

Hypogea2023

Proceedings of IV International Congress of Speleology in Artificial Cavities
Italy, Genoa, September 29th / October 1st



EDITORS

Stefano Saj, Carla Galeazzi

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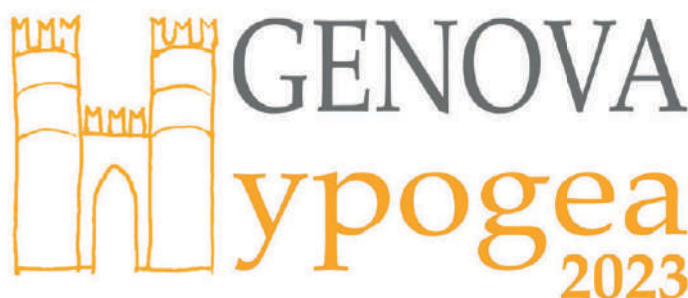


PROCEEDINGS OF
IV INTERNATIONAL CONGRESS OF
SPELEOLOGY IN ARTIFICIAL CAVITIES

HYPOGEA2023

SEPTEMBER 29th / OCTOBER 1st
GENOA, ITALY

PALAZZO DUCALE, SALA MINOR CONSIGLIO
Piazza Matteotti 9, Genova



Proceedings of IV International Congress of Speleology in Artificial Cavities

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PALAZZO DUCALE, SALA MINOR CONSIGLIO
Piazza Matteotti 9, Genova

Edited by
CENTRO STUDI SOTTERRANEI

Supplement to issue 1-2 / 2023
Opera Ipogea - *Journal of Speleology in Artificial Cavities*
Memorie della Commissione Nazionale Cavità Artificiali
www.operaipogea.it
Semestrale della Società Speleologica Italiana ETS
Autorizzazione del Tribunale di Bologna n. 7702 dell'11 Ottobre 2006

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Typography
Corigraf Srl – Viserba, Rimini, Italy

With the financial support of
Società Speleologica Italiana ETS

CONTENTS

FOREWARD: <i>Mario Parise</i>	7
CONGRESS PRESENTATION: <i>Stefano Saj, Carla Galeazzi</i>	9

SPECIAL CONTRIBUTION ABOUT GENOA HISTORY

The plague (1656-1657) in the history of the Maritime Republic of Genoa (Italy): an important testimony of efficacious measures of safety and prevention in the field of hygiene and public health and a wonderful discovery of a precious historical heritage to protect. A “blend” of speleology and history of medicine

<i>Mariano Martini, Stefano Saj, Danilo Repetto, Martino Terrone, Simon Luca Trigona, Nico Radi, Giancarlo Icardi, Francesca Ferrando</i>	13
---	----

UNDERGROUND ARCHITECTURE AND URBAN PLANNING

The tanks of the Regia Marina of Monte Erice (Trapani, Italy) on a project by the engineer Pier Luigi Nervi

<i>Roberto Grammatico, Roberto Mazzeo</i>	21
---	----

Genoa Municipality GeoPortal as tool for underground and overground analysis (Italy)

<i>Martino Terrone, Elena Ausonio, Flavio Marovic, Cristina Olivieri, Andrea Rimassa, Federico Rottura, Emilio Vertamy, Luca Volpin, Stefania Traverso</i>	29
--	----

ARTIFICIAL CAVITIES AS A POSSIBLE GEOLOGICAL RISK FACTOR

Culverted watercourses as an anthropogenic constraint of flood risk in the historical centre of Genoa (Italy)

<i>Francesco Faccini, Roberto Bixio, Andrea Mandarino, Pietro Piana, Stefano Saj, Martino Terrone, Mauro Traverso, Stefania Traverso</i>	37
--	----

Artificial cavities and geo-risk assessment: the case of “The Strade Nuove and the system of the Palazzi dei Rolli” Unesco World Heritage site in Genoa (Italy)

<i>Francesco Faccini, Andrea Ferrando, Giacomo Montanari, Pietro Piana, Stefano Saj, Martino Terrone, Stefania Traverso</i>	47
---	----

A chronology of sinkholes related to artificial cavities in the hydrographic district of the Southern Apennines of Italy

<i>Isabella Serena Liso, Carmela Vennari, Maria Assunta Fabozzi, Daniela Ruberti, Marco Vigliotti, Gennaro Capasso, Vera Corbelli, Mario Parise</i>	57
---	----

The hidden world of artificial cavities in the hydrographic district of the Southern Apennines of Italy: findings, architectural variability and risk assessment

<i>Maria Assunta Fabozzi, Isabella Serena Liso, Mario Parise, Carmela Vennari, Piernicola Lollino, Marco Vigliotti, Gennaro Capasso, Vera Corbelli, Daniela Ruberti</i>	65
---	----

On the role of geo-structural features in the development of failure mechanisms affecting man-made underground cavities

<i>Piernicola Lollino, Mario Parise</i>	75
---	----

ANCIENT UNDERGROUND HYDRAULIC WORKS

Ahmet Çelebi Qastel of Gaziantep (Turkey)

Ali Yamaç 85

Water monuments in Hittite and Neo-Hittite periods: structure, functions, and connection with the “other world”

Maria Elena Balza, Marco Capardoni, Clelia Mora 91

The ancient aqueducts of Asolo (Italy): new investigations and acquisitions

Massimiliano Zago, Daniele Davolio M., Marcello Pellegrini, Roberto Sordi, Marco Sordi 99

The Civil Forum cisterns in Pompeii (Italy)

Graziano Ferrari, Daniele De Simone, Alberta Martellone, Bruno De Nigris, Massimo Osanna 107

Aqua Augusta in Campania. New section under the Posillipo ridge (Naples, Italy)

Graziano Ferrari, Daniele De Simone 111

The water storage system of Marcigliana (Rome, Italy): an unusual representative of a Roman cistern

Andreas Schatzmann, Mara Abbate, Andrea Peresso 119

An Archaeological Survey in the Jerusalem Hills and Water Facilities for Pilgrims during the Early Roman Period

Boaz Zissu, Danny Bickson, Dvir Raviv 127

ROCK-CUT SETTLEMENT WORKS

Quarried underground hiding complexes in the Galilee, Israel: new evidence for their use in the Second-Century CE Revolt against the Romans

Yinon Shvitzel 137

Castle of Gaziantep (Turkey). Tunnels, Dwellings, Excavations and Earthquakes

Ali Yamaç 147

Underground Shelters in Cappadocia (Turkey)

Roberto Bixio, Ali Yamaç 153

From Xenophon houses to Armenian rock-cut dwellings and sacristies

Samvel M. Shahinyan, Ashkhen Shahinyan, Nerses Varderesyan, Gayane Erkoyan, Ani Badasyan 161

Intended use and dating of rock-cut dovecotes in Cappadocia (Turkey)

Andrea Bixio, Roberto Bixio, Andrea De Pascale, Ali Yamaç 171

Underground living spaces in the Chinese loess

Constantin Canavas 177

A cave settlement in Ardahan (Turkey): Harosman

Göknıl Arda 183

Discovery and documentation of the underground structures of Hagia Sophia (Istanbul, Turkey)

Ali Hakan Eğilmez, Özlem Kaya, Barkın İren, İrem Kapucuoğlu, Eylül Horoz, İrem Güzel, Tuğçe Nur İlbaş, Burcu Cavdar, Kadir Gürses 189

UNDERGROUND RELIGIOUS AND CULT STRUCTURES

St. Euphemia's cave inscriptions: ancient navigation, beliefs and devotion (Vieste, Italy)

Giuliano De Felice, Danilo Leone, Mario Mazzoli, Maria Turchiano, Giuliano Volpe 197

Use of natural caves for ritual purposes as a forerunner of the formation of architecture

Samvel M. Shahinyan, Armen Davtyan, Smbat Davtyan, Boris Gasparyan 205

Physical evidence of dedication rites in rock churches of Basilicata and Apulia (Italy). Some case studies

Sabrina Centonze 213

New considerations on the Uplistsikhe rock-cut ensemble (Georgia)

Nodar Bakhtadze 227

Artificial cavities under worship places: case studies from the province of Caserta (Italy)

Emilia Damiano, Francesco Fabozzi, Maria Assunta Fabozzi, Paolo Maria Guarino, Ivana Guidone, Erika Moliterno, Lucio Olivares, Arcangelo Pellegrino, Marco Vigliotti, Daniela Ruberti 233

The hypogeum of San Gavino a mare in Porto Torres (Sassari, Sardinia, Italy): preliminary epigraphic, glyptographic and speleological investigations

Giuseppe Piras, Pier Paolo Dore 243

The rupestrian churches in the monastery of Geghard, Armenia

Marco Carpiceci, Fabio Colonnese, Antonio Schiavo, Rachele Zanone 251

Làjos Bethlen's crypt (Chiraleș, Romania): a geological viewpoint

Tudor Tămaș, Codruța Valea, Szabolcs Attila Kövecsi, Eusebiu Szekely 261

MINING AND EXTRACTION WORKS

Exploration of the Quarries of Moldavanka District in Odesa City (Ukraine)

Igor Grek, Yevheniia Pechenehova, Nataliya Moldavska, Yuliia Pelovina, Mike Shyrokov 271

Quarrying Methods in the Cave of Zedekiah in Jerusalem at the Ancient time (Israel)

Avraham (Avi) Sasson 277

Antrona Valley's Gold Mines: from ore deposits to cultural opportunity for mining heritage (Piedmont, Italy)

Luca Palazzolo, Alex Briatico, Enrico Zanoletti, Andrea Basciu, Flavio Caffoni, Andrea Martinelli, Luca Miglierina, Elena Mileto, Antonio Moroni, Luca Nardin, Giulio Oliva, Renato Oliva, Roberto Piatti, Edoardo Rota, Marco Ulivi, Marco Venegoni, Daniele Piazza 285

Ancient mines in Valsesia (northeastern Piedmont, Italy): 25 years of historical research and speleological exploration

Paolo Testa, Riccardo Cerri 293

Multidisciplinary research on two ancient mining sites in Western Liguria (Italy)

Alberto Assi, Simone Baglietto, Marco Marchesini, Simona Mordegli, Andrea Roccatagliata, Antonio Travi, Daniele Vinai 303

NEW TECHNOLOGIES FOR ANALYZING AND DOCUMENTING THE ARTIFICIAL CAVITIES

Re-defining the relationships between the tangible and intangible heritage: the rock-cut village of Vitozza, Sorano (Tuscany, Italy)

Carmela Crescenzi, Alessandro Baldacci 309

The Pozzuoli (Naples, Italy) Flavian Amphitheatre cisterns: a basic experience in 3D modelling with LIDAR

Graziano Ferrari 319

Notes on the survey of the Catacomb of San Senatore at Albano Laziale (Rome, Italy)	
<i>Marco Carpiceci, Fabio Colonnese, Roberto Libera</i>	325
CADASTRE, CATEGORIES AND TYPOLOGIES OF ARTIFICIAL CAVITIES: UPDATES	
The Modern-era technique of the semi-rupestrian architecture in the Matera area (Italy)	
<i>Franco Dell'Aquila, Francesco Foschino, Raffaele Paolicelli</i>	335
20 Years of the project "The map of ancient underground aqueducts in Italy", and future perspectives	
<i>Paolo Madonia, Carla Galeazzi, Carlo Germani, Mario Parise</i>	343
Rock-cut dovecotes in Cappadocia (Turkey): elements in comparison	
<i>Andrea Bixio, Roberto Bixio, Andrea De Pascale, Ali Yamaç</i>	349
Underground structures inventory project of Kayseri (Turkey): a short summary	
<i>Ali Yamaç</i>	359
Cadastre of artificial cavities of Piedmont and Valle d'Aosta (Italy): new perspectives for the use and updating of data	
<i>Arianna Paschetto, Massimo Taronna, Davide Barberis, Enrico Lana, Michelangelo Chesta, Giandomenico Cella, Michele Gallina</i>	365
MILITARY AND WAR WORKS	
Artificial caves shelters in vertical tuff escarpments in Cappadocia (Turkey) and Upper Mustang (Nepal)	
<i>Igor Grek, Nataliya Moldavska, Mike Shyrokov</i>	373
The place of no return in ancient Ani (Kars, Turkey): report of the explorations	
<i>Vedat Akçayöz</i>	383
Some aspects of the wartime work underground in the Southeastern Alps (Italy) during World War I and carried out mainly on the Marmolada and Adamello mountain ranges and on the Trentino highlands (Lavarone, Pasubio, Asiago), but also on the so-called backward front such as the Cadorna Line	
<i>Lamberto Laureti</i>	391
SPECIALIZED UNDERGROUND FAUNA	
Hypogeal fauna of the military subterranean fortification Forte di Vernante Opera 11 "Tetto Ruinas" (Piedmont, Italy)	
<i>Enrico Lana, Valentina Balestra, Michelangelo Chesta, Dario Olivero</i>	401
The caves of Finalese karstic area (Finale Ligure, Liguria, North-Western Italy): a project for the coexistence between the touristic activity and the Chiroptera conservation	
<i>Anastasia Cella, Roberto Toffoli, Federico Mantovani</i>	409
AUTHORS INDEX	
Authors index	415
APPENDIX	
GUIDED TOURS "HYPOGEA2023"	417
CENTRO STUDI SOTTERRANEI FORM	421

Underground structures inventory project of Kayseri (Turkey): a short summary

Ali Yamaç¹

Abstract

The rock-cut architecture of Kayseri (Caesarea, Mazaca), which served as Cappadocia's capital throughout the Roman and Byzantine eras, has not been thoroughly studied until lately. The OBRUK Cave Research Group started working on the "Kayseri Underground Structures Inventory Project" in January 2014 to fill this gap. This project involves researching, surveying, mapping, and documenting all the underground and rock-cut structures found in Kayseri province. It is carried out in accordance with a triple protocol with the Foundation for the Protection and Promotion of the Environment and Cultural Heritage (ÇEKÜL) and Kayseri Metropolitan Municipality. Throughout the previous nine years, a total of 32 researches have been carried out in this province. As a result, 47 previously unknown Byzantine rock-cut churches, 40 underground shelters, 3 underground aqueducts, and 10 Assyrian tin mines have been explored and surveyed. In addition, within the five cliff settlement villages explored, a total of 476 different rock-cut dwellings were surveyed and inventoried for the first time. Also, within our proposal, the Koramaz Valley, which is the region's most important cultural and historical value, has been added to the tentative list of UNESCO World Heritage Sites. Several details on the ongoing project in the area were published in various articles. Our aim in this presentation is to provide a summary of the entire project and all the findings without going into excessive detail.

Keywords: Kayseri, Underground city, Cliff settlement, rock-cut church.

Introduction

Despite being the capital of Cappadocia during ancient times, no comprehensive scientific research of the rock-cut architecture in Kayseri has been carried out until now. To fill this deficiency, we, as OBRUK Cave Research Group, started to work for the "Kayseri Underground Structures Inventory Project" in January 2014. Just like in Gaziantep, this project was also carried out based on a triple protocol with ÇEKÜL Foundation and Kayseri Metropolitan Municipality, with the permission of the Ministry of Culture and Tourism, and includes the researching, surveying, mapping, and documentation of all the underground structures in this province.

This project, which covers the entire 17.000 sq km area of the Kayseri province (fig. 1) and which has been ongoing for more than nine years, has a distinctive place as one of Turkey's, and the world's most important underground structures research projects. We have explored, researched, and surveyed 47 Byzantine rock-cut churches, 40 underground cities, 10 Assyrian tin mines, three underground aqueducts, and six different cliff settlements. Given the fact that only one of these six cliff settlements -Dimitre Cave Settlements, located in Koramaz Valley- has a total of 229 different rock-dwelled structures, the magnitude of the work should be better understood.

According to our preliminary research, the number of



Fig. 1 – Map of Kayseri Province (after Google Maps - elaboration A. Yamaç).

rock-cut structures in Kayseri province exceeds the structures listed above. For example, it is known that there were four other cliff settlement villages in the unexplored northern part of the province.

Cliff Settlements

A cliff or wall settlement is a rock-dwelled village with all its structures such as dwellings, storage rooms, barns, cisterns, churches, dovecotes and defense shelters. Throughout history, in various regions of the world, people have dug all these structures into the

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rocks, and all these dwellings dug side by side merged over time to form troglodyte villages (Kempe, 1988). Cliff settlements can be of different sizes. Along with the small settlements consisting of few dwellings dug side by side and housing a small population, there are huge troglodyte villages. However, the rocks on which the relevant rock-dwelled villages are dug differ from region to region. In Anatolia alone, there are rock-cut villages dug on numerous different rocks from tuff to sandstone or limestone.

On the east of Kayseri, there are several valleys eroded by the streams flowing down to the valley from the high hills, similar to these valleys on the west of Cappadocia. In most of these valleys, which are just a few kilometers apart from each other, there are se-

veral cliff settlements. The number of rock-dwelled structures explored in these settlements differs a lot from valley to valley. For example, though there are 35 dwellings in the cliff settlement of Değirmendere Valley, there are in total 436 different rock-cut structures in four different cliff settlements of Koramaz Valley, which is the longest of all these valleys (fig. 2 and fig. 3). The distribution of the total structures in the cliff settlements explored and surveyed so far within the scope of this project is as follows:

CLIFF SETTL.	NO. OF DWELLINGS
K. Burunguz	8
Ağırnas	195
Dimitre	229
Vekse	4
Değirmendere	35
Belağası	28
Avedik	5
TOTAL	504



Fig. 2 – The relief base map of Koramaz Valley with the villages marked with red dots was prepared by E. Tok with QGIS

Rock-cut Churches

During the studies regarding rock-cut structures that have been carried out in Kayseri so far, a total of 47 different rock-cut churches were identified and surveyed (Yamaç, 2021). Before we conducted our research, only



Fig. 3 – Northwest end of Dimitre Cliff Settlements (photo B. Langford).



Fig. 4 – Ispidin Church No.1 (photo R. Straub).

three studies had been conducted regarding rock-cut churches in the entire region, and only two churches were surveyed in detail. Nilay Karakaya, described the church that we named Ispidin Rock-Cut Church No.1 (Karakaya, 2013) and Subaşı Rock-Cut Church (Karakaya, 2014) in two different articles.

So, only two of the 47 churches in the Kayseri Province have been the subject of a scientific publication, and the remaining 45 churches have not been studied and published by any scholar until now. Although a great many of these churches are single nave, small churches without any ornaments, a few others are large and some have partial frescoes. That there are no frescoes in most of the churches and that they have similar architectural plans also makes it difficult to date these churches. Neither the rock-cut churches in Koramaz Valley nor the rock-cut churches in the northern part of Kayseri Province have never been surveyed scientifically before now, and thus, it is not possible to set the ground for comparison. Even though Karakaya dates the two churches; Ispidin Church No.1 (fig. 4) and Subaşı Church to 10th – 11th and 11th – 13th centuries, respectively, these dates either cannot be considered as references for all other churches in the region or they are rather argumentative. For instance, one out of two rock-cut churches, which we photographed and surveyed at another cliff settlement in Değirmendere Valley -located nearly 3 km in the south

of Koramaz Valley- was dated by Catherine Jolivet-Levy to mid to late 8th century, despite its destroyed frescoes (Tok, Yamaç, 2015; Jolivet-Lévy, 2020).

On the other hand, among all the churches we researched, Vekse Church No.1, which has not been scientifically researched before, is notable for its meticulous architecture as well as its size (fig. 5 and fig. 6). In our opinion, examining all these rock-cut churches in and around Koramaz Valley, which have not yet been extensively researched by experts, will give us new information about the region's Christian past and its architectural history.

A list of rock-cut churches according to the villages of Kayseri Province is as follows:

VILLAGES	NO. OF CHURCHES
Subaşı	1 (monastery)
Ağırnas	15
Dimitre	7
Vekse	5
Ispidin	14
Değirmendere	3
Develi	1
Derevenk	1 (monastery)
TOTAL	47

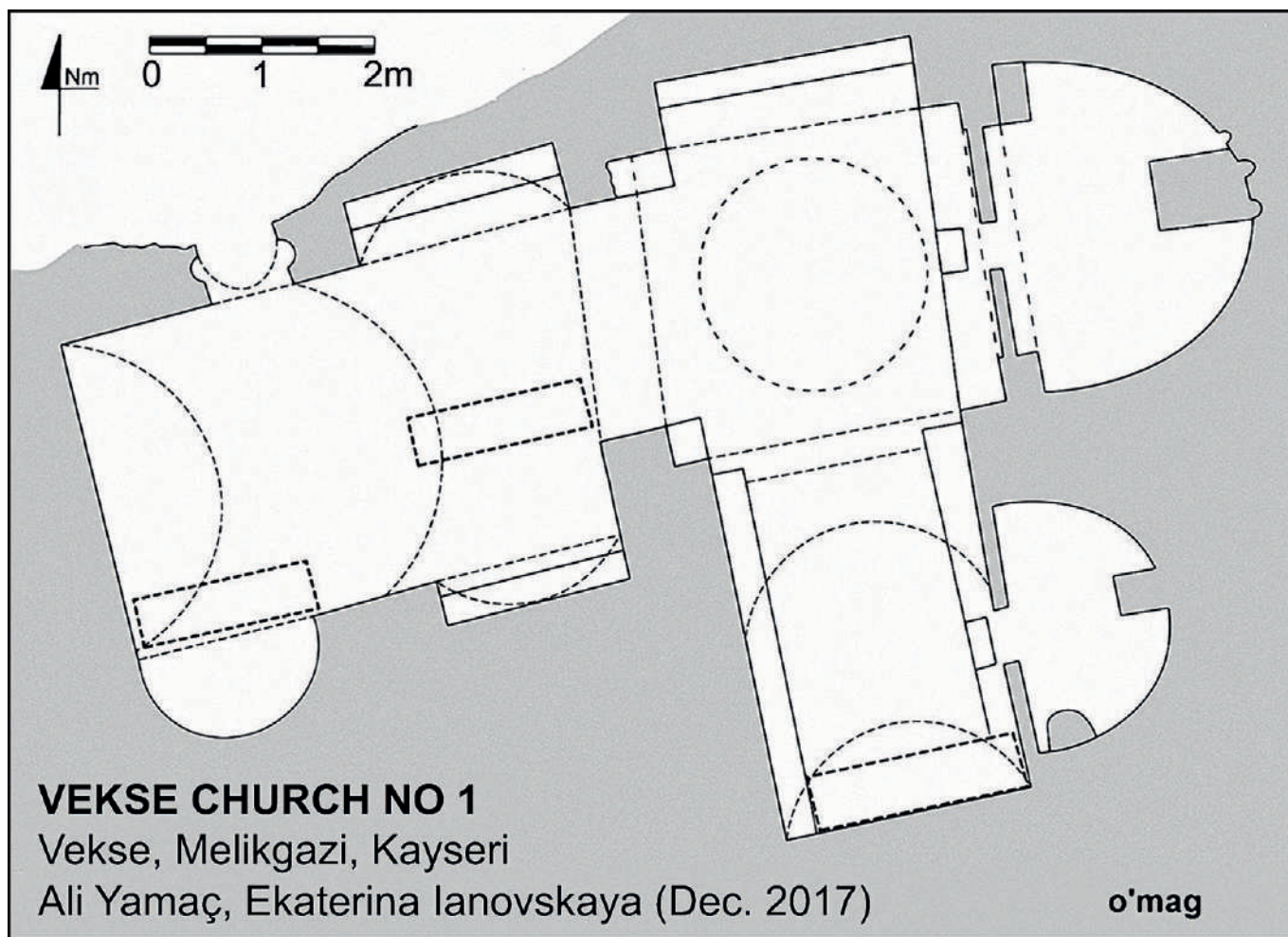


Fig. 5 – Plan of Vekse Church No. 1 (drawing A. Yamaç, E. Ianovskaya).



Fig. 6 – Vekse Church No. 1 (photo R. Straub).



Fig. 7 – Büyük Bűrüngüz Underground City (photo A. E. Keskin).

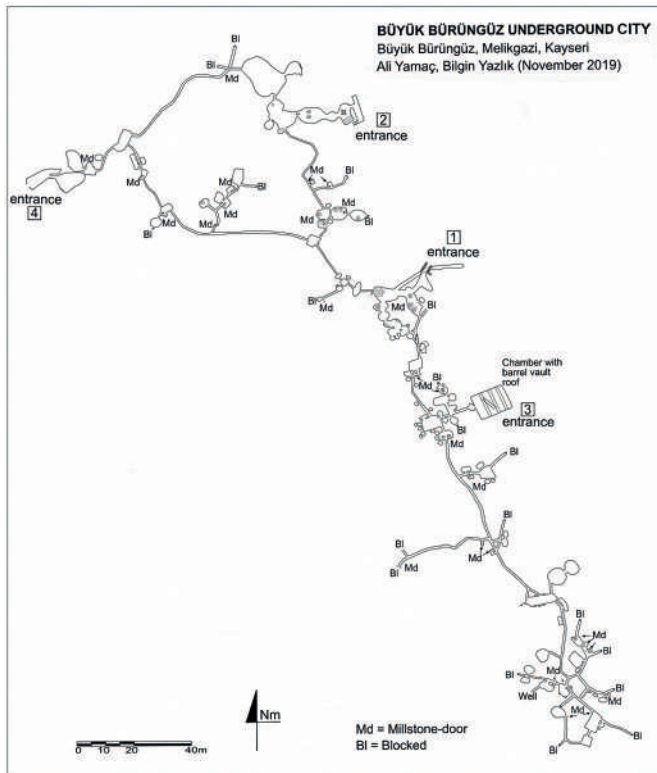


Fig. 8 – Plan of Büyük Bűrüngüz Underground City (drawing A. Yamaç and B. Yazlık).

Two monasteries explored during this project; Subaşı and Derevank were introduced by us in two different articles (Yamaç, 2021, 2022a). Although we explored, surveyed, photographed, and inventoried 47 rock-cut churches in Kayseri Province, it is possible to discover new churches in areas not yet studied.

Underground Cities

People have been using the underground for thousands of years to hide and protect themselves. Entrances of these cities dug underground were difficult to detect. Numerous rooms connected to one another by intricate tunnels filled with traps and doors that are almost impossible to open from the outside have turned these structures into defense centers indispensable against all types of attacks throughout history (Triolet, Triolet, 1996; 2013).

Though they have been used for hundreds or even thousands of years in numerous different countries, the first place that comes to mind when it comes to 'underground defense structures' is always Cappadocia. The two main reasons are the excessive number of underground cities in the region and the enormous size of some of these cities. Derinkuyu Underground City is an extreme example of these types of structures. This underground

city, which we surveyed in 2013, is excavated on five floors, with a total length of 1.880 m and a depth of 55 m; many connections are still closed (Yamaç, Tok, 2015).

On the other hand, as part of the “Kayseri Underground Structures Inventory Project”, 40 underground cities were explored and surveyed in Kayseri Province over the past nine years. In these structures, none of which has been explored before,

with a total length of 1,273 m and with 27 millstone doors, Büyük Bürüngüz Underground City was the longest underground city ever found in Kayseri (Yamaç, 2019) (fig. 7 and fig. 8). Within the scope of the same project, very small shelters with a single millstone door, one or two small chambers, and even some underground structures whose purpose of construction cannot be understood were also explored and surveyed (Yamaç, 2022b).

Conclusion

The main purpose of the “Kayseri Underground Structures Inventory Project” was to explore, survey and document all underground/rock-cut structures that are disappearing day by day. For this purpose, we have taken care to publish as much as possible. We have published six preliminary reports in the past nine years (OBRUK, 2017a, b, c, 2018, 2020, 2023). Apart from these reports, 16 articles were published in foreign academic journals, and 11 presentations were made at international symposiums. In response to all these efforts, our only wish is to transfer these structures to future generations without further destruction.

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