fortification was to the north-east from the camp, it was 464 paces long and 400 paces wide. Remains of foundation walls of collapsed houses and fragments of columns with a perimeter of 70 cm diameter were still visible, as well as olive press (Musil 1928, 135).

History

Historical notes

Musil references

Musil A. 1928: Palmyrena. New York.

Others selected references

Gregory, S. 1995 - 1997: Roman Military Architecture on the Eastern Frontier. From AD 200-600. 3 vol., Amsterdam: Adolf M. Hakkert.

Gennequand, D. 2010: Les élites omeyyades en Palmyrène: contribution ? l'aspects fonctionnels et économiques des établissements aristocratiques omeyyades du Bilād al-Shām. Thèse doctoral. Université de Lausanne/ Université de Paris I Pantéon - Sorbonne.

Notes - Discussions

Musil spent there a half of hour in 1912 and during his stay he explored the site and made the ground plan.

Poidebard just mentioned the site.

Geolocation:

30 km west-south of Tadmur/ Palmyra, on the route to Damascus, parallel to Strata Diocletiana, north of Jabal Rawaq

Category:

Roman - unidentified - fort

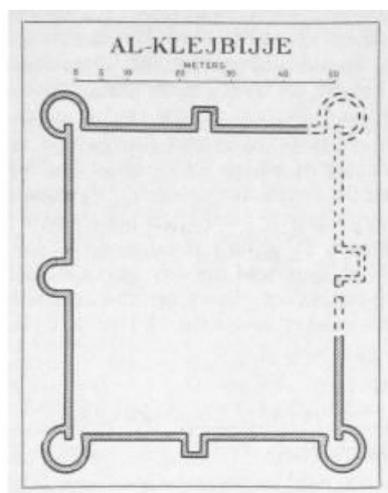
Archeologist: Musil Alois

Action:

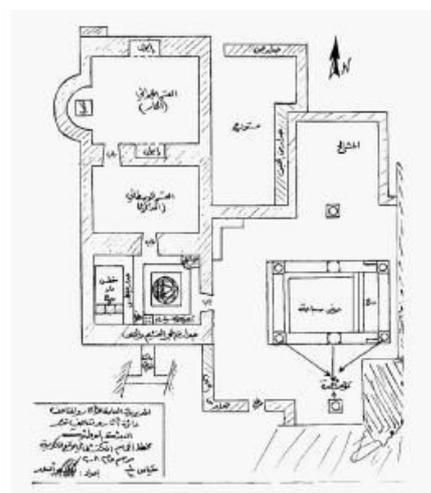
Archeologist: Musil Alois

Duration: 1912-03-20 08:40:00 - 1912-03-20 09:10:00 (00:30:00)

Musil's action time total: 00:30:00



al-Kulaybiyya
(Musil Alois - Musil 1928, 135/ fig. 32)



al-Kulaybiyya_plan of the Bath
(‘Umar al-As ‘ad - after ‘Umar al-As ‘ad in: Genequand 2010)

al-Ṣāliḥīyya/Dura Europos

MUSIL EN: **Aṣ-Ṣāliḥīyye**

ANCIENT: **Dura Europos**

MUSIL CS: **Sálhijje**

Periods

300 BC (founded by Alexandre's successors Seleucus; named Europos after his home town in Macedonia; Dura means fortress).

-reused around 200 AD.

-city was taken by Parthians in 113 BC, than by Trajan (116) and captured back in 165.

- city was a caravan trading centre, linked with Tadmur/ Palmyra.

The site was established at the beginning of Hellenistic period and was continually used also in the Roman period (less than 100 years).

After it was captured by Shapur I, it was never renewed.

Date of surviving remains

Roman.

Verified by modern research

The first archaeological research was executed by a French team in years 1922-1923, the research was restored between 1928-1937 and besides the French team also Americans worked on it. Results were published in 1978.

The most important discovery was a finding of a synagogue dated into the period of rule of Philip the Arab (244-249) with an interior richly decorated by frescoes depicting human figures.

The style of painting on the frescoes is often compared with the decoration of Umayyad desert castles ʿAmra and Qaṣr al-Ḥayr al-Sharqī, in spite of the fact that they come from a different period (Fowden 2004,8; Rosen-Ayalon 1995, 461).

These frescoes were transported in Damascus, where are now a part of a permanent exposition of the National museum.

Description

History

Historical notes

Musil identified it with ancient town of Dūra and according to arabic writers with Arabic settlement ad- Dālīja (al-Dāliyya).

Musil references

Musil,A.1927:The Middle Euphrat. New York.

Others selected references

Notes - Discussions

During his short stay he made a fundamental plan of ruins and some photographs (Musil 1927, 10, 11).

Musil's plan, from which execution is evident the author's lack of time, catches relatively accurately the line of fortifications. He recorded but simplified the inner structure traces of the temple of Deus Kyr in the south-western part of the complex, and also a Parthian palace and structures in the south-eastern part.

Geolocation:

This considerably extensive site, according to ancient sources called also Dura Europos is situated on the right bank of Euphratus between Dajr az-Zawr and Iraqi borders.

Modern state: **Syria**

Category:

-

Archeologist: **Gregory Shelagh**

garrison city

Action:

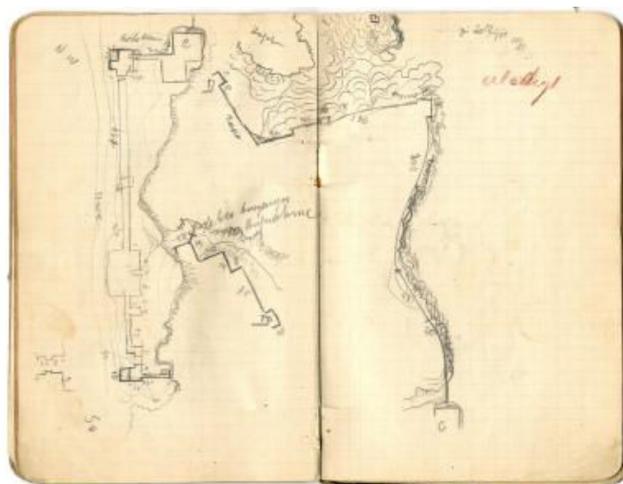
Archeologist: **Musil Alois**

Duration: **1912-04-10 14:52:00 - 1912-04-10 17:10:00 (02:18:00)**

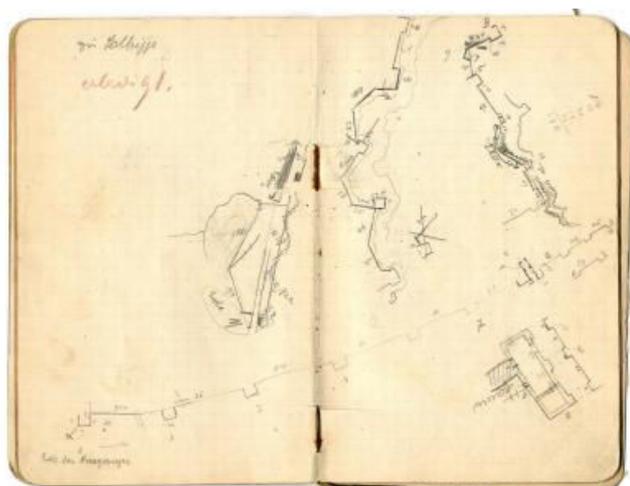
Musil's action time total: 02:18:00



al-Şālihiyya
(Musil Alois - Private archive of Musil's Family)

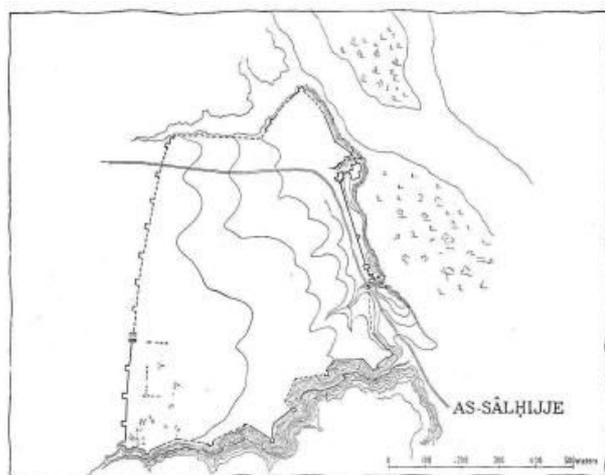


al-Şālihiyya
(Musil Alois - Private archive of Musil's Family)



al-Şālihiyya
(Musil Alois - Private archive of Musil's Family)

A



Şālihiyya



al-Şālihiyya

(Musil Alois - Musil 1927, 12/fig. 4)

(Gregory Shelagh - Gregory 1997: fig. D 5.1)

A1

al-Şāliḥiyya

(Musil Alois - Musil 1927, 13/fig. 5 - The Literary archive of
The Museum of Czech Literature, Château Staré Hradý)



Şāliḥiyya

(Musil Alois - 2012)

al- Mlāka

MUSIL EN: **al-Mlêke**

Periods

Uncertain.

Date of surviving remains

Uncertain.

Verified by modern research

Description

Ruined settlement (Musil 1928, 143).

History

Musil identified the site with a mention site in al- Ṭabarī (Musil 1928, 294).

Historical notes

Musil references

Musil A. 1928: Palmyrena. new York.

Othersselected references

Poidebard, A.1934: La Trace de Rome dans Le désert Syrie. Le Limes de Trajan a la Conqu?te arabe. Recherches aériennes 1925-1932. I.-II. Paris.

Gregory, S. 1995 - 1997: Roman Military Architecture on the Eastern Frontier. From AD 200-600. 3 vol., Amsterdam: Adolf M. Hakkert.

Notes - Discussions

Construction is made of hard limestone; it's similar construction of "moyen appareil" to Khān al-Hallābat, but without mortar, plan is similar as al-Bshir.

Gregory after Poidebard documentations stated that west and south side was already destroyed in 1932. (Gregory 1997, 204-205).

Geolocation:

cca 30 km southeast of Khān al-Hallābat, 47 km from Tadmur/ Palmyra via al-Bakhrā.

Modern state: **Syria**

Category:

Roman - unidentified - fort

Archeologist: **Gregory Shelagh**

50 m by 50 m square, cca 0,2 ha; towers cca 9 m square

Action:

Archeologist: **Musil Alois**

Duration: **1912-03-21 00:00:00 - 1912-03-21 00:00:00 (00:00:00)**

Musil just mentioned the ruins, probably he just saw it from a distance.

Musil's action time total: 00:00:00

Esriya/ Seriana

ANCIENT: **Seriana, Sûrija/Seria, Serija**

MUSIL EN: **Esrija**

Periods

-Roman, Byzantine

Date of surviving remains

-Roman, Byzantine

Verified by modern research

Between 1991 and 1994 the research of this Roman temple and adjacent environs was executed by the German Archaeological Institute. The course of supporting walls corresponds with Musil's plans. The new survey specified the inner layout and the date of origin. Architectonic ornaments on the church put it into late Severian period, but recycled stone blocks visible on the profile of the podium indicate, that there were also older structures. However, even present exploration did not bring new information about this older construction. Only profiles of stone slabs show, that they could be from the period of early Roman empire. The context of the finding of a bronze small statue of Apollo indicates a conjecture, that it could be the oracle dedicated to Apollo, used at the most till the beginning of the 4th century AD. The exact date of origin of this early classical figurine is not unequivocal. The fact, that in the environs up to 100 km there is no such representative temple, shows to the special position of this site. The research of Rüdiger Gogräfe confirmed the finding of three smaller churches recorded by Musil. Churches date back to the early Byzantine period. However in Musil's description is no mention about a simple brick fortification enclosing the site and adjoining on the northern and the southern sides to the church. Analyses of ceramics originating from surface collection indicate a frequented settlement from early Byzantine period till the 13th century. The large fortress built between the temple and the valley was during the research dated to the end of the Byzantine period. The temple itself was later rebuilt and a newly built cistern served as a reservoir for the rain water. The space around the temple served as a Muslim burial ground (Gogräfe 2005, 99-102).

Description

Musil (Palmyrena)

Esrija ruins, covered a basin 1 km wide. At the eastern end of the basin, on the right bank of the channel, there rises a hillock where there are remains of a strong fort with two deep wells. Opposite the fort on the same bank the foundation walls of a stately round building measuring seventy paces in diameter were still to be seen. It's roof evidently rested on gigantic pillars, the drums of which have been dug out by *fellahin* searching for water. On one of these Musil saw two Greek letters. About 200 paces to the west he found the apse of a Christian church. Still farther west both the banks of the channel are covered with the remains of ruined houses. At the northwest end of the ruins there rises on the ridge formed by the spur Tanâheğ Esrija a tolerably well preserved pagan temple. This forms a rectangle 15,3 m long from east to west by 9,04 m wide. From the east a gate 2,5 m wide leads into it. In the corner to the right of the gate there was a spiral stairway leading to the roof. The gate and the whole east side have remained almost intact. There are heaps of débris of other ruined buildings around the temple. Here he found and copied an Arabic inscription.

Northeast of the temple there was a reservoir 236 paces long from north to south by 174 wide. Northwest of it on the right bank can be seen the foundation walls of a Christian church. A few paces farther north was other church with an adjoining monastery, on the cornice of which are Christian emblems. From the Christian church a beautiful view opens out over the extensive plain stretching west... When Estija became a Christian town, the former pagan temple was converted in to a Christian church and after expulsion of Christians into a Mohammedan place of worship. It is owing solely to this double transformation that it was not demolished entirely.

When Esrija became a Christian town, the original pagan temple was rebuilt to a Christian church. After Christians were expelled, it served to Muslims

(Musil 1928, 56, 57, 58, 59).

History

Historical notes

Ruins of once important town of Seriana, indicated both in the *Antonine Itinerary* and *Peutinger table*.

According to Seriana written in Greek capitals might easily be wrongly transcribed as Derrhima, Musil suggested reading Seriana instead of Derrhima in Ptolemy.

Musil references

Musil A. 1928: Palmyrena. New York.

Others selected references

Gogräfe, R. 2005: The Temple of Isrye- Seriana- From Oracle Sanctuary to Qasr. Mainz am Rein.

Notes - Discussions

Between 1991 and 1994 the research of this Roman temple and adjacent environs was executed by the German Archaeological Institute. The course of supporting walls corresponds with Musil's plans. The new survey specified the inner layout and the date of origin.

The research of Rüdiger Gogräfe confirmed the finding of three smaller churches recorded by Musil. Churches date back to the early Byzantine period. However in Musil's description is no mention about a simple brick fortification enclosing the site and adjoining on the northern and the southern sides to the church.

Geolocation:

The site associated with antique Seriana is situated in the middle of the way between Palmyra and Aleppo in the Syrian desert. Through Seriana, which had at disposal sufficient amount of wells, so important in these places, led always several important trade routes.

Modern state: **Syria**

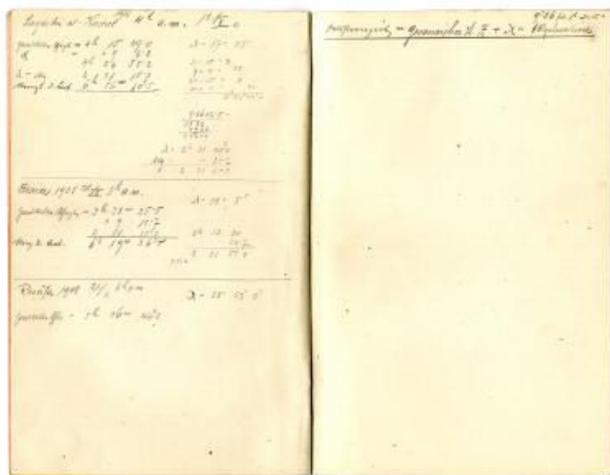
Action:

Archeologist: **Musil Alois**

Duration: **1908-10-19 00:08:00 - 1908-10-20 07:10:00 (31:02:00)**

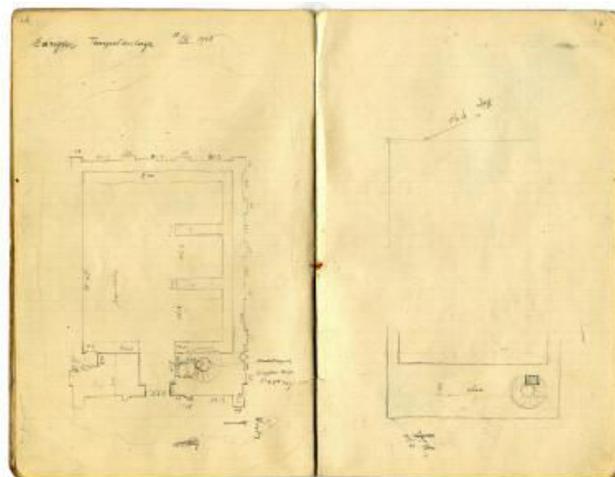
(they stayed overnight- Musil + Thomasberger) temperature at 07:10 am on 20th October 1908 was 14°C

Musil's action time total: 31:02:00



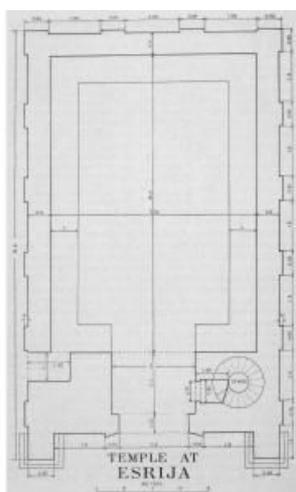
Esriya

(Musil Alois - Private archive of Musil's Family)



Esriya

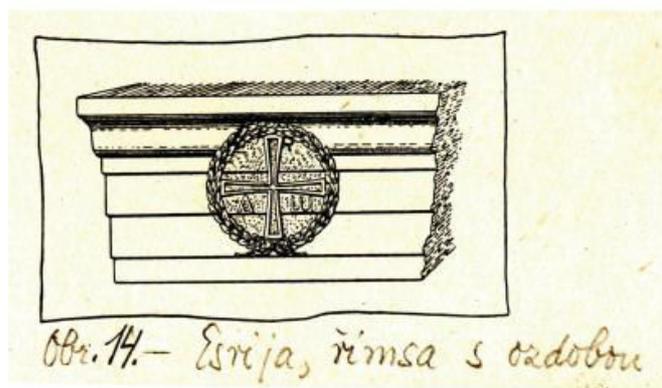
(Musil Alois - Private archive of Musil's Family)



Esriya - temple

(Musil Alois - 1928, 56/fig.10)

3



Esriya cornice with a Christian emblem.

(Musil Alois - Musil 1928, 59/fig. 12 - The Literary archive of The Museum of Czech Literature, Château Staré Hradý)

Qal'at Rahba

MUSIL EN: **Ar-Rḥaba**

Periods

From the 9th century.

Date of surviving remains

Built in between 1146 to 1174 AD.

Verified by modern research

An research of French-Syrian expediton was executed here in 1978 with probes in the fortress and also in two attached settlements, of which the first is situated directly on the foot of the hillock. From this research were published reports about findings and studies about analyses of water management of this fortress (Biahquis 1986, 1987).

The first fortress built by Malik ibn Taub in the first half of the 9th century was destroyed by an earthquake in 115. A new castle was built between 1146 and 1174. In contrast to later construction of massively fortified crusade castles with bastions and moats this fortress was built on a central hillock and fortified by a high, but only simple wall. The enclosure of the pentagonal ground plan is protected by a moat. The central donjon on a small ground plan (approximately 60 x 30 m) has also the pentagonal ground plan and the longest is the western side. The building contains a spacious sunk cistern. A part of building from fire bricks is bearing typical elements of an Arabian architecture from this period, but we can distinguish also strong Mezopotamian and Persian influence (Ross 1999, 189).

Description

The hill is surrounded by a stone wall. Musil described well preserved underground brick vaults. Also a high wall enclosing a rectangular court was in a good condition. There is a large building in the middle of the court with an inner court with a thick masonry. The most of walls was devastated, some of them were completely dismantled. There were to the north and to the south of the hill indefinable remains of buildings (Musil 1927, 6,7).

History

Historical notes

Musil references

Musil A. 1927: The Middle Euphrates. New York.

Others selected references

Ross, B. 1999: Monument sof Syria. London- New York.

Notes - Discussions

Most of the documentation of Musil to this site was later stolen.

Musil published 4 photos and we have just a very rough draft from his diary.

The comparison of Musil's photos with today state shows, that the tower of the castle fell down, probably due to the turistic buses arriving in the past to the immediate vicinity of the castle.

Geolocation:

This castle is situated on a projection of a solitary hill in the plain not far from Euphratus, in the vicinity of present road from Dajr az-Zawr to Iraq.

Modern state: **Syria**

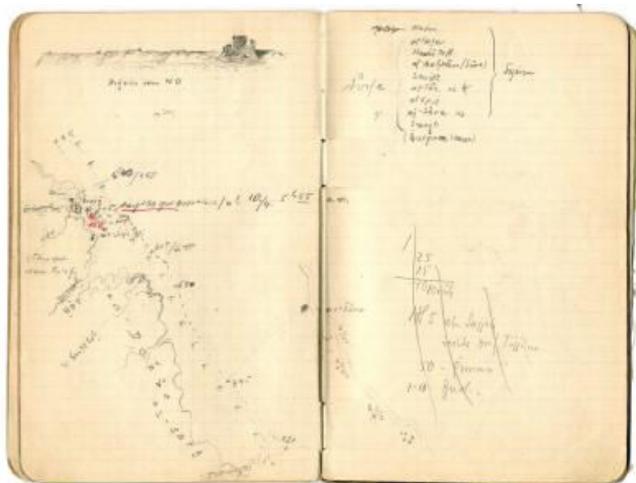
Action:

Archeologist: **Musil Alois**

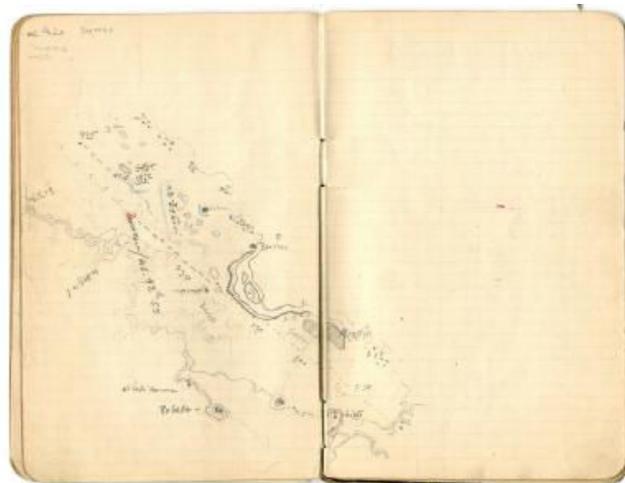
Duration: **1912-04-09 00:00:00 - 1912-04-09 17:12:00 (17:12:00)**

not exact time mentioned

Musil's action time total: 17:12:00



Qal'at Rahba
(Musil Alois - Private archive of Musil's Family)



Qal'at Rahba
(Musil Alois - Private archive of Musil's Family)

A1



Qal'at Rahba
(Musil Alois - Musil 1927, 7/fig. 2 - The Literary archive
of The Museum of Czech Literature, Château Staré
Hradý)



Qal'at Rahba
(Veselá Martina - 2012)

B1



Qal'at Rahba
(Musil Alois - The Literary archive of The
Museum of Czech Literature, Château Staré
Hradý)



Qal'at Rahba
(Veselá Martina - 2012)

C1



Qal'at Rahba
(Musil Alois - The Literary archive of The
Museum of Czech Literature, Château Staré
Hradý)



Qal'at Rahba
(Veselá Martina - 2012)

D0



Qal'at Rahba
(Musil Alois - The Literary archive of The
Museum of Czech Literature, Château Staré
Hradý)

D1



Qal'at Rahba
(Veselá Martina - 2012)



Qal'at Rahba
(Veselá Martina - 2012)

Al-Khulla/Cholle

MUSIL EN: **Al-Ḥulle**

Periods

- Roman, Umayyad

Date of surviving remains

- Roman, Umayyad

Verified by modern research

A renewed research of the German Archaeological Institute as a part of the project of survey of the Roman limes follows in Musil's exploration from 1908. Its aim was the comparison of the architecture of several Roman fortresses from Resafa, Chulle, Sura and others, and also to specify the eastern border of empire and further to specify eastern Limits of empire and to enable in such a way the first thorough determination of the western border line of the Roman empire.

A typical Roman fortress in this region consists of a huge brick fortification about 2 m high. The construction has strictly rectangular, often square ground plan. Construction of the square ground plan with a side between 40 and 60 m were found in the distance about 15km along the inner fortification and occupied the most of the enclosed space. The fortification was dated into 540 AD, that means to the period, when Persian ruler Chosrou I. carried on podnikal raids to these places (Konrad 2005, 121).

The research under Thillo Ulbert recently documented for a short time existing palace building from Umayyad period with proofs about agricultural and operational facilities. The building belongs in the category of objects inaccurately marked as desert palaces. Thillo Ulbert believes, that this site is related to the not too much distant metropolis Resafa (Ulbert 2001, 191- 221).

Description

Musil determined a Roman camp 60 m long in the north-south axis and about 55 m wide. The wall is fortified on each from the four corners by a round tower. Between them there are on each side two others. Gates situated on the eastern and the western sides lead to the court, where are still visible foundations of several walls. There is a well or a deep cistern almost in the middle. To the description is attached the ground plan (Musil 1928, 69-70).

History

Historical notes

-Ptolemy, Geography V, 14:19, page 233 writes about Cholle.

According to Musil it can be identified with al-Ḥulle.

Musil references

Musil A. 1928: Palmyrena. New York.

Others selected references

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

Ulbert, T. 2001: La residencia rural omeya de Hallul- Cholle(Syria), in: Valdés-Velázquez, A. (eds.) : La Islamización de la Extramadura Romana. Mérida. 191-192

Notes - Discussions

The exploration of the Roman fortress roughly confirmed Musil's plan. It is identical to the main line of fortification as well as in layout of the inner built-up area, which was specified by the new research.

Geolocation:

Modern state: **Syria**

Action:

Archeologist:

Duration: **1912-04-04 12:10:00 - 1912-04-04 13:48:00 (01:38:00)**

4.4.1912 - from 12:10 till 1:48 they rested east of al-Hulle (Musil 1928, 172).

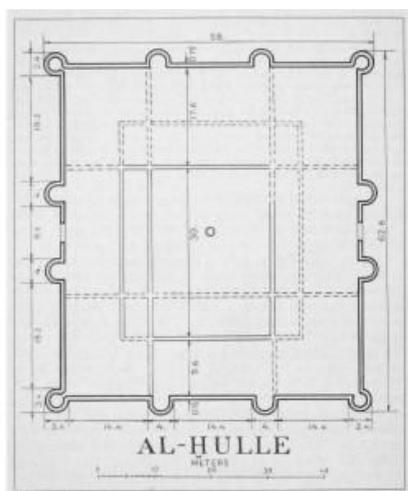
Action:

Archeologist:

Duration: **1908-10-25 08:00:00 - 1908-10-25 08:45:00 (00:45:00)**

25.10.1908 from 8:00 am till (exact time not mentioned, but they stopped at the most for 45 minutes, because at 9:00 they were again on the way)

Musil's action time total:



al-Khulla/Cholle
(Musil Alois - 1928, 70/ fig.14)

Ḍumayr/Thelsee

MUSIL EN: **Ḍmejr al-° Atīže**

Periods

- Late Antiquity ?
- Umayyad ?

Date of surviving remains

- Late Antiquity?
- Umayyad?
- Musil dated on the base of found Roman inscription the camp in the year 162 AD (Musil 1928,113).

Verified by modern research

Lenoir on the base of a new exploration published in 1999 dates the new building into late antique, probably in the Ghassanid period or into the Umayyad period.

He disproved for a long time repeated opinion, that it was a Roman camp (quoted according to Genequand 2001, 25).

If another research will confirm this datation, it would be the second example of a castle from the Byzantine period in Arabian setting discovered in Syria, which would be a predecessor of Umayyad castles (Lenoir 1999, quoted according to Genequand 2001, 24-25).

Description

Ḍumayr was the largest fortified camp northeast of Damascus.

The camp was 189 m long in the east-west direction and 173 m wide. A round tower was situated in each corner with a perimeter of 20 m, other shooting towers stood between them on all sides. Gates leading into the court were located in the middle of all four walls and were surrounded on the both sides by towers. Between these towers and corner towers is in each case situated another tower. The main road from north to south was 7 m wide, lined on both sides by columns. A perpendicular road to it connects the eastern and the western gate. Two buildings stood in the western part of the fortification. They had almost the same size, 20 m long and 17 m wide.

A basilica was situated in the south-western corner, outside of the camp, 30 m long and 24 m wide, divided by four columns on each side into three naves. Musil did not find both in the basilica and the camp any fragments of columns or marble. He believed, that everything was already long time ago sold in Damascus (Musil 1928, 110-111).

History

Historical notes

Musil references

Musil A. 1928: Palmyrena. New York. Musil. A. 1927: Arabia Deserta. New York.

Others selected references:

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.

Lenoir,M. 1999: Dumayr, Faux camp romain, vraie résidence palatiale; in: Syria, 227-236.

Notes - Discussions

Musil states, that this was the largest fortified camp to the north-east from Damascus. During his visit in 1908 he spent over one hour there and he measured it and drew its ground plan (Musil 1928, 112).

The modern plan of the site corresponds with Musil's plan in main lines of fortifications, but it differs in inner layout. Two structures indicated in Musil's plan, which Lenoir originally interpreted as commemorative columns, were during the research identified as cisterns of a pear-like shape. The research gave precision to the form of the inner structures.

Musil didn't notice Umayyad structures.

Lenoir states, that the church in the vicinity of south-western corner, noticed by Musil, was built with the same technique and from the same material as the inner palace. According to Lenoir this fact supports its origin in the Byzantine period.

The type of fortification is more similar to the Umayyad buildings than to Roman camps (Lenoir 1999, quoted from Genequand 2001, 24-25).

The object was not very sensitively restored and was accessible for public (before the escalation of today's conflict).

Geolocation:

This camp is situated near of the road Damascus/al-Shām – Palmyra/ Tadmur.

Modern state: **Syria**

Category:

Roman - unidentified - camp

Archeologist: **Musil Alois**

Action:

Archeologist: **Musil Alois**

Duration: **1914-12-04 09:40:00 - 1914-12-06 06:40:00 (45:00:00)**

Action:

Archeologist:

Duration: **1908-11-17 07:00:00 - 1908-11-17 10:00:00 (03:00:00)**

Musil worked there with Tûmân (Rudolf Thomasberger) from Military Cartographical Institute in Vienna (they drew a plan) -16.11.1908 – short visit, because of repugnant stench; they drew a plan of the local Roman camp -17.11.1908, 3 hours in the morning Musil work with Tûmân

(measuring)

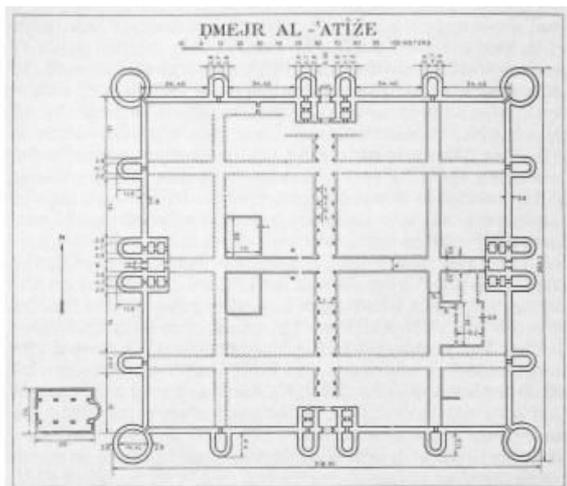
Action:

Archeologist: **Musil Alois**

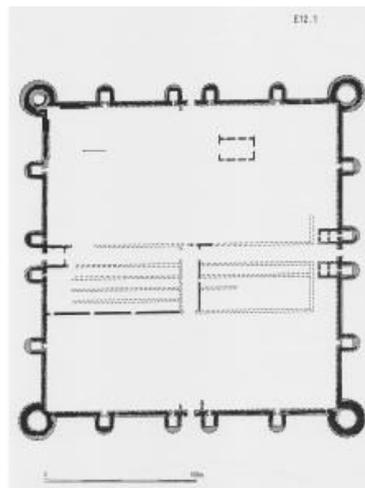
Duration: **1908-11-02 07:08:00 - 1908-11-09 00:00:00 (160:52:00)**

3.11.1908: Musil worked about one hour in the Roman camp (Musil 1928, 110). 2.11.1908 from 7:08 pm 2.11.1908 till at least 9.11.1908 (Musil was sick) – the day of departure is not mentioned

Musil's action time total: 205:52:00



Dumayr
(Musil Alois - Musil 1928, 112/fig. 29)



Dumayr/Thelsee
(- Brunnow-Domaszewski, pl. LIII.)

Qaṣr al-Kharāna

MUSIL CS: **Ḥarāni**

ARABIC: قصر خُرَّانَة

MUSIL DE: **al- Ḥarāni**

Periods

Qaṣr al-Kharāna belongs to the groups of Umayyad castles, it may have been built during the reign of the Umayyad Caliph al-Walid I (AH 86–96 / AD 705–15), or possibly earlier.

Date of monument: before 710 AD/ Hegira 92;

Arabic (Kufic) graffiti have been found on the inside walls, one of which has the date 710 AD (Kennedy- Bewley 2004, 223).

Date of surviving remains

-Early Islamic - Umayyad

Verified by modern research

The site was excavated by the American Ulrice 1978-9.

Kennedy Bewley aerial prospection:

Castle of square ground, 35 m x 35 m with sole doorway.

The walls of castle are made of courses of small stones, but it was originally plastered over. At each corner is a slender circular tower and three of the sides have similar semi-circular ones in the centre.

K.-B. supposed that "Arrow slits" may have been for light, rather than defence. A small square courtyard is surrounded by rooms on two storeys, containing 61 rooms.

(Kennedy - Bewley, 2004, 223)

Najjar M. : "Qasr al-Kharanah" in Discover Islamicart Art.

Well-preserved square structure that measures 36.5 m x 35.5 m.

The corners of the structure are marked by four solid three-quarter circle towers. The entry gate in the centre of the southern façade is flanked by two quarter-circle towers, and a semi-circular interval tower situated at the middle of each of the remaining facades. The palace is built of stone rubble with mortar. The structure includes two storeys of residential units arranged around a square courtyard that measures 13 m x 13 m. The upper storey is accessed by two flights of stairs directly behind the gate block. The barrel-vaults of the rooms are supported by semi-circular arches which spring from attached pilasters. One row of diagonally-placed bricks is used to decorate the upper part of the façade right above the ornamental 'arrow' slits. Another row of bricks marks the middle of all the nine towers.

In spite of its fortified appearance Qasr al-Kharanah does not seem to have served a military function since its towers and arrow slits are ornamental. The towers are solid, and the slits are too high above the floor to serve archers. Quite probably it served as a meeting place with the local tribes to elicit their political support for the Umayyad dynasty.

Both the construction techniques (the use of rubble with mortar) and the decoration (bricks and stucco) indicate Sassanid influences.

Source: [http://www.discoverislimicart.org/database_item.php?id=monument;ISL;jo;Mon01;25;en&cp]

Description

Relatively well preserved low building, square ground.

On both sides of entrance hall are stables and staircase with very low steps leading to 3 apartments (Syrian bayt - "house", specifically referring to courtyard apartments in early Islamic period) around the court, which are mutually divided (Musil, 1907b, 293, fig. 131). Each flat had one main larger room and 5-6 smaller rooms into which the light entered partly through the light well above the doors and partly through narrow openings, loopholes. Only two rooms on the corners of the court had no light at all.

Arcade extension in the court didn't exist any more, but from remnants it was possible to make a reconstruction. From pillars bearing arches remained almost nothing, but girders of small arches are still well preserved. The staircase and the doors with light well led into the empty court. Formerly it led into a corridor. What remained were 5 space formations – 3 flats above the ground floor and 2 flats above stables. Above the entry hall was a special room and individual flats composed of 4-6 small rooms. Musil wrote, that especially excellent were three larger rooms. The lighting was the same as below. On the outside wall are two rows of loopholes. From upper floor led staircase to the roof. All spaces of both floors were covered by a barrel vault, which was mostly preserved, except vaults in the northern part.

Outside walls are as the others from hewn quarry stones, which alternate with smaller stones. All preserved walls in the court were plastered by mortar, from exterior walls none.

Outside walls were reinforced by towers, which serve also as a decoration. There are ornamental bells from bricks around loopholes.

Musil described, that radius of arch above the entry gate was widened, as well as whole gate was. Musil believed, that above the original narrower entry gate existed a protruding balcony, from which defenders poured resin on attackers. Musil was convicted, that this is a tradition.

(Musil 1907b, 290- 291)

History

For the first time Musil saw this site in 1898. Then Alois Musil visited Qaṣr al-Kharāna together with A. Mielich in June 1901.

After Musil, the site was visited by Jaussen and Sauvinac (Jaussen - Savinac 1922), Abbot in 1946, Gaube (1979) and Imbert (1995).

Historical notes

Musil references

Musil,A. 1902b: Kusejr Amra. Věstník České akademie císaře Františka Josefa pro vědy, slovesnost a umění 11, 325–349.

Musil, A. 1907b: Arabia Petraea I. Moab. Wien: Alfred Holder Musil,A.

Others selected references

Ulrice,S.C.1987: Qasr Kharana in the Transjordan. Durham, North Carolina: American Schools of Oriental Research.

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

Notes - Discussions

Geolocation:

19.11.12 16:31

eastern Jordan, about 60 kilometres east of Amman

Modern state: **Jordan**

GPS: **31.7288, 36.4627**

Category:

Early Islamic - Umayyad -

Archeologist: **Genequand Denis** - Genequand,D.: 2006, 8

35m x35 m (Genequand 2006, 8)

Category:

Early Islamic - Umayyad -

Archeologist: - Kennedy- Bewley 2004, 223

square 25m x 25m (Kennedy- Bewley 2004, 223)

Action:

Archeologist: **Musil Alois**

Duration: **0000-00-00 00:00:00 - 0000-00-00 00:00:00 ()**

Arrival: on 9th.of June 1901 at 16:25. Departure: on 10th of June at 1:40 (am). Musil documented the site together with Mielich (Musil 1907b, 290).

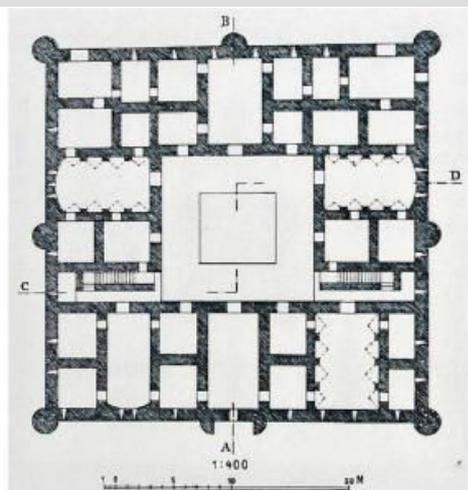
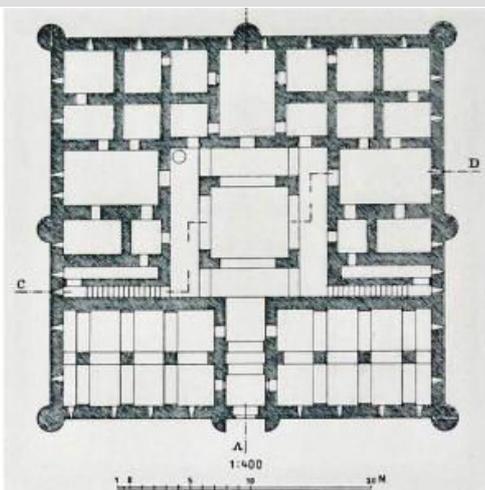
Musil's action time total:

Component:

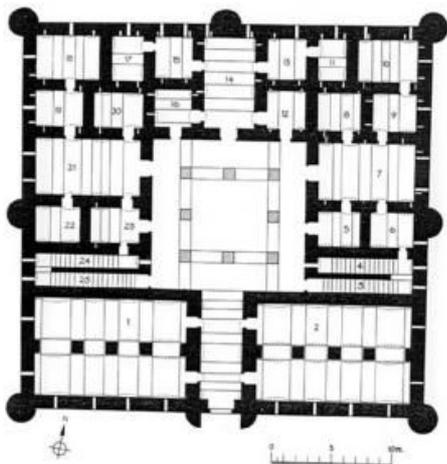
Archeologist:

-

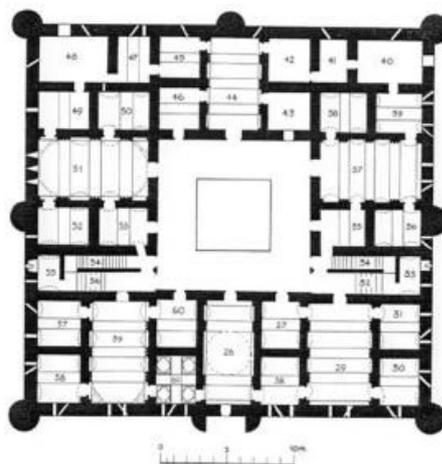
A



Qaṣr al-Kharāna
(Mausse M. - after Mause in: Musil 1907b, 292/fig.130)

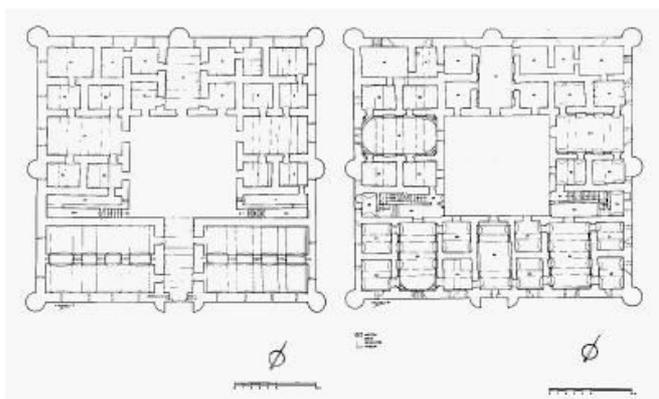


Qaṣr al-Kharāna
(Mausse M. - after Mause in: Musil 1907b, 296/fig.134)



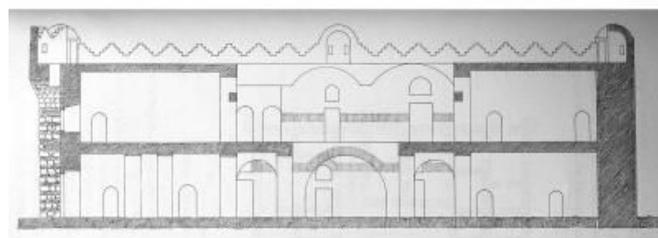
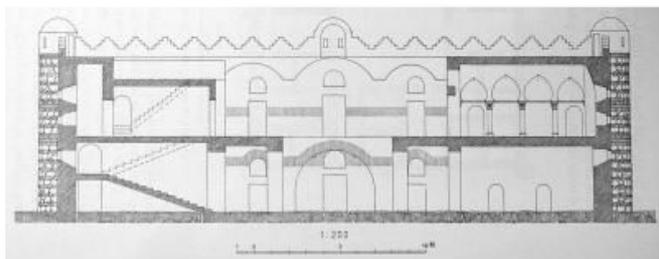
Qaṣr al-Kharāna
(Savignac,Raphaël - Jaussen, Antoine - Jaussen-Savignac 1922)

Qaṣr al-Kharāna
(Savignac,Raphaël - Jaussen, Antoine - Jaussen-Savignac 1922)



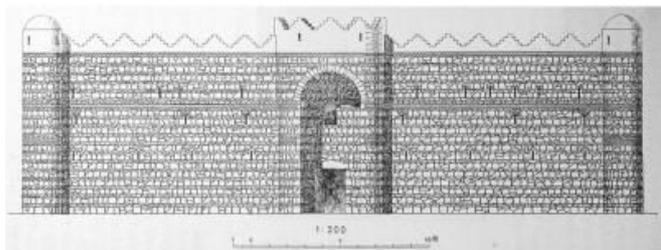
Qaṣr al-Kharāna
(Ulrice - Ulrice 1987)

B



Qaṣr al-Kharāna
(Mausse M. - after Mause in: Musil 1907b, 295/fig. 132)

Qaṣr al-Kharāna
(Mausse M. - after Mause in: Musil 1907b, 295/fig. 132)

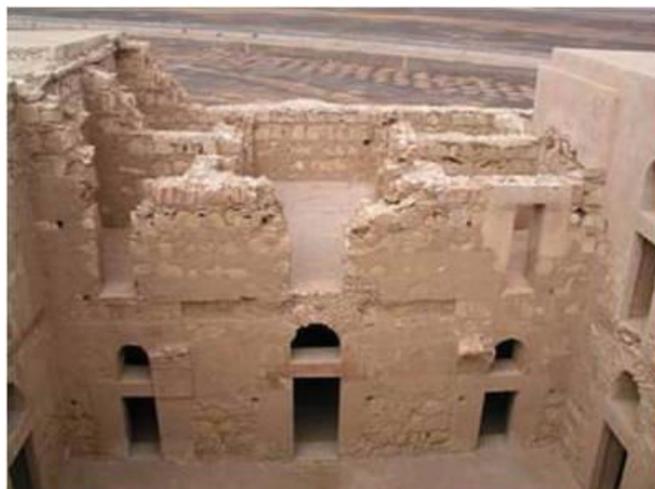


Qaṣr al-Kharāna
(Mausse M. - after Mause in: Musil 1907b, 297:fig. 135)

C



Qaṣr al-Kharāna
(Musil Alois - Musil 1907b, 292/fig. 131 - The Literary archive
of The Museum of Czech Literature, Château Staré Hrady)



Qaṣr al-Kharāna
(Veselá Martina)



Qasr al-Kharāna
(Veselá Martina)