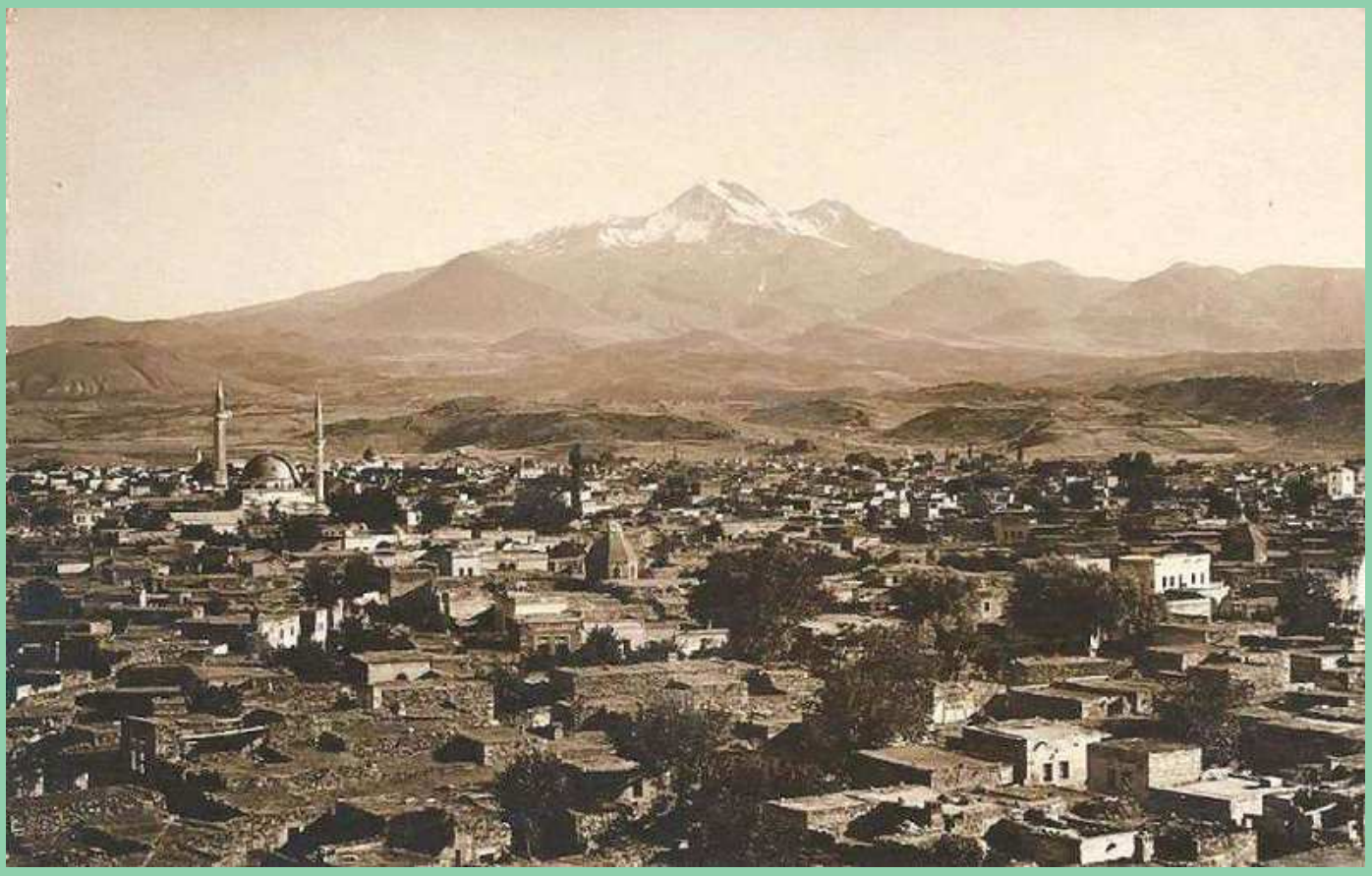
KAYSERİ
YERALTI YAPILARI ENVANTERİ
YEDİNCİ ARA RAPOR





OBRUK MAĞARA ARAŞTIRMA GRUBU

KAYSERİ
YERALTI YAPILARI ENVANTERİ
YEDİNCİ ARA RAPOR

ÇEKÜL ÇEVRE VE KÜLTÜR DEĞERLERİNİ KORUMA VE TANITMA VAKFI

omag OBRUK MAĞARA ARAŞTIRMA GRUBU

KAYSERİ BÜYÜKŞEHİR BELEDİYESİ 1869

Ön Kapak Resimleri: 1900 lerden bir Kayseri kartpostalı
Çevril Kaya Yerleşimleri, Foto: A. Yamaç
Arka Kapak Resmi: Akin Kaya Yerleşimleri, Foto: A. Yamaç

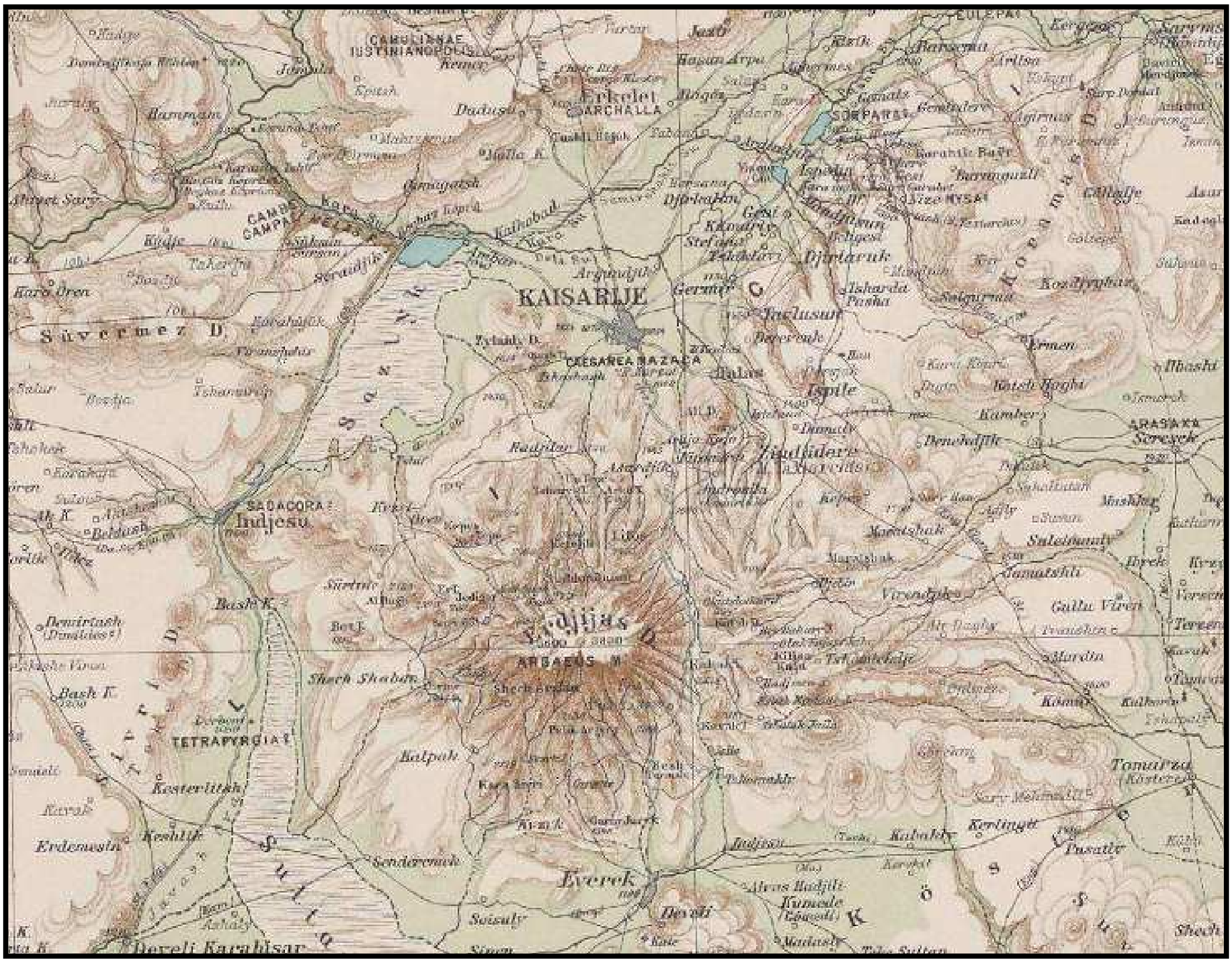
İÇİNDEKİLER

Teşekkür
Giriş
Çalışmalarımız ve Raporlarımız
Çalışılan Yerlerin Haritası

Akin Kaya Yerleşimleri
Yemliha Kaya Yerleşimleri
Çevril Kaya Yerleşimleri
Höbek Yeraltı Şehri
Boyacı Kaya Yerleşimi
Boyacı Eski Mahalle
Küllü Köyü Kaya Oyma Camii
Gürpınar Yeraltı Şehri
Sümengen Yaylası Kaya Yerleşimleri
Turanlı Kaya Oyması Yapılar
Çomaklı Yeraltı Şehri

Hisarcık - Kıranardı Kalay Madenleri

Ek 1: Protokol
Ek 2: Sunum ve Yayınlarımız



1909 tarihli Kiepert haritasında Kayseri ve civarı

TEŞEKKÜR

• Yüzlerce yıllık bir geçmişe sahip olan Kayseri Yeraltı Yapıları'nın envanterlenmesi ve gelecek kuşaklara aktarılmasına yönelik desteği dolayısıyla Kayseri Büyükşehir Belediye Başkanı Sayın Memduh Büyükkılıç'a,

• Bu projeye katkıları ve bu projeden bağımsız olarak, Türkiye'nin kültürel mirasının korunmasına yönelik inanılmaz çabaları dolayısıyla ÇEKÜL Vakfı Başkanı Sayın Prof. Metin Sözen'e,

• Bu projeyi yoktan var eden ve inanılmaz dirayetiyle geçen on yıl içinde uluslararası bir seviyeye taşıyan, yıllar boyu tüm sorunlarımıza çözüm bulması ve yol göstermesinin yanısıra hiçbir çalışmamızda bizi yalnız bırakmayan sevgili dostumuz, ÇEKÜL Vakfı Kayseri Koordinatörü Sayın Prof. Osman Özsoy'a,

yürekten teşekkürü bir borç biliriz.

GİRİŞ

OBRUK Mağara Araştırma Grubu olarak 27 Aralık 2013 tarihinde "Kayseri Yeraltı Yapıları Envanteri Projesi" için çalışmaya başladık. Kayseri Büyükşehir Belediyesi ve ÇEKÜL Vakfı ile birlikte, üçlü bir protokola bağlı olarak yürütülen bu proje, Kayseri'de bulunan tüm yeraltı yapılarını araştırmayı, ölçüp haritalamayı, fotoğraflayarak belgelemeyi içeriyordu.

Projenin başlangıcından bu yana bölgedeki tüm envanter ve tescil çalışmalarını sürekli ve düzenli olarak takip etsek bile, geçen on yıl boyunca yaptığımız çalışmalar sırasında ölçüp haritaladığımız, fotoğraflayıp belgelediğimiz her bir yeraltı yapısına karşılık, daha önce bilinmeyen birçok yeni yapının varlığını öğrenmenin şaşkınlığını sürekli olarak yaşamaktayız. "Kayseri Yeraltı Yapıları Envanteri Projesi" başladığında hiç kimse bu denli büyük ve uzun soluklu bir projeye adım atıldığını düşünmüyordu.

Bu proje bugün geldiği noktada; ilk defa tarafımızdan araştırılıp ölçülen ve haritalanıp raporlanan 13 kaya yerleşimi, 43 yeraltı şehri, 51 kaya kilisesi, 3 yeraltı su yapısı ve 10 Asur maden ocağı ile, değil Türkiye'nin, dünyanın en büyük yeraltı yapıları araştırma projelerinden birisi olarak saygın bir yere sahiptir. 'Kaya Yerleşimleri' ile kasdedilen kompleksin tüm yapıları kayalara oyulmuş bir köy olduğu ve bahsi geçen 13 kaya yerleşiminden sadece birisi olan Dimitre'nin 229 farklı yapı içerdiği göz önüne alınırsa bu çalışmanın büyüklüğü daha da iyi anlaşılacaktır.

Bugüne dek araştırdığımız kaya ve yeraltı yapılarının dökümü şu şekildedir:

KAYA KİLİSELERİ

Değirmendere Vadisi	3
Avedik Vadisi	1
Derevenk Vadisi	1 (Manastır)
Belağası Mevkii	1
Develi	1
Güney – Gesi	1
Subaşı	1 (Manastır)
Boyacı	1
Ağırnas	15
Dımitre	7
Vekse	5
Ispıdın	14

TOPLAM 51

YERALTI ŞEHİRLERİ

- Ali Dağı
- Ali Saip Paşa
- Çatalin
- Penzikli
- Kırlangıç Vadisi
- Ötedere Vadisi No 1
- Ötedere Vadisi No 2
- Belağası No 1
- Belağası No 2
- Doğanlı
- Güzelöz
- Ağırnas
- Mimar Sinan
- Mustafa Bozdemir
- Subaşı No 1
- Subaşı No 2
- Subaşı No 3
- Sosun
- Bünyan
- Dadaloğlu
- Talasıra
- Danalık
- Emiruşağı
- İncili
- Sümengen
- Kirkor Mevkii
- Kuruköprü
- Fatinler
- Kuşcağız
- Kömür
- Gülistan
- Harman Yeri
- Şahmelik Vadisi No 1
- Şahmelik Vadisi No 2
- Büyük Bürüngüz
- Küçük Bürüngüz
- Mahmutçuk
- Eski Pusatlı
- Tombak
- Pazarören
- Höbek
- Gürpınar
- Çomaklı

TOPLAM 43

KAYA YERLEŞİMLERİ

Dimitre	229 Yapı
Ağırnas	195 Yapı
Akın	78 Yapı
Çevril	53 Yapı
Değirmendere	33 Yapı
Yemliha	32 Yapı
Belağası	28 Yapı
Boyacı	18 Yapı
İncesu	14 Yapı
Dadaloğlu	9 Yapı
K. Bürüngüz	8 Yapı
Avedik	4 Yapı
Vekse	4 Yapı

Yıllar önce oldukça basit bir proje olarak başlayan ve bugün sayısız yeraltı şehrinin ve kaya yerleşiminin keşfi ile devam eden dünya çapındaki bu çalışmanın onuru, hiç kuşkusuz, Kayseri Büyükşehir Belediyesi'ne aittir. Yıllar boyu biz lere sağladıkları destek, yüzölçümü bazı ülkelerden bile daha büyük olan bu ilin her köşesini araştırmamıza imkan sağlamaya devam ediyor.

Daha önce yayımlanan altı ara raporda da belirttiğimiz gibi; bu projenin temel amacı, Kayseri ilinde bulunan ve bu bölgenin tarihsel geçmişi ve kültürü için son derece önemli olan, öte yandan, kaçak kazılarla veya artarak devam eden inşaatlarla hızla yok edilen antik kaya yerleşimlerinin ve yeraltı yapılarının daha fazla gecikmeden araştırılması, belgelenmesi, haritalanması ve kapsamlı bir envanterinin hazırlanmasıdır.

Her ne kadar günümüzde "Kapadokya" olarak bilinen bölge Ürgüp- Göreme civarı ise de, antik çağlarda Kapadokya'nın başkenti Kayseri (Caeserae) idi. Bugünkü turistik Kapadokya'nın 70 km doğusunda bulunan Kayseri günümüzden 10 milyon yıl önce başlayan yoğun volkanik aktiviteden aynen komşusu gibi etkilenmişti. Bu volkanik faaliyet zaman zaman durmuş, ardından tekrar başlamış ve milyonlarca yıl devam etmişti. Tarihsel çağlara dek süren bu püskürmeler sonucunda sadece Kayseri civarında sayıları 70 civarında olan küçük – büyük birçok yanardağ, bölgeye kalınlığı yer yer 200 metreye ulaşan tüf ve ignimbrit püskürtmüşlerdi.

Ürgüp ve Göreme'de olduğu gibi, antik Caeserae'da da bu yumuşak volkanik kayaçlar yörede yaşayan insanlar tarafından kazılmış, kayaların içine meskenler, kiliseler ve korunma amaçlı savunma yapıları inşa edilmişti.

Kapadokya'nın daha çok bilinen turistik yörelerinden farklı olarak, Kayseri'nin kaya yapıları ve yeraltı şehirleri daha önce araştırılmamıştır. Halbuki, bu bölgede bulunan yeraltı yerleşimlerinin büyük bir kısmı mimari açıdan Kapadokya'nın diğer kısımlarıyla rekabet edebilecek kalite ve güzelliktedir.

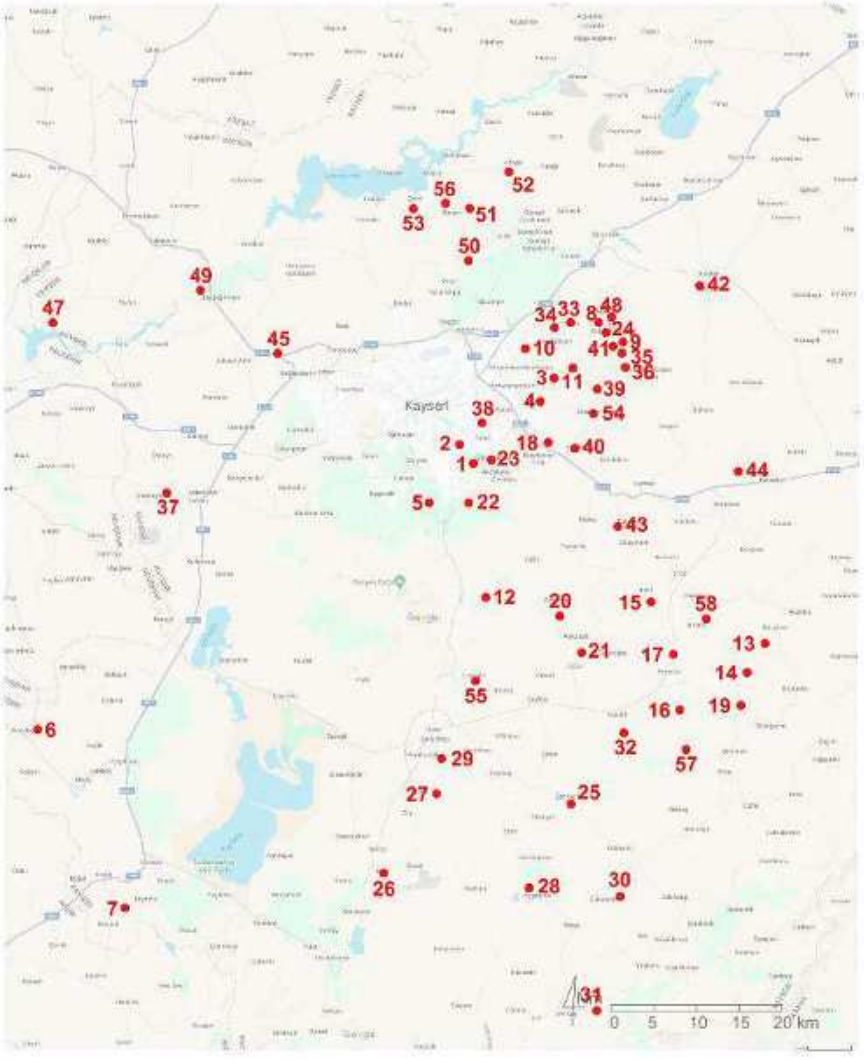
Kiliseleri hariç tutarsak, kayalara oyulmuş tüm bu yapıların tarihini tespit edebilmemiz mümkün değildir. Yeraltı şehirlerinin MS. 7 ila 11. yüzyıllar arasında kazıldığı düşünülmekte ise de, bu tarihler arkeolojik olarak henüz ispatlanmış değildir. Öte yandan; mesken, ahır, ağıl, depo gibi kaya oyma yapılar geçen yüzyıllar boyunca kesintisiz olarak kullanılmaları dolayısıyla hiçbir şekilde tarihlenememektedir.

Bu çalışmanın; raporlarımızda bahsi geçen tüm bu yapılar içinde henüz tescil edilmemişlerin de tescil edilerek daha kapsamlı bir şekilde korunması, önemli yapılara farklı kullanım amaçları sağlanarak değerlendirilmeleri ve bu şekilde gelecek kuşaklara kazandırılmaları için bir başlangıç olmasını diliyoruz.

Çalışmalarımız ve Raporlarımız

27-29 Aralık 2013	1. Araştırma	
25-28 Ocak 2014	2. Araştırma	
27 Şubat-2 Mart 2014	3. Araştırma	
3-6 Nisan 2014	4. Araştırma	
15-19 Mayıs 2014	5. Araştırma	
12-15 Haziran 2014	6. Araştırma	1. Ara Rapor
24-27 Ekim 2014	7. Araştırma	
7-9 Kasım 2014	8. Araştırma	
4-7 Nisan 2015	9. Araştırma	
3-6 Temmuz 2015	10. Araştırma	2. Ara Rapor
5-8 Aralık 2015	11. Araştırma	
1-4 Nisan 2016	12. Araştırma	
8-12 Ekim 2016	13. Araştırma	
6-10 Ocak 2017	14. Araştırma	
15-19 Şubat 2017	15. Araştırma	
13-16 Nisan 2017	16. Araştırma	
12-15 Mayıs 2017	17. Araştırma	3. Ara Rapor
10-11 Temmuz 2017	18. Araştırma	
12-16 Ağustos 2017	19. Araştırma	
25-29 Ekim 2017	20. Araştırma	
6-11 Aralık 2017	21. Araştırma	4. Ara Rapor
8-13 Nisan 2017	22. Araştırma	
28 Ağus-7 Eylül 2017	23. Araştırma	
20-23 Aralık 2018	24. Araştırma	
14-17 Şubat 2019	25. Araştırma	5. Ara Rapor
17-21 Kasım 2019	26. Araştırma	
22-28 Haziran 2020	27. Araştırma	
4-7 Aralık 2020	28. Araştırma	
21-25 Nisan 2021	29. Araştırma	
19-22 Ocak 2022	30. Araştırma	
24-29 Mayıs 2022	31. Araştırma	
21-27 Kasım 2022	32. Araştırma	6. Ara Rapor
31 May-6 Haz 2023	33. Araştırma	
27 Kas-2 Aralık 2023	34. Araştırma	
5-9 Şubat 2024	35. Araştırma	
12-17 Haziran 2024	36. Araştırma	

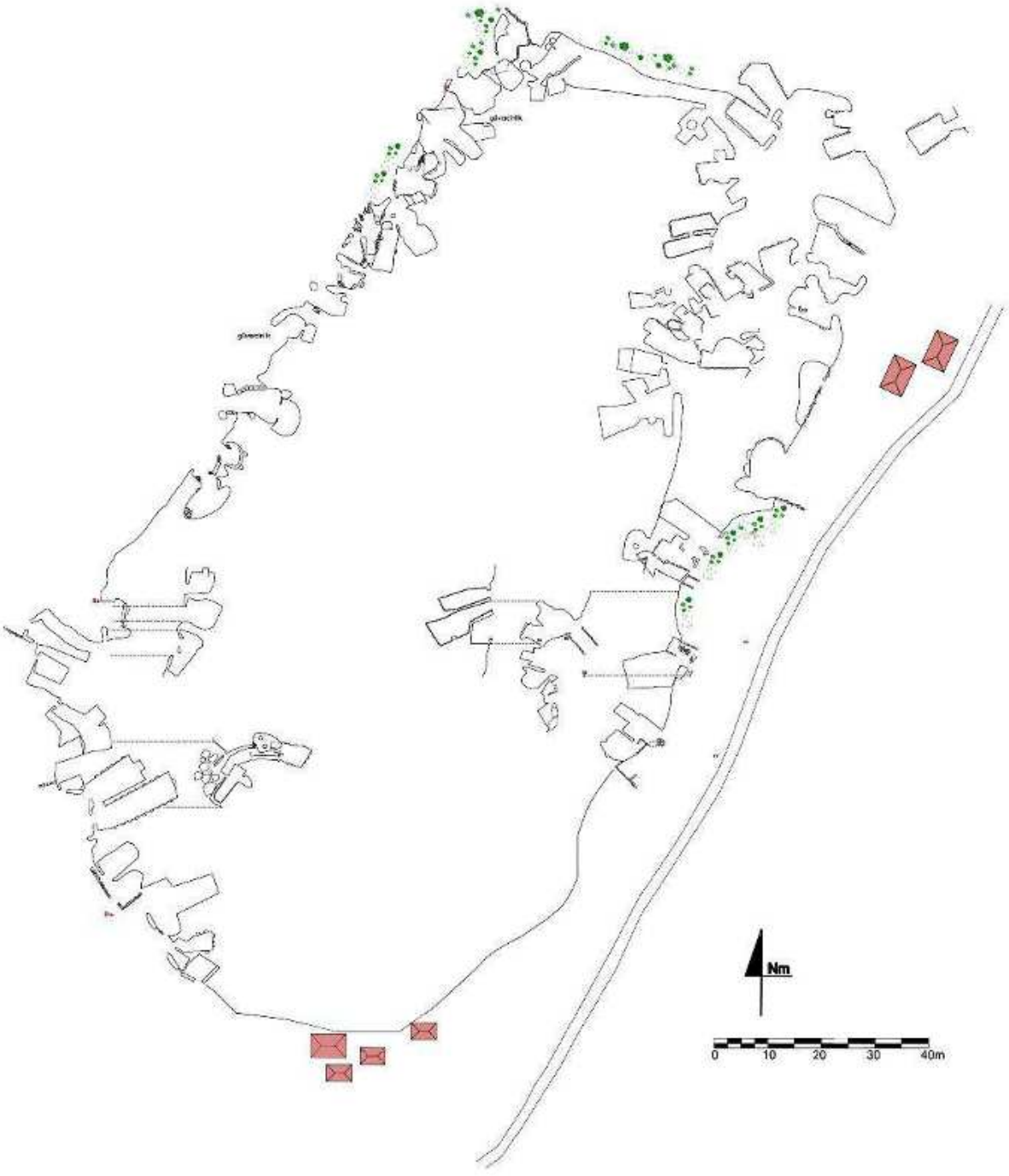
HAZİRAN 2024 İTİBARIYLA ÇALIŞILAN KAYA YAPILARI VE YERALTI ŞEHİRLERİ



1. Ali Dağı Yeraltı Şehri
2. Ali Saip Paşa Yeraltı Şehri
3. Gesi / Değirmendere Vadisi kaya yerleşimleri, Çatalin ve Penzikli yeraltı şehirleri
4. Belağası kaya yerleşimi, No 1 ve No 2 yeraltı şehirleri, Ötedere Vadisi No 1 ve No 2 yeraltı şehirleri
5. Kırlangıç Vadisi Yeraltı Şehri
6. Güzelöz Yeraltı Şehri
7. Doğanlı Yeraltı Şehri
8. Ağırnas, Mimar Sinan ve Mustafa Bozdemir yeraltı şehirleri, Akbin Vadisi kaya yerleşimleri
9. Subaşı Yeraltı Şehri
10. Demokrasi kaya yerleşimleri
11. Talasıra Yeraltı Şehri
12. Danalık Yeraltı Şehri
13. Dadaloğlu kaya yerleşimleri
14. Emiruşağı Yeraltı Şehri
15. İncili Yeraltı Şehri
16. Sümengen Yeraltı Şehri
17. Kirkor Mevkii Yeraltı Şehri
18. Kuruköprü Yeraltı Şehri
19. Fatinler Yeraltı Şehri
20. Kuşcağız Yeraltı Şehri
21. Kömür Yeraltı Şehri
22. Gülistan Yeraltı Şehri
23. Harman Yeri Yeraltı Şehri
24. Subaşı kaya kilisesi
25. Şahmelik Vadisi
26. Gazi Sarnıç
27. Tombak Tepe kaya yerleşimleri
28. Ayşepınar kaya mezarları
29. Öksenek kaya kilisesi
30. Mahmutçuk Yeraltı Şehri
31. Yeniköy kaya mezarları
32. Eski Pusatlı Yeraltı Şehri
33. Vekse kaya yerleşimleri ve kiliseler
34. Dimitre kaya yerleşimleri ve kiliseler
35. K. Bürüngüz kaya yerleşimleri
36. B. Bürüngüz Yeraltı Şehri
37. İncesu kaya yerleşimleri
38. Talas Amerikan Koleji
39. Derindere Mevkii güvercinlikler
40. Derevank Manastırı
41. Subaşı Yeraltı Şehri No 2 ve No 3
42. Bünyan Yeraltı Şehri
43. Sosun Yeraltı Şehri
44. Pazarören Yeraltı Şehri
45. Boğazköprü kaya yerleşimleri
46. Dölek kaya yerleşimleri
47. Bayramhacı kaya yerleşimleri
48. Halıcıoğlu Yeraltı Şehri
49. Yemliha kaya yerleşimleri
50. Akın kaya yerleşimleri
51. Boyacı kaya yerleşimi
52. Höbek Yeraltı Şehri
53. Çevril kaya yerleşimleri
54. Gürpınar Yeraltı Şehri
55. Çomaklı Yeraltı Şehri
56. Boyacı Eski Mahalle kaya yerleşimleri
57. Sümengen kaya yerleşimleri
58. Turanlı kaya yerleşimleri

AKİN KAYA YERLEŞİMLERİ
Akin Köyü - Kocasinan - Kayseri

Çizim: K. Kendirciler, F. Varol, A. Yamaç (Şubat - Mayıs 2024)



AKİN KAYA YERLEŞİMLERİ

Akin Kaya Yerleşimleri, Kayseri / Kocasinan ilçesinin Akin Köyü'nde yer almaktadır. Oldukça eski bir yerleşim yeri olmasına rağmen köy hakkında herhangi bir tarihi kaynak bulunmamaktadır. Sefure Deveci Çetinkaya, Kayseri Ansiklopedisi'nde köyün eski adının 'Karabekirli' olduğunu ve buraya yerleşen 'Karabekirli' adlı Türkmen aşiretinden dolayı bu ismi aldığını yazmaktadır (Çetinkaya, 2015). Ancak, Mehmet İnbaşı'nın 1500 ve 1520 tarihli tahrir defterlerindeki kayıtlardan aktardığına göre köyün önceki adı "Ağcain" idi (İnbaşı, 1993).

Akin Köyü, ortalama 60-70 m yüksekliğinde, yaklaşık 200 x 100 m ölçülerinde oval bir tepenin doğu ve güney yamaçlarına kurulmuştur. Yamaçlardaki Osmanlı döneminden kalma bu eski taş evler günümüzde tamamen terk edilmiş ve yerleşim ovaya kaymıştır.

Tepenin yalnızca doğu ve güney yamaçlarında yoğunlaşan bu tarihi taş evlerin aksine, kayaya oyulmuş bir kaya yerleşimi tüm tepeyi çevrelemektedir. Toplam 56 farklı kaya oyması yapının yer aldığı Akin Kaya Yerleşimleri, bölgedeki Dimitre, Ağırnas gibi kayalık yerleşim yerlerinden daha küçüktür. Ancak mütevazı boyutuna rağmen önemlidir, çünkü Kapadokya'da bir tepeyi çevreleyen yegane yuvarlak kaya yerleşimidir.

1500 tarihli tahrir defterlerine göre köyde 13 hane mevcuttur. 1520 de ise bu sayı 16 olmuştur. Bahsi geçen bu meskenlerin kayalara kazılan yapılar mı, yoksa yüzeydeki taş evler mi olduğuna dair bir kayıt yoktur.

Bu kaya kompleksinin en büyük yapıları tepenin doğusunda yola bakan konutlardır. Günümüzde tamamı ahır ya da depo olarak kullanılan bu yapılar, muhtemelen orijinal yapılarına göre değiştirilmiş ve yeniden tasarlanmışlardır. Tepenin kuzeyindeki yapıların ilki ve en büyüğü köylüler tarafından 'kilise' olarak adlandırılmıştır. Yapının tahribatı ve kaya çökmesi o kadar büyüktür ki kilise olup olmadığını anlamak mümkün değildir. Ancak, beşik tonozlu tavanın görünen kısmı özenli ve kaliteli bir işçiliğe sahiptir.

Yapı kompleksinin batı kısmı neredeyse tamamen küçük konut, depo ve ahırlardan oluşmaktadır. Zaman içinde pek çok kez değişikliğe uğradığı belli olan bu yapılar muhtemelen uzun süredir kullanılmamaktadır.

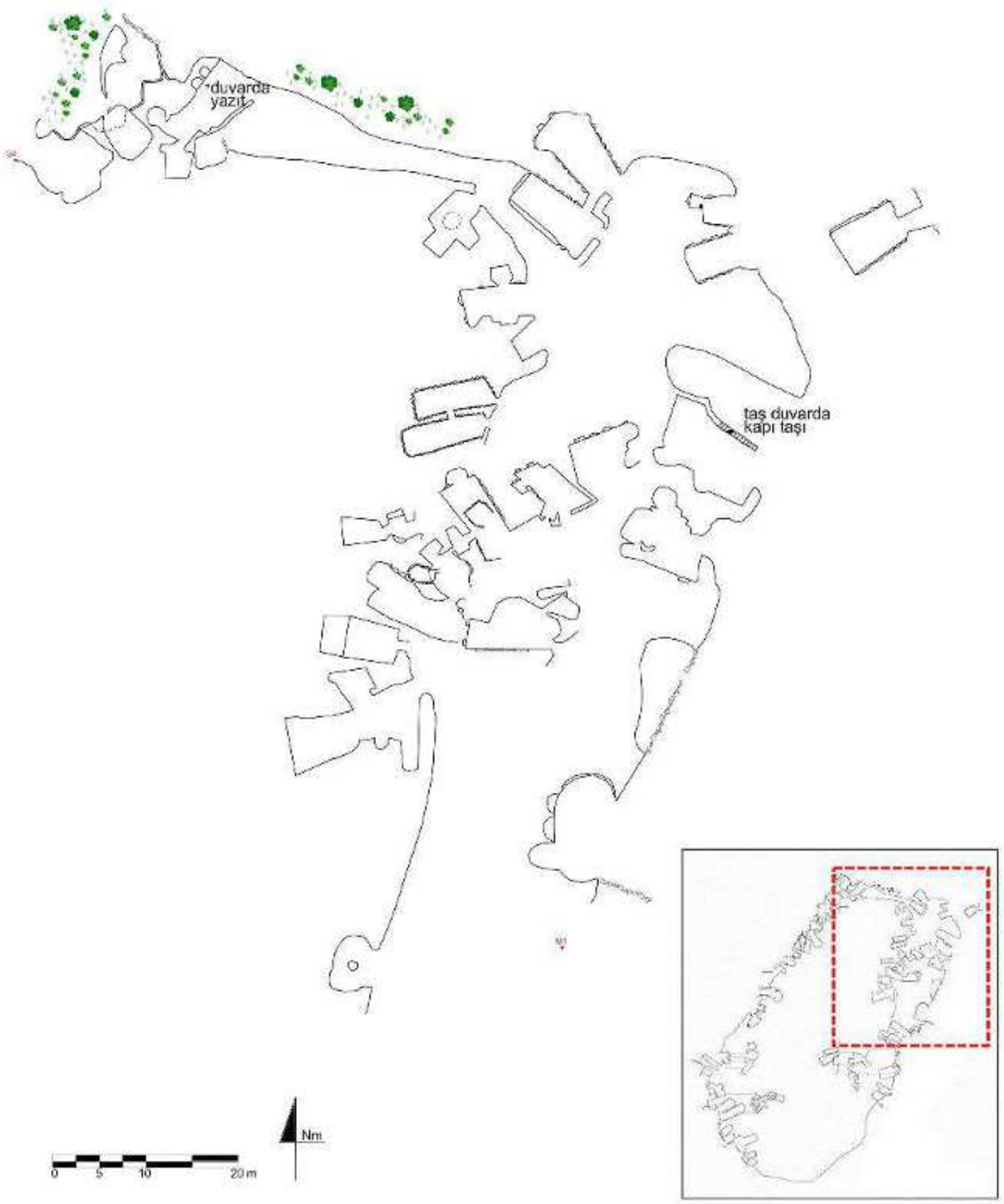
Yapı kompleksinin güneybatı kısmı tümüyle güvercinliktir ve bu güvercinliklerin - en azından bazılarının - daha önceki yapılardan devşirildiği açıktır. Ancak bu bölgedeki yapılar yoğun kaya çöküşünün izlerini taşımaktadır. Batı kısmında, evler ve ahırlar arasından geçen kısa bir tünelle ulaşılan iki küçük sığınak bulunmaktadır. Girişlerindeki iki taş kapı bu yerleşimin en az bin yıllık olduğunun ispatıdır.

Çetinkaya, S. (2015). Kayseri'de Adı Değişen Yerleşim Yerleri ve Adlarının Kaynakları, Kayseri Ansiklopedisi (Cilt 4, sy. 114). Kayseri

Inbaşı, M. (1993). 16. Yüzyıl Başlarında Kayseri, Kayseri.

AKİN KAYA YERLEŞİMLERİ NO 1
Akin Köyü - Kocasinan - Kayseri

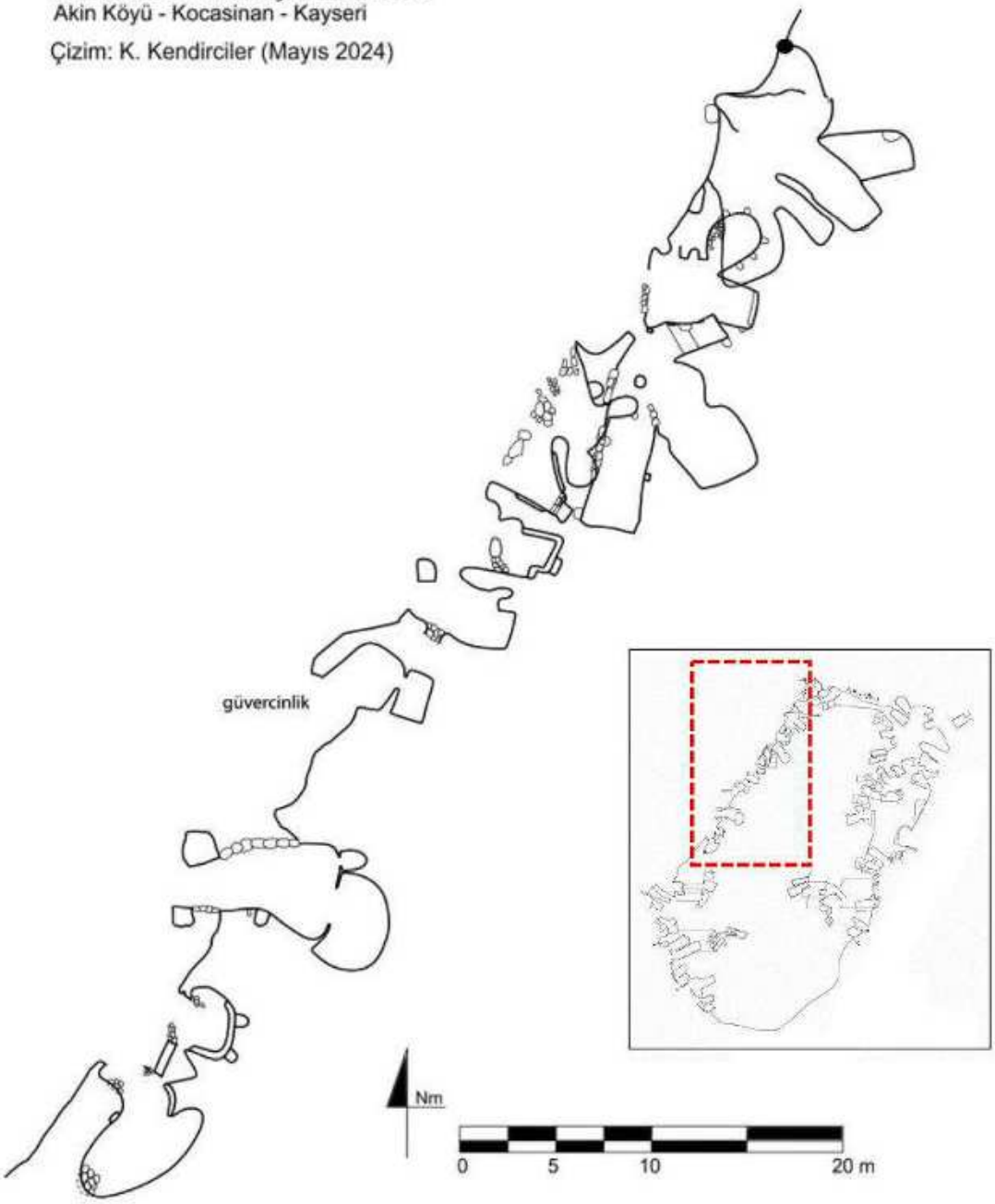
Çizim: F. Varol (Şubat 2024)



AKİN KAYA YERLEŞİMLERİ NO 2

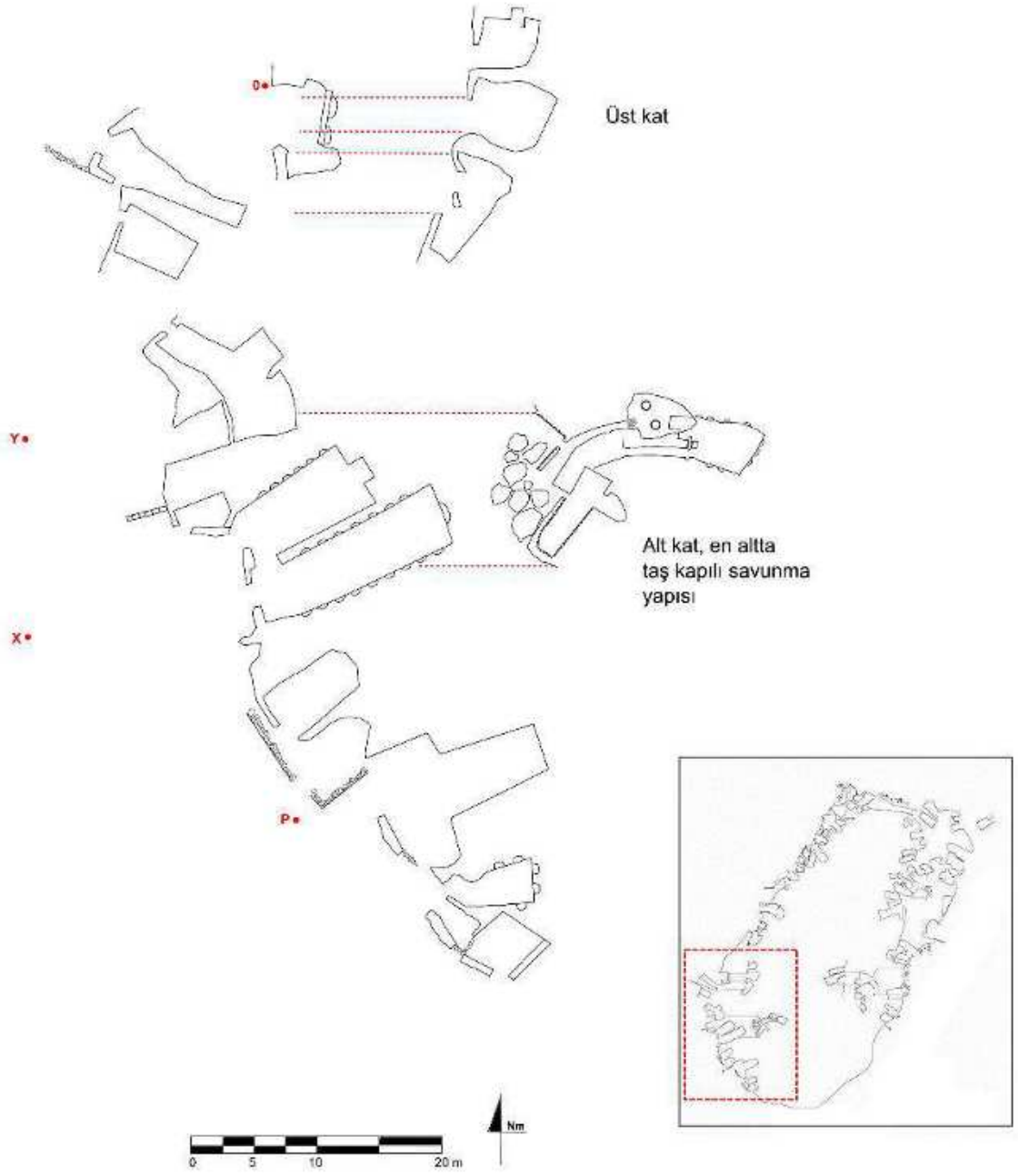
Akin Köyü - Kocasinan - Kayseri

Çizim: K. Kendirciler (Mayıs 2024)



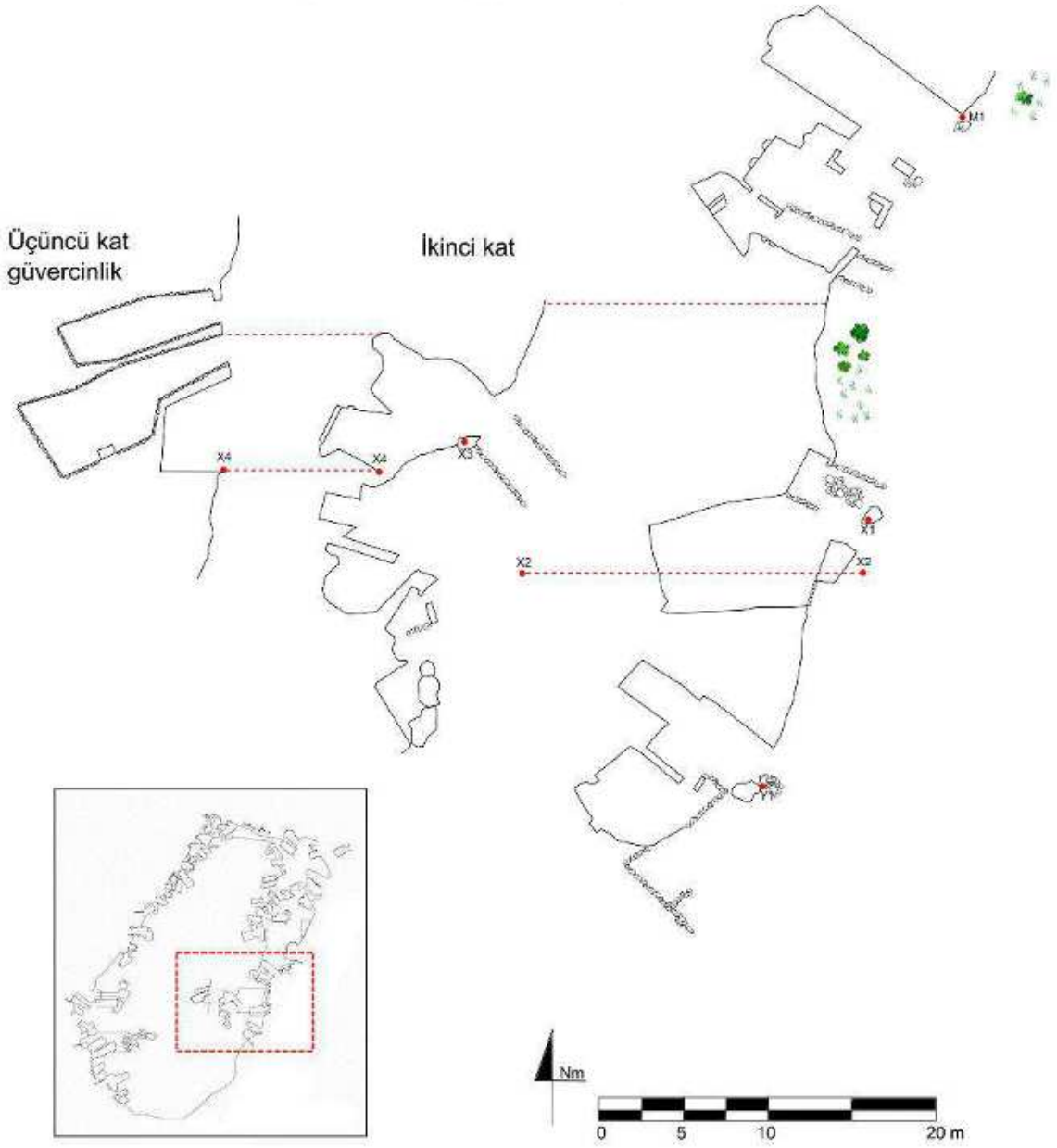
AKİN KAYA YERLEŞİMLERİ NO 3
Akin Köyü - Kocasinan - Kayseri

Çizim: A. Yamaç (Nisan 2024)



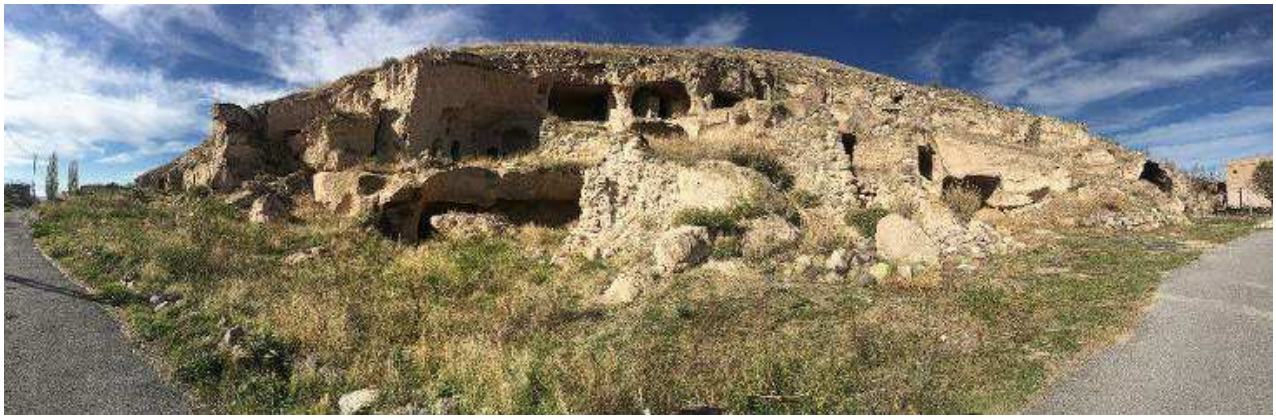
AKİN KAYA YERLEŞİMLERİ NO 4
Akin Köyü - Kocasinan - Kayseri

Çizim: A. Yamaç (Nisan 2024)

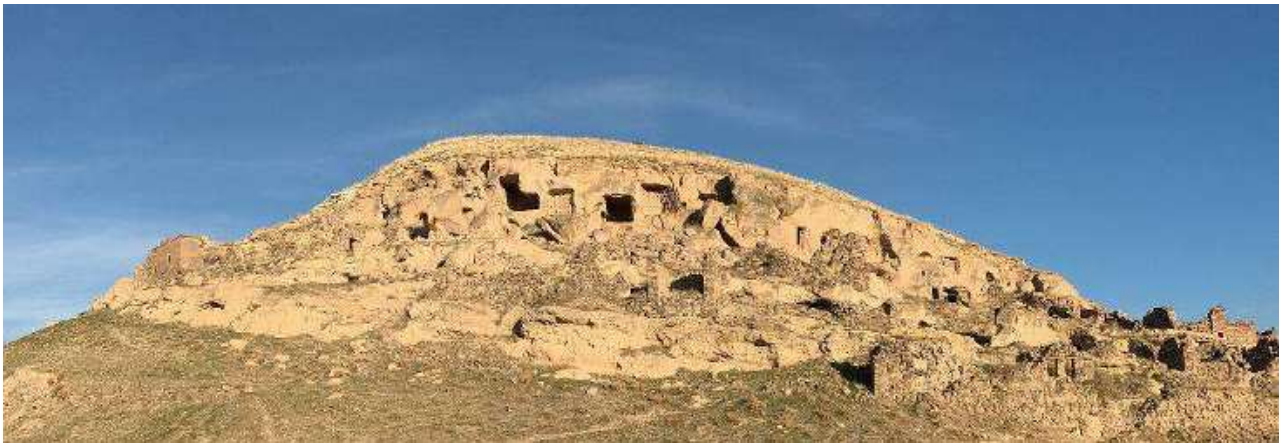




Akin Kaya Yerleşimleri'nin yer aldığı tepenin Google Earth görüntüsü



Akin Kaya Yerleşimleri'nin güneydoğu kısmı



Akin Kaya Yerleşimleri'nin güneybatı segmenti, bir kısmı yıkılmış güvercinlikler görülmekte



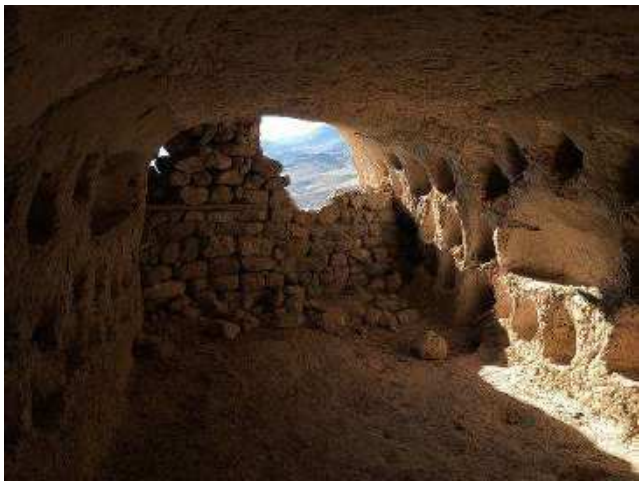
Akin Kaya Yerleşimleri'nin kuzeybatı kısmında meskenler



Akin Kaya Yerleşimleri'nin batı kısmında bir taş kapı
ile savunulan küçük bir sığınak



Kuzey kısımda kilise olduğu düşünülen yapı kalıntısı

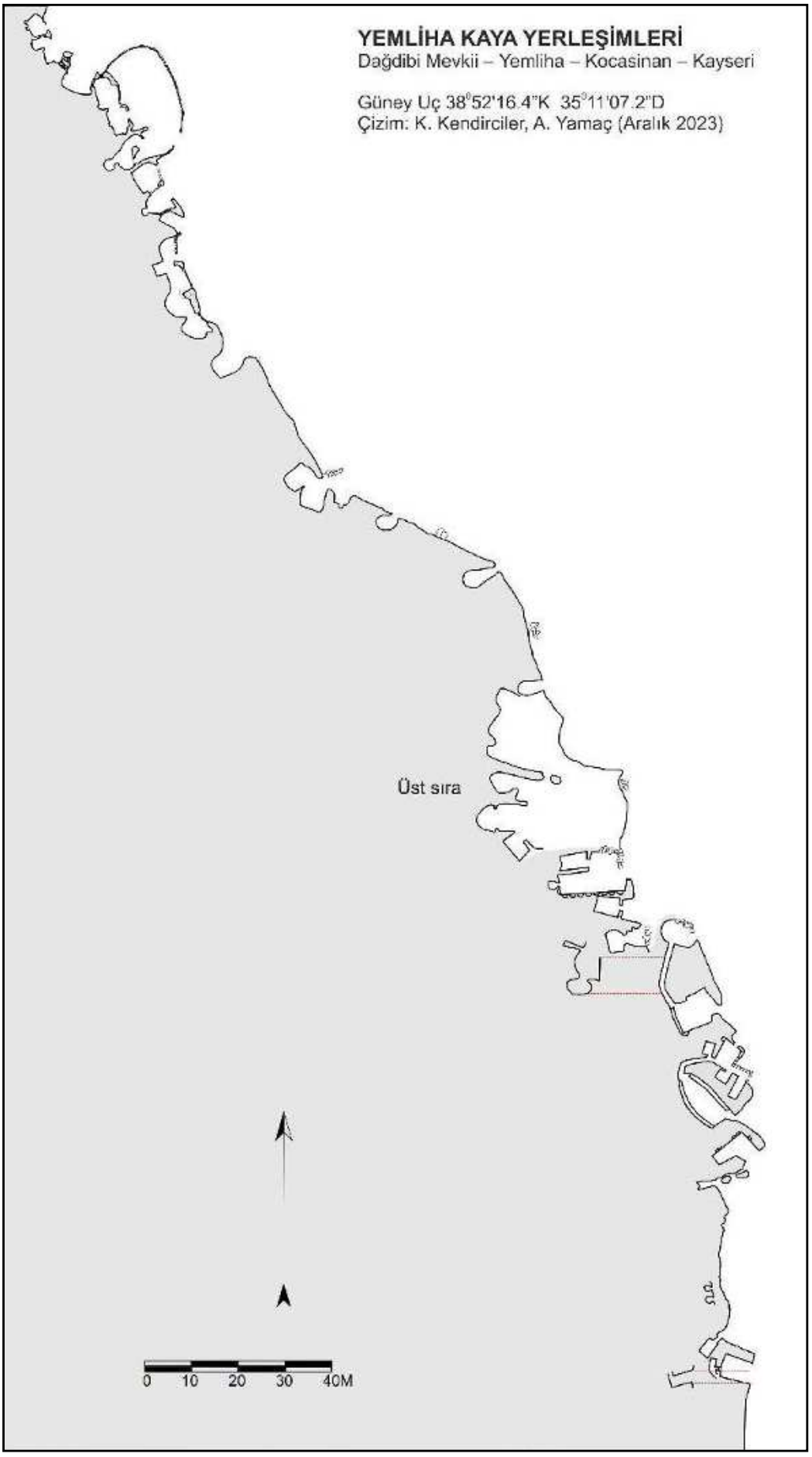
Akin Kaya Yerleşimleri'nin batı kısmında iki farklı yapı




Akin Kaya Yerleşimleri'nin güneybatısında güvercinlikler




Batı kısmında kısmen çökmüş yerleşimler


YEMLİHA KAYA YERLEŞİMLERİ
Dağdibi Mevkii – Yemliha – Kocasinan – Kayseri
Güney Uç 38°52'16.4"K 35°11'07.2"D
Çizim: K. Kendirciler, A. Yamaç (Aralık 2023)
Üst sıra
0 10 20 30 40M

YEMLİHA KAYA YERLEŞİMLERİ

Kocasinan ilçesine bağlı Yemliha Köyü'nün 8 km batısında bulunan ve Dağdibi Mevkii olarak isimlendirilen kayalık sırtta, yaklaşık 350 m aks uzunluğunda bir hat üzerinde kayalara kazılmış 32 farklı yapı mevcuttur.

Bu kompleksin kuzey kısmındaki bazı yapılar günümüzde besi yeri olarak kullanılmaktadır. İncelediğimiz yapıların birkaçının orijinal amacının da bu olduğu belirgin olsa da (bkz. fotoğraf) kompleksin bütünü göz önüne alındığında küçük bir köy yerleşimi olarak planlandığı düşünülebilir.

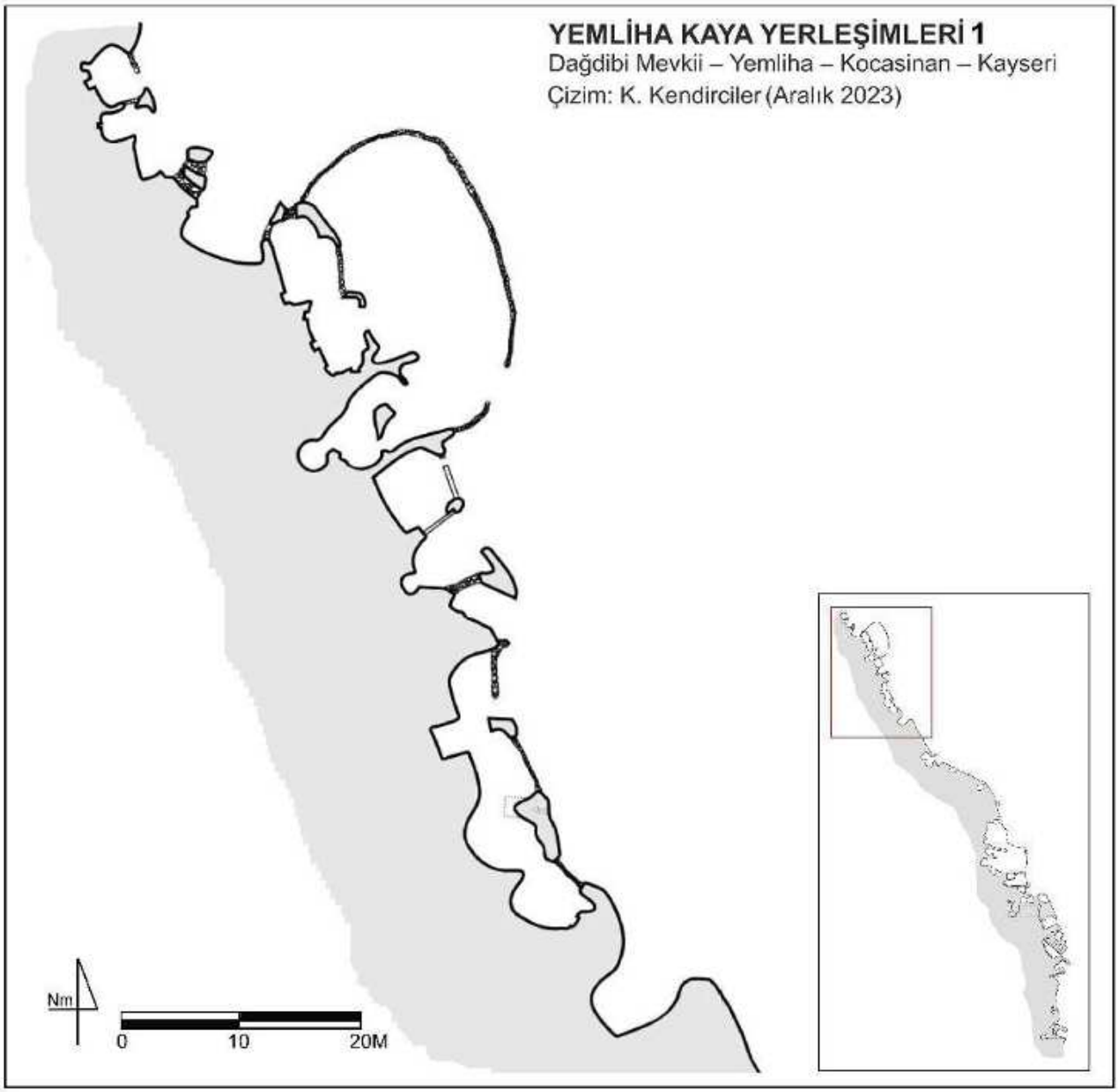
Güney kısımda mesken olarak inşa edildiği belirgin olan birkaç yapı mevcuttur. Özellikle de iki katta dört farklı odası olan ve içeriden merdivenli bir yapı bu düşünceyi destekler mahiyettedir. Yine bu kısımda evlerin birkaçı birbirlerine tünellerle bağlanmıştır. En uzunu 9 m olan bu tünellerde herhangi bir kapı taşı bulunmadığı gibi operasyon odası da yoktur. Bu da tünellerin savunma amaçlı olmadığını göstermektedir.

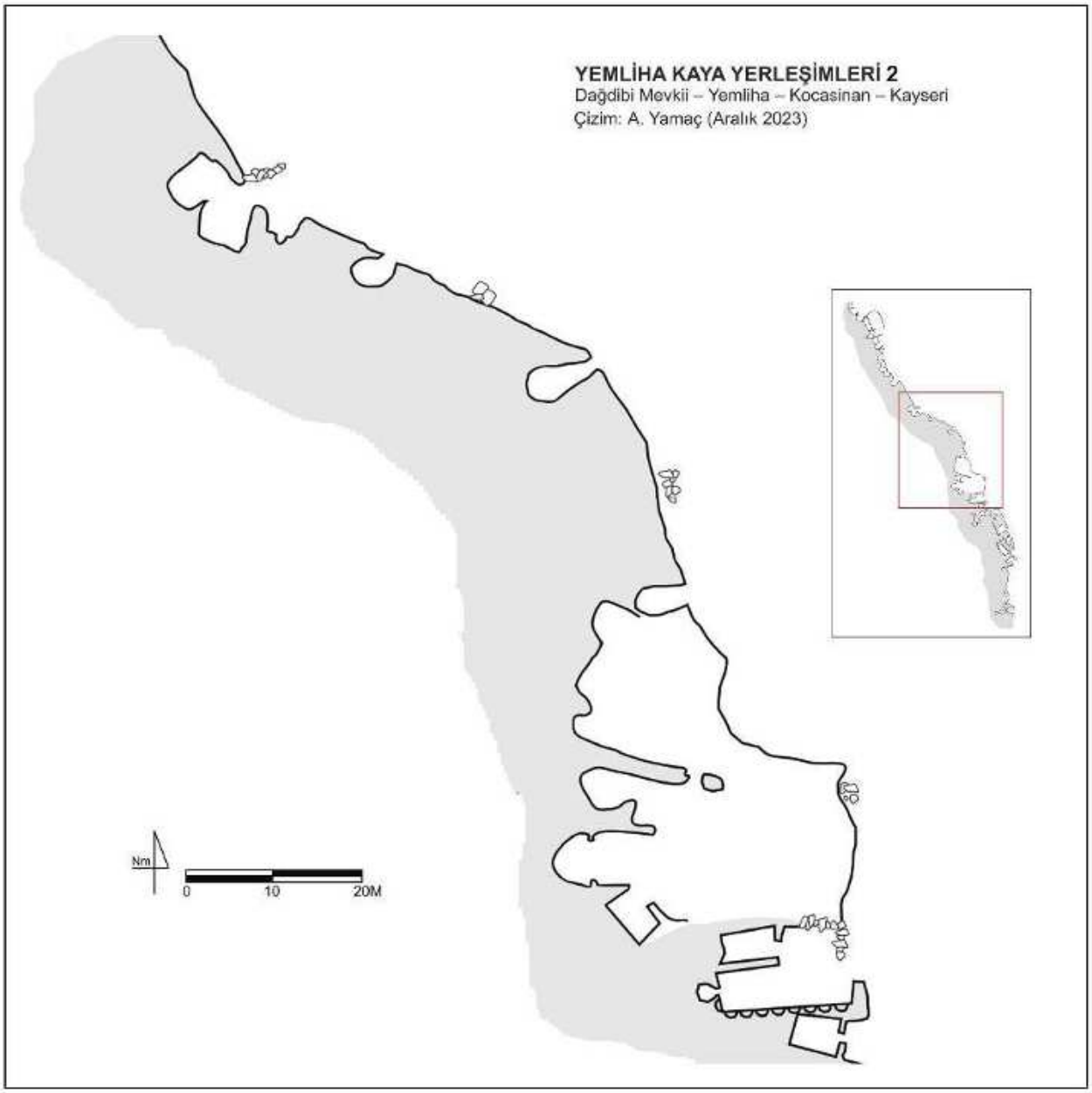
Yapıların çoğu basit kaya oyması işçiliğine sahip ise de kompleksin orta kısmında yer alan bir yapının, bölgede fazla rastlanmayan ilginç kapısı, beşik tonozlu tavanı ve süslemeli duvar işçiliği ile kilise olma olasılığı mevcuttur (bkz. fotoğraf). Zaman içinde büyük tahribata ve tadilata uğrayan bu yapıda bugün apsis benzeri bir mimari öğe mevcut değildir.

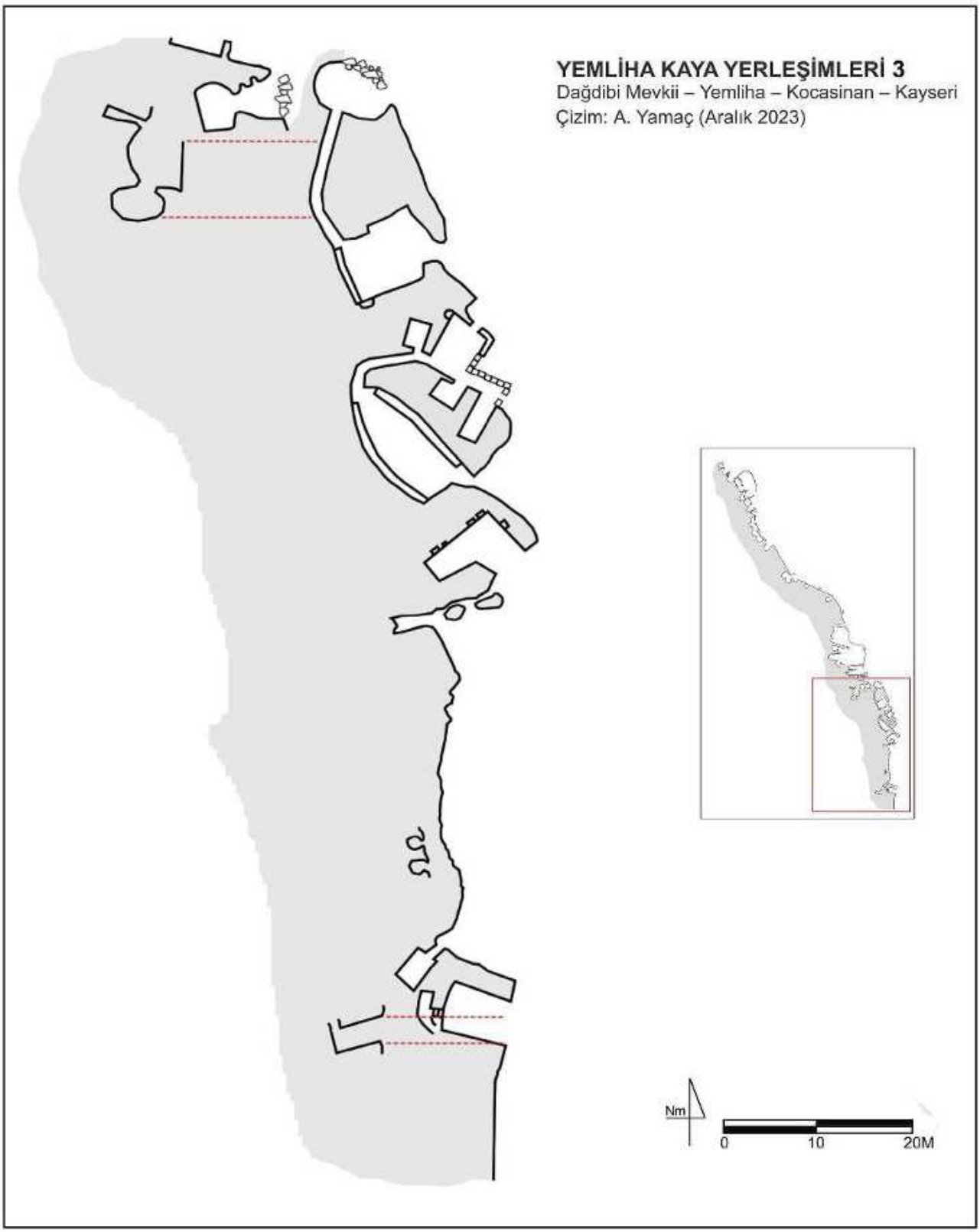
Yemliha Dağdibi Kaya Yerleşimleri, Kayseri Koruma Kurulu'nun 20.10.2022 tarihli ve 6449 nolu kararı ile 1. Derece Arkeolojik Sit ilan edilmiş olmasına karşın her türlü tahribata açık ve korumasız bir durumdadır.



Yemliha Kaya Yerleşimleri'nin anayoldan görüntüsü


YEMLİHA KAYA YERLEŞİMLERİ 1
Dağdibi Mevkii – Yemliha – Kocasinan – Kayseri
Çizim: K. Kendirciler (Aralık 2023)
Nm
0
10
20M


YEMLİHA KAYA YERLEŞİMLERİ 2
Dağdibi Mevkii – Yemliha – Kocasinan – Kayseri
Çizim: A. Yamaç (Aralık 2023)
Nm
0
10
20M

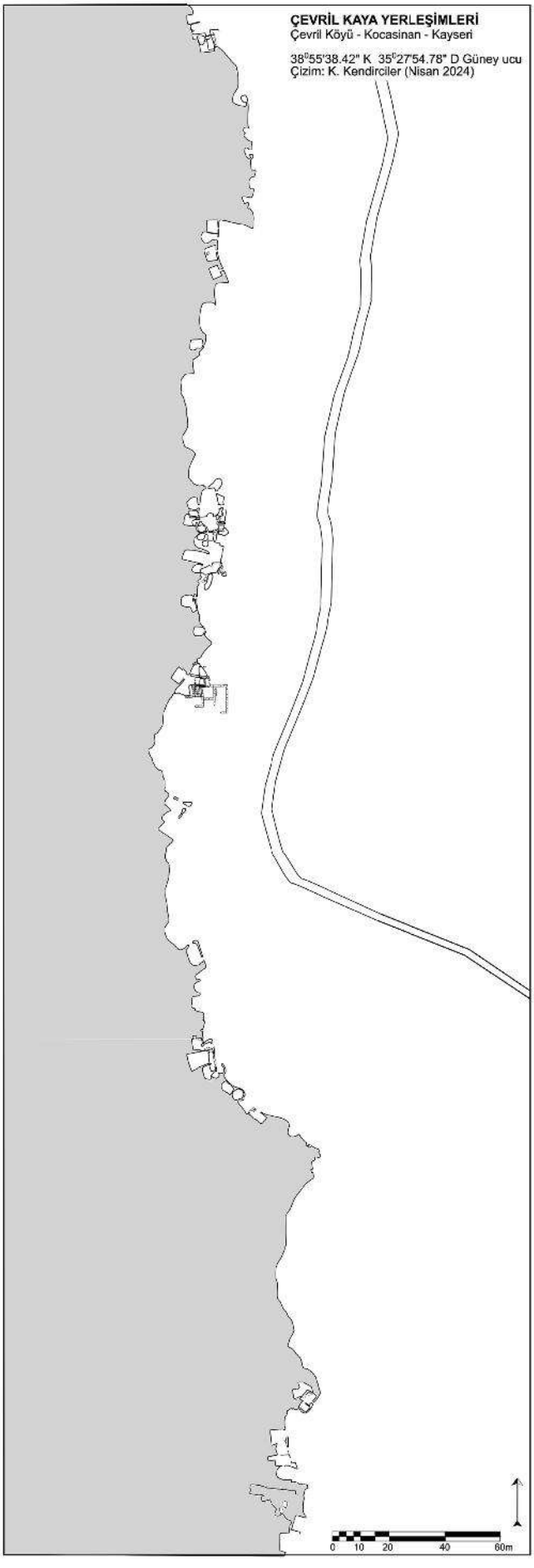

YEMLİHA KAYA YERLEŞİMLERİ 3
Dağdibi Mevkii – Yemliha – Kocasinan – Kayseri
Çizim: A. Yamaç (Aralık 2023)
Nm
0
10
20M



Bölgede örneğine daha önce hiç rastlanmamış bir giriş kapısı



Yukarıda fotoğrafta görülen kapının ardındaki kaya oyması mekanda duvar süslemeleri. Yapı, olasılıkla bir kilise olsa da, yoğun tahribat dolayısıyla kesin bir fikir beyan etmek mümkün değildir


ÇEVRİL KAYA YERLEŞİMLERİ
Çevril Köyü - Kocasinan - Kayseri
38°55'38.42" K 35°27'54.78" D Güney ucu
Çizim: K. Kendirciler (Nisan 2024)
0 10 20 40 60m

ÇEVRİL KAYA YERLEŞİMLERİ

Bugün Yamula Baraj Gölü'ne tepeden bakan bir konumda yer alan, Kocasinan İlçesi'ne bağlı Çevril Köyü uzun geçmişi boyunca üç defa yer değiştirmiştir. İlk olarak kayalara oyulmuş meskenlerde yaşayan Çevril halkı olasılıkla kaya çökmeleri dolayısıyla bu yerleşimin doğusunda, vadi içinde taş kesme evlerden oluşan yeni bir köy kurmuşlardır. Vadideki derenin taşkınları sebebiyle bu ikinci iskan da terk edilmiş ve köy, vadinin güneybatısındaki tepenin üzerinde yeniden inşa edilmiştir.

Çevril Kaya Yerleşimleri yaklaşık 650 m uzunluğunda bir ana aks üzerinde kayalara kazılmış 53 farklı yapıdan oluşmaktadır. Bazıları içiçe geçişli veya iki katlı olan bu yapıların büyük çoğunluğu mesken veya besi yeri olsa da oldukça sağlam durumdaki bir bezirhane ve bitişiğindeki değirmen dikkat çekicidir. Aynen Akin Kaya Yerleşimleri'nde gözlendiği gibi, burada da evlerin arasından geçen kısa bir tünelle ulaşılan iki küçük sığınak bulunmaktadır.

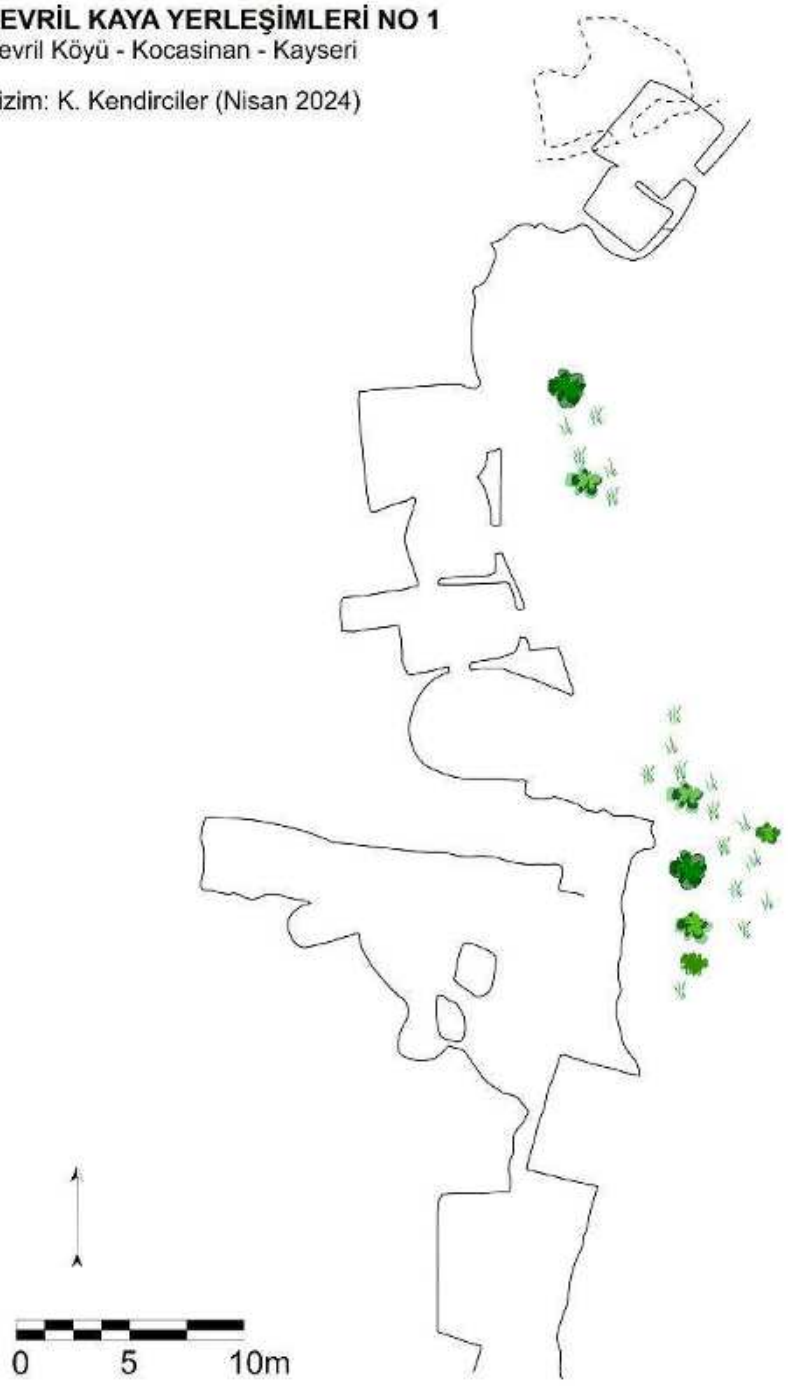
Çevril Kaya Yerleşimleri, Kayseri Koruma Kurulu'nun 24.9.2020 tarihli ve 4721 nolu kararı ile 3. Derece Arkeolojik Sit ilan edilmiştir.

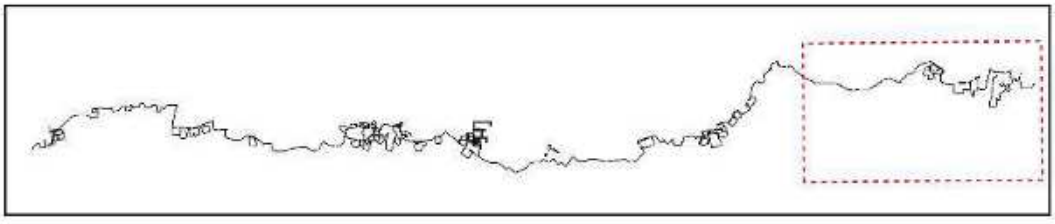


Çevril Kaya Yerleşimleri'nin kuzey segmentinden bir görüntü

ÇEVRİL KAYA YERLEŞİMLERİ NO 1
Çevril Köyü - Kocasinan - Kayseri

Çizim: K. Kendirciler (Nisan 2024)

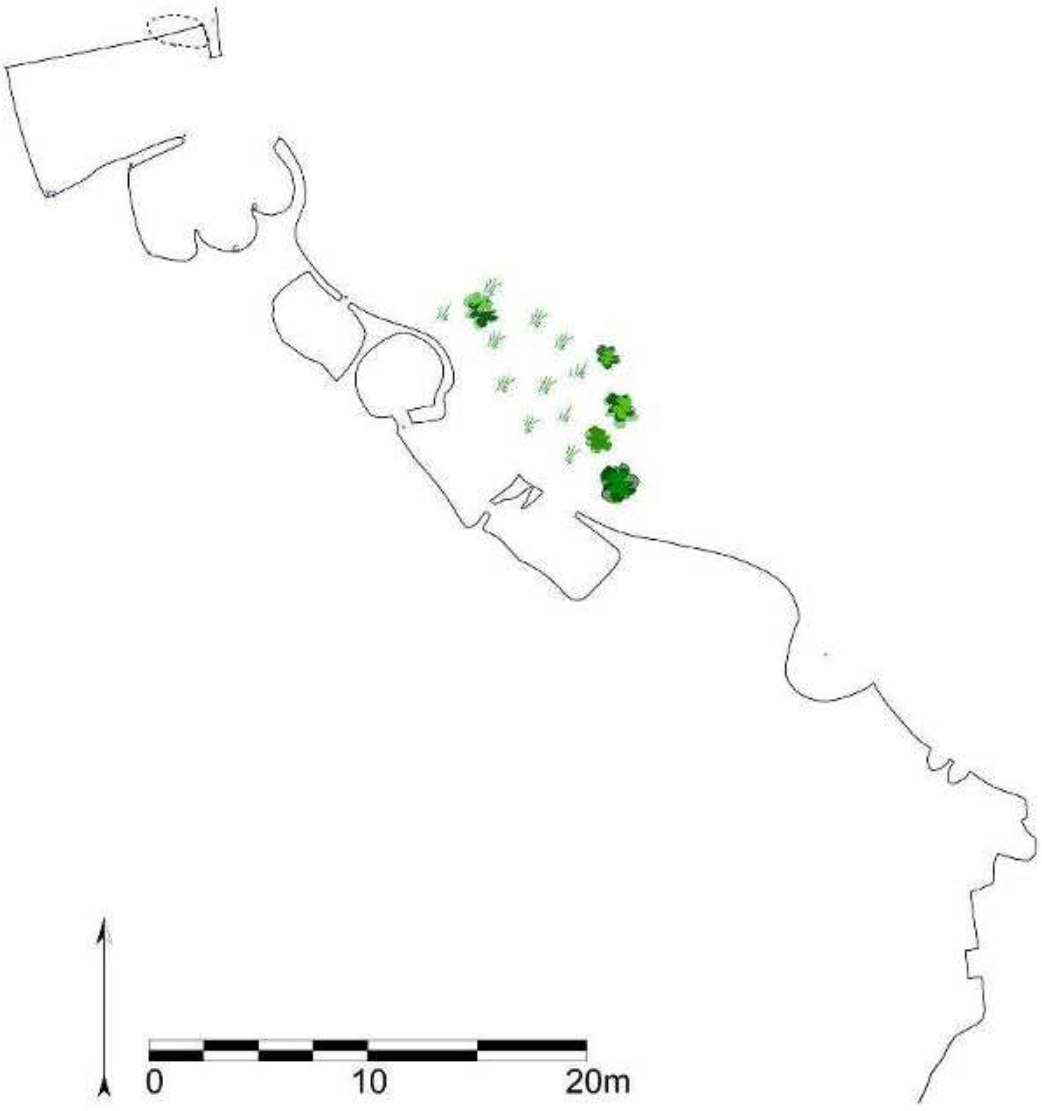


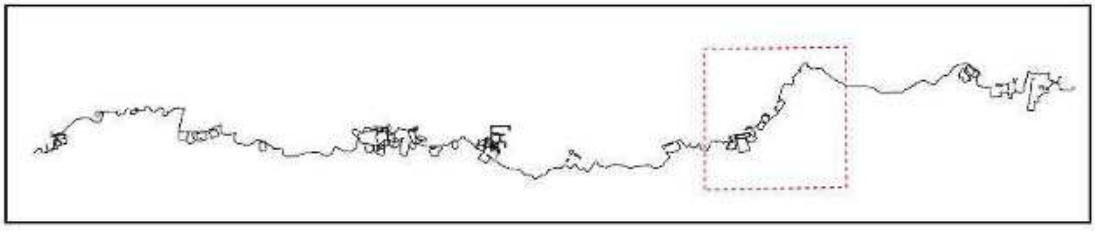


ÇEVRİL KAYA YERLEŞİMLERİ NO 2

Çevril Köyü - Kocasinan - Kayseri

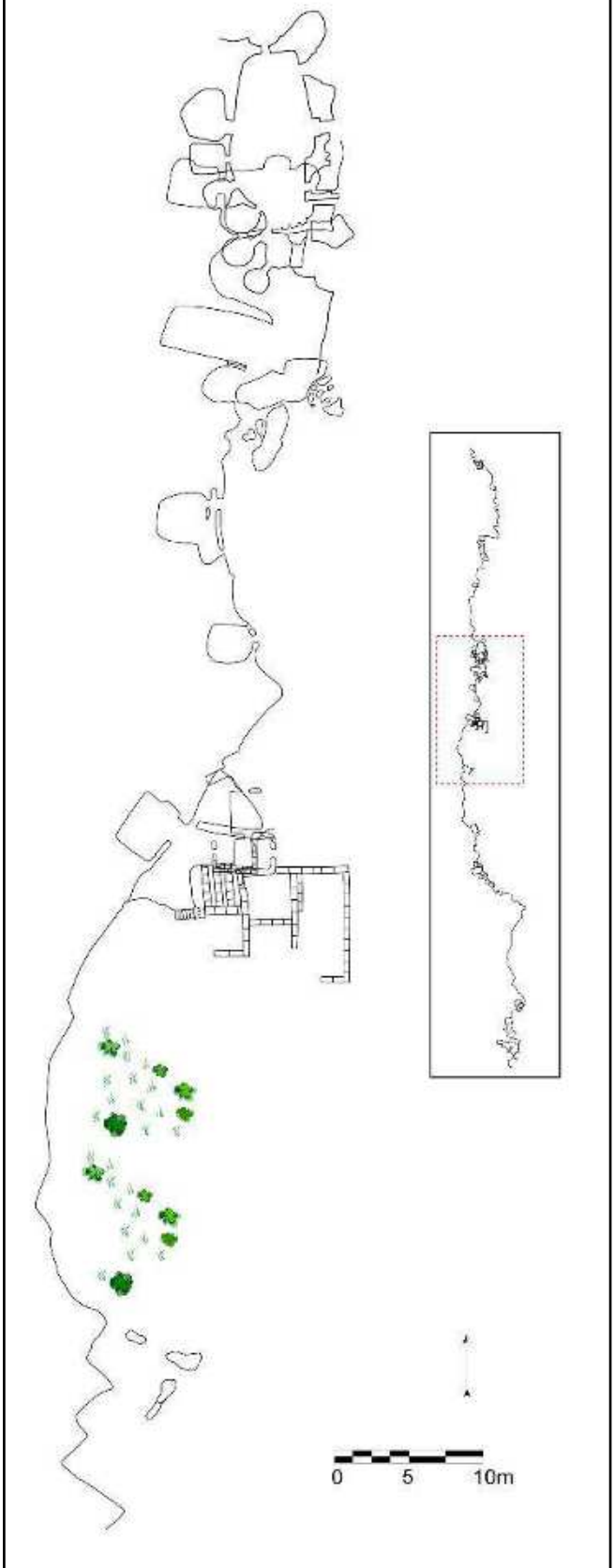
Çizim: K. Kendirciler (Nisan 2024)





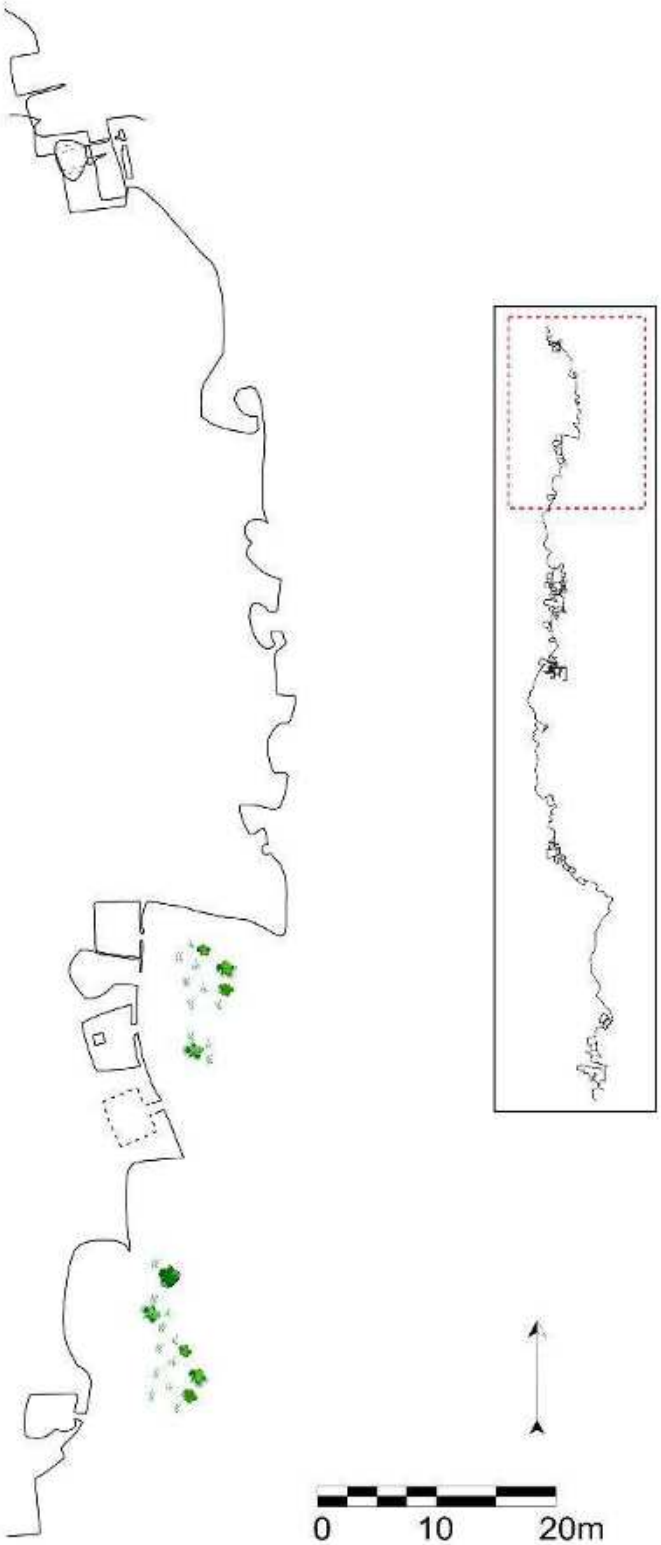
ÇEVRİL KAYA YERLEŞİMLERİ NO 3
Çevril Köyü - Kocasinan - Kayseri

Çizim: K. Kendirciler (Nisan 2024)



ÇEVRİL KAYA YERLEŞİMLERİ NO 4
Çevril Köyü - Kocasinan - Kayseri

Çizim: K. Kendirciler (Nisan 2024)





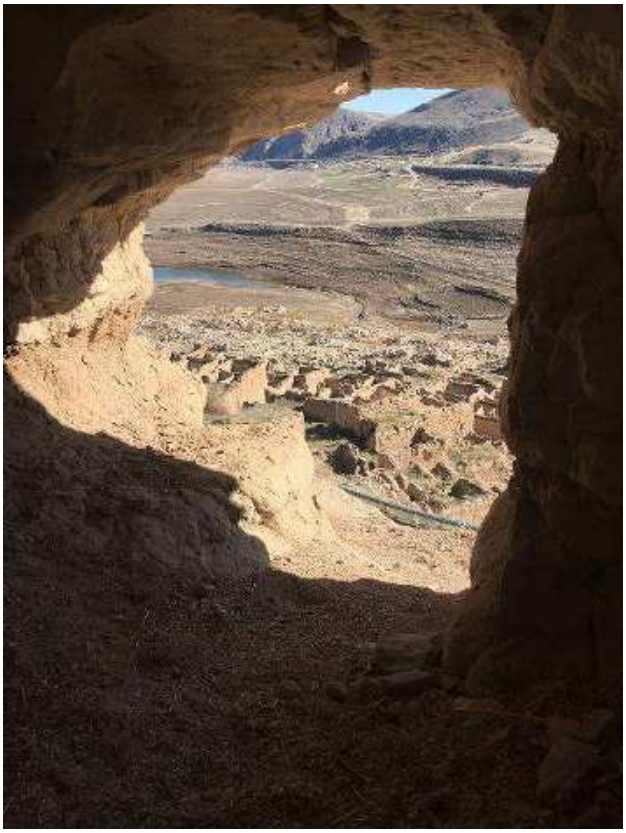
Kırmızı çizgi ile işaretlemiş, yaklaşık 600 m uzunluktaki Çevril Kaya Yerleşimleri'nin doğusunda Eski Çevril Köyü'nün kalıntıları görülmekte



Çevril Kaya Yerleşimleri'nin en güney ucunun genel görüntüsü



Bezirhane



Eski Çevril Köyü



Değirmen



Kuzey kısmında iki katlı ve altı odalı bir yapı



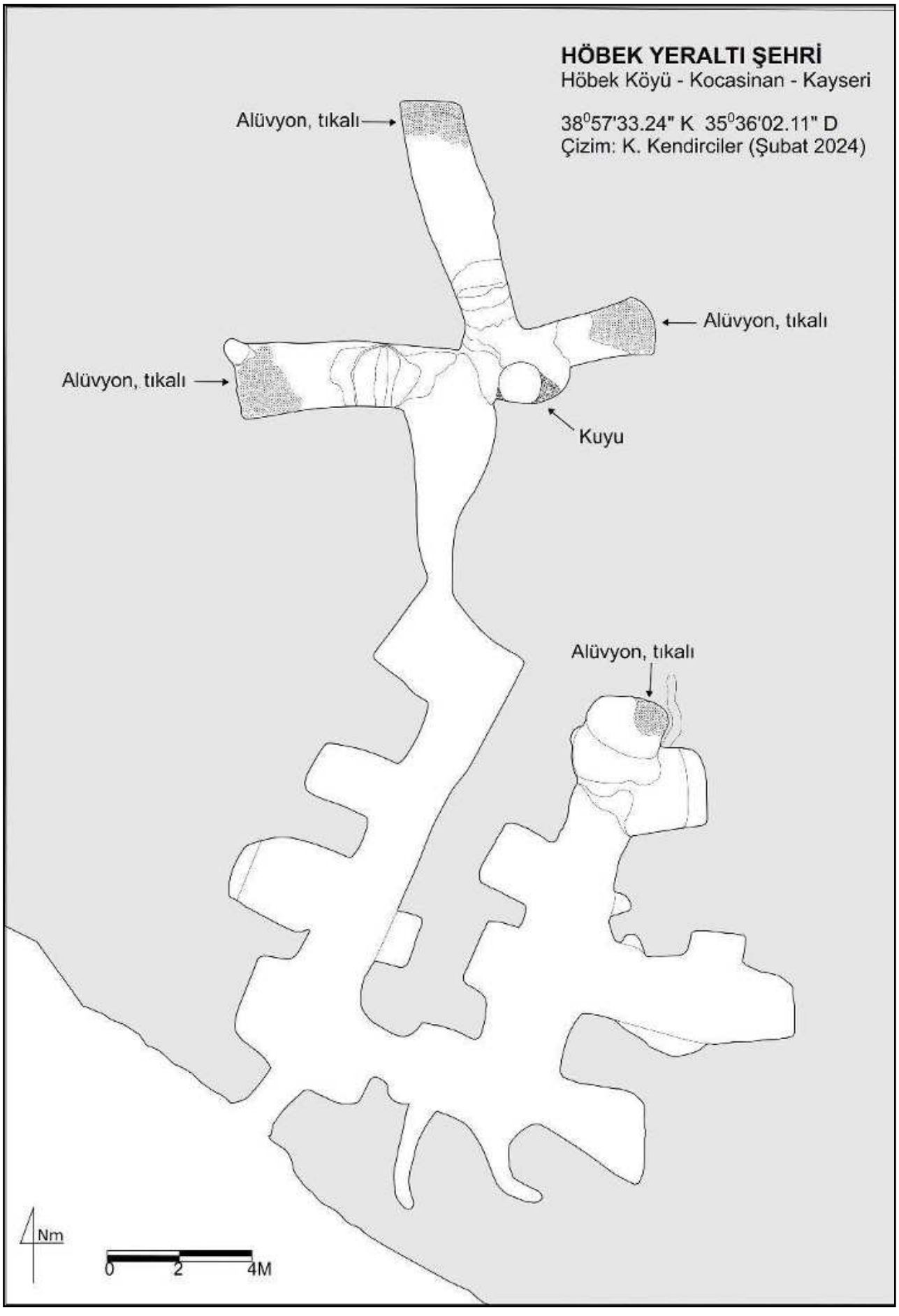
Çevril Kaya Yerleşimleri'nin orta kısmının genel görüntüsü



Çevril Kaya Yerleşimleri'nin orta kısmının genel görüntüsü



Orta kısımda kaya oyması meskelerle bütünlük içinde inşa edilmiş kesme taş, iki katlı ev


HÖBEK YERALTI ŞEHRİ
Höbek Köyü - Kocasinan - Kayseri
38°57'33.24" K 35°36'02.11" D
Çizim: K. Kendirciler (Şubat 2024)
Alüvyon, tıkalı
Alüvyon, tıkalı
Alüvyon, tıkalı
Kuyu
Alüvyon, tıkalı
Nm
0
2
4M

HÖBEK YERALTI ŞEHRİ

Höbek Yeraltı Şehri, Kocasinan'a bağlı Höbek Köyü'nün 1600 m güneyinde, "İntepesi" ya da yerel halkın verdiği daha ilginç bir isimle "Cinler Şehri" olarak bilinen yerde bulunmaktadır. Yapı, Kayseri Kültür Envanteri'nde yer almasına karşın tescil edilmemiştir.

Yapı, her ne kadar Kayseri Kültür Envanteri'nde 'Yeraltı Şehri' olarak isimlendirilmiş ise de, kanımızca bu yapının özelinde böylesi bir fonksiyon tartışmaya açıktır. Öncelikle, yapının girişten itibaren tüm galerileri herhangi bir savunma kaygısı gözetilmeksizin geniş ve yüksek kazılmıştır. Ayrıca, araştırılan kısımlarda herhangi bir taş kapı, ya da bu kapıların yerleştirildiği bir 'operasyon odası' mevcut değildir.

Her ne kadar alüvyonlarla tıkanmış olan dört galerinin devamı henüz bilinmiyor ise de, şu andaki görüntüsüyle Höbek Yeraltı Şehri'nin savunma amaçlı inşa edilmediğini söyleyebiliriz.





Höbek Yeraltı Şehri'nin girişinden sonraki ana galerisi



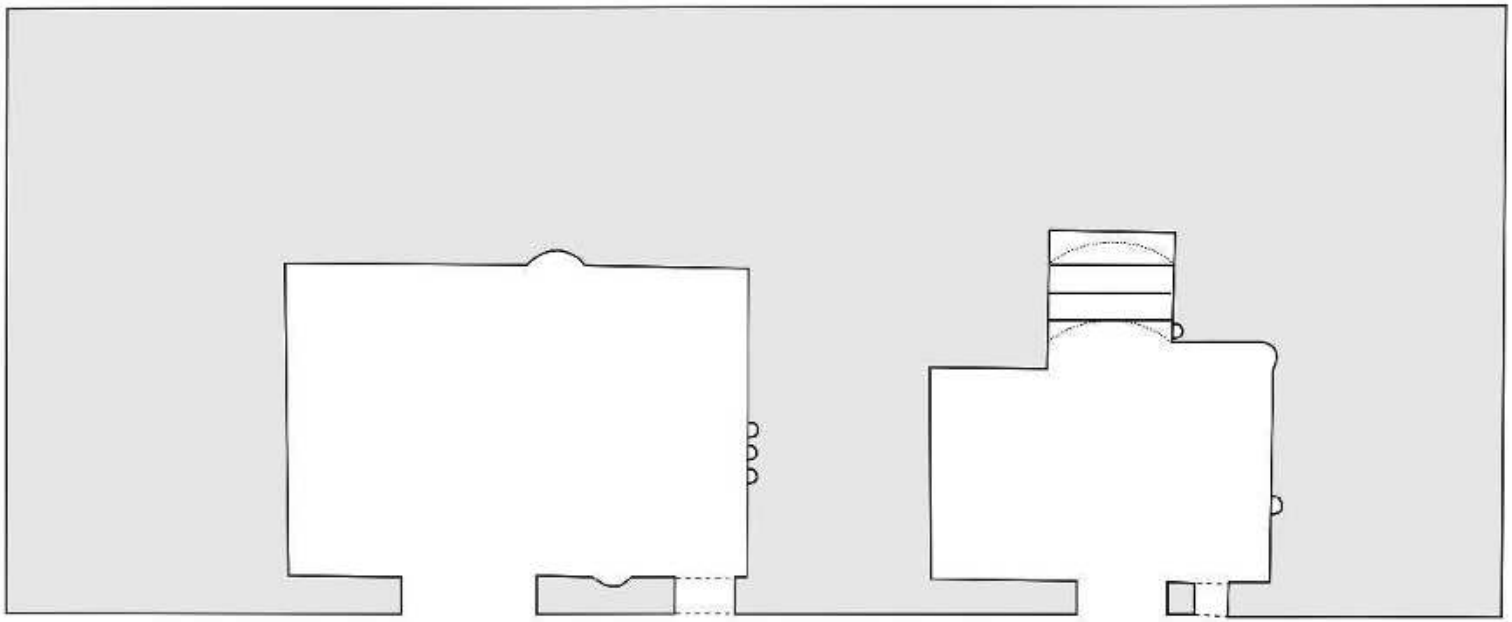
Defineciler tarafından kazılmaya devam edilen bir kuyu



Höbek Yeraltı Şehri'nin girişi



Höbek Yeraltı Şehri'nin ana galerisinin devamı







BOYACI KAYA YERLEŞİMİ ?
Boyacı Köyü - Kocasinan - Kayseri

38^{0}54'54.07" K 35^{0}30'33.76" D
Çizim: A. Yamaç (Şubat 2024)

BOYACI KAYA YERLEŞİMİ

Boyacı Köyü'nün içinde ve imar alanının bitişiğinde yer alan bu, iki odalı, kayaya oyma yapının işlevi belirsizdir. Batı yönünde bulunan, 5 x 3,5 m ölçülerindeki tek pencereli yapı son derece temiz ve düzgün bir işçilikle kazılmıştır. Kuzey yönünde mihrap benzeri bir girinti ve doğu duvarında yanyana üç niş dışında duvarlarda hiçbir hareket ve işleme yoktur.

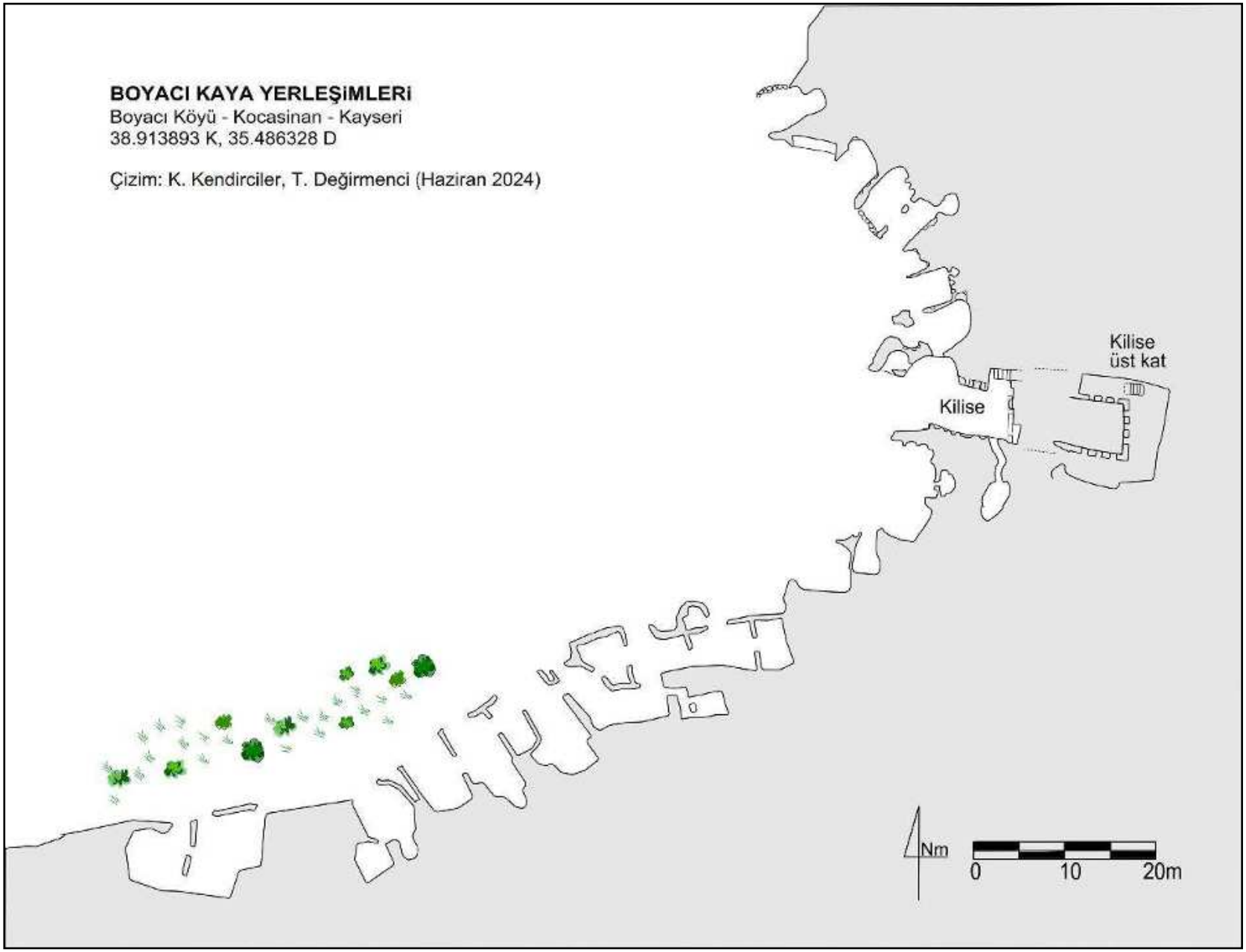
Bu yapının 9 m doğusunda bulunan ve aynı kaya bloğuna kazılmış diğer oda ise ilginç mimari öğeler içermektedir. Giriş kısmındaki oda düz tavanlı olsa da odanın kuzeye bakan ve üç basamakla yükselen kısmın tavanı beşik tonozdur. Bir altar görüntüsü veren ve 1,8 x 1,8 ölçülerine sahip bu ufak girinti dışında odada sadece iki ufak iş ve bir pencere mevcuttur.



Boyacı Kaya Yerleşimi



Boyacı Kaya Yerleşimi doğu odasındaki altar (?)


BOYACI KAYA YERLEŞİMLERİ
Boyacı Köyü - Kocasinan - Kayseri
38.913893 K, 35.486328 D
Çizim: K. Kendirciler, T. Değirmenci (Haziran 2024)
Kilise
üst kat
Kilise
Nm
0
10
20m

BOYACI KAYA YERLEŞİMLERİ

Kocasinan ilçesi Boyacı Köyü'nün 3 km batısında, 38.913893 K, 35.486328 D koordinatlarında bulunan ve Kayseri Koruma Kurulu'nun 25.11.2022 tarihli ve 6560 sayılı kararına istinaden 1. Derece Arkeolojik Sit ilan edilen bu bölge yıllar önce terk edilmiş bir köydür.

Benzerlerine Kayseri'nin birçok yerinde rastlanan bu köyler çoğunlukla, taş kesme evler ile kayalara oyulmuş mağaraların birlikteliğinden oluşmaktadır ve zaman zaman kaya çökmeleri sebebiyle terk edilmektedirler.

Koruma Kurulu'nun raporunda 'Boyacı Eski Mahalle' olarak zikredilen bu kaya yerleşiminde ölçülen ve haritalanan 18 yapı arasında bulunan kilise değişik bir mimari üsluba sahiptir ve giriş kısmı çok tahrip olmuş olsa da apsisin üzerine kazılmış ikinci katıyla benzerlerinden oldukça farklıdır.





Boyacı Kaya Yerleşimi



Boyacı Kaya Yerleşimi



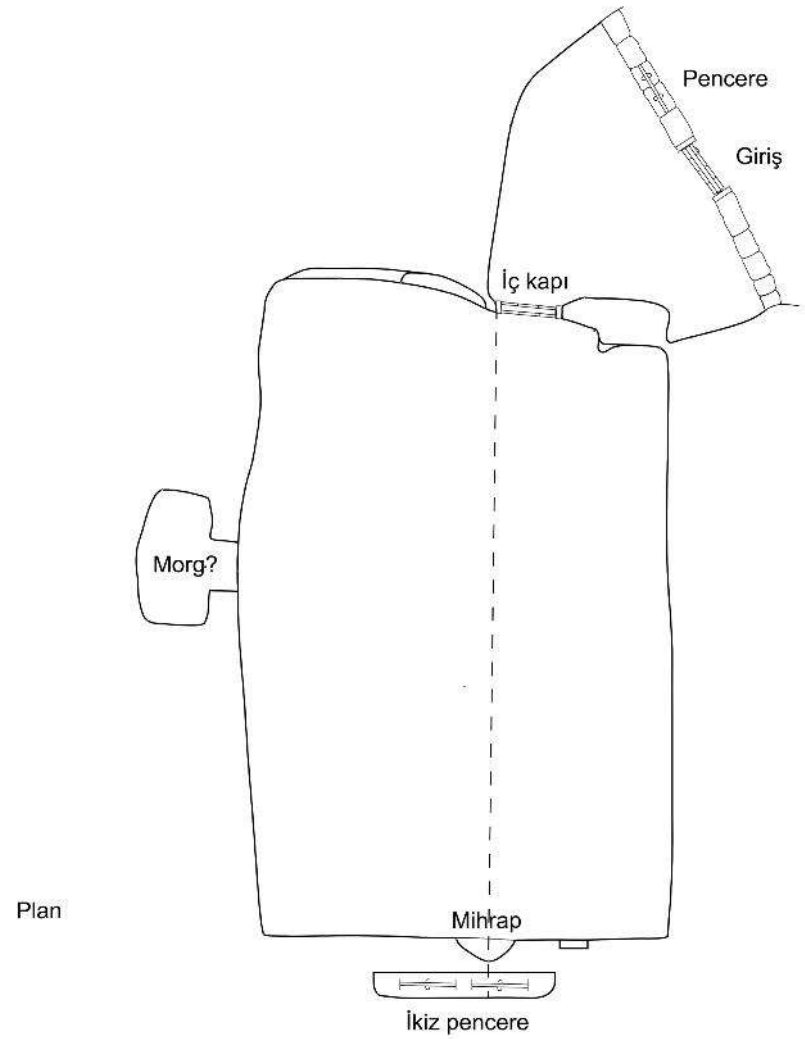
Boyacı Kaya Yerleşimi, kilise

KÜLLÜ KÖYÜ CAMİİ

Küllü Köyü - İncesu - Kayseri

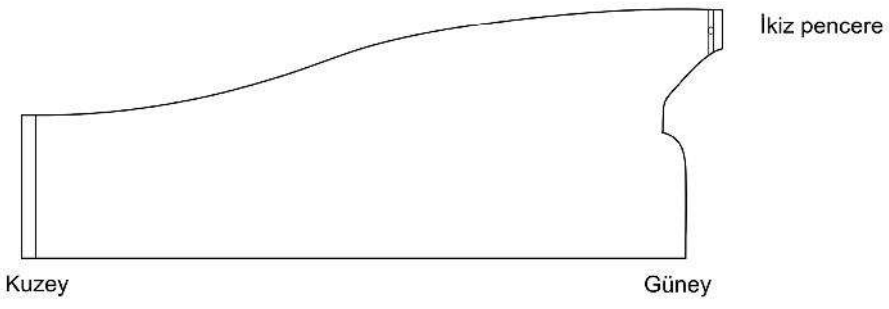
38^{0}47'10.76" K 35^{0}04'55.90" D

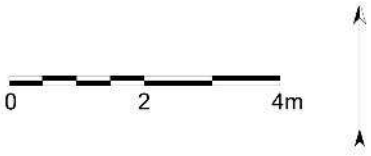
Çizim: K. Kendirciler (Nisan 2024)



Plan

Kesit





KÜLLÜ KÖYÜ KAYA OYMA CAMİİ

Küllü Köyü'nün eski yerleşimi 1970 yılında boşaltılmış ve köy tepenin üstünde yeniden kurulmuştur. Bu eski yerleşimde bulunan, ana kayaya oyularak inşa edilmiş olan caminin inşa tarihi ve banisi bilinmemektedir. Cami, tek bir ana mekân ve bu mekânın kuzeyinde bulunan giriş bölümünden ibarettir.

Ana mekân sadece bir kapı ve bir pencereyle dışarı açılmaktadır, doğu ve batı cepheleri sağır bırakılmıştır. Ana mekânın batı duvarında yine kayaya oyma dikdörtgen planlı küçük odanın geçici bir morg işlevi gördüğü köylüler tarafından ifade edilmiştir. Ana mekanın güney cephesinin ortasında bulunan mihrap nişi üçgen planlıdır.

Her üç duvarda yazıyla yapılmış süslemeler ve ibrik, hilal, tuğra, altı yapraklı çiçek bezemeleri bulunur. Süslemelerin 1960 lı yıllarda yapıldığı biliniyorsa da yapının inşa tarihi kesin olarak bilinmemektedir. Yapının mevcut hali, caminin inşasının 20. yüzyıl öncesine ait olduğunu düşündürmektedir. Özgün halini büyük ölçüde koruyarak günümüze ulaşmış bu yapı köyün en eski dini mimari örneğidir.

Budak, A. (2018). Kapadokya Bölgesi Kaya Oyma Camileri. İstanbul: Literatürk Academia.



Küllü Camii ana mekânı





Küllü Camii dış ve iç kapıları



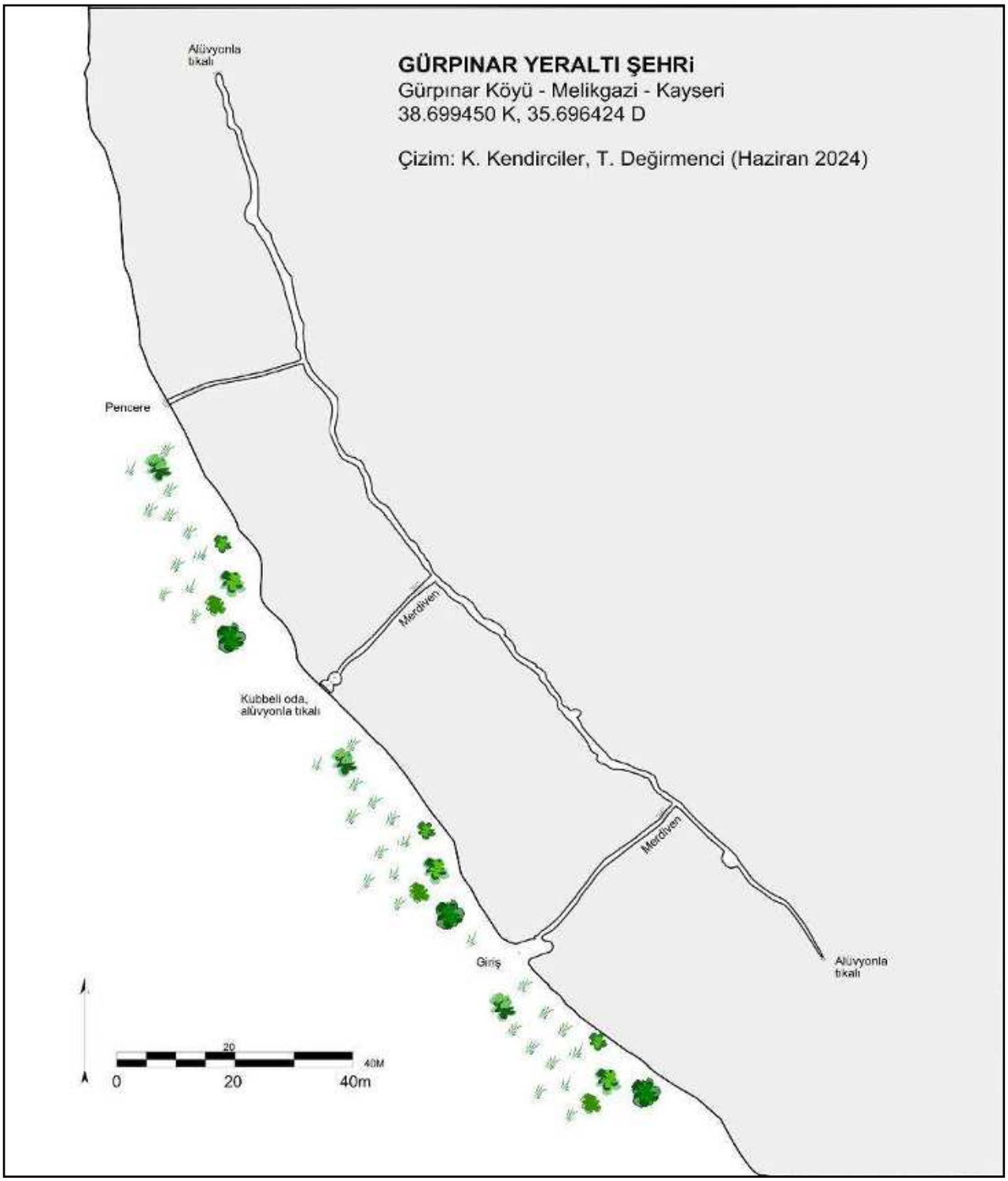
Küllü Camii duvar süslemelerinden detaylar



Küllü Camii duvar süslemelerinden detaylar



Küllü Camii minaresi


GÜRPINAR YERALTI ŞEHRİ
Gürpınar Köyü - Melikgazi - Kayseri
38.699450 K, 35.696424 D
Çizim: K. Kendirciler, T. Değirmenci (Haziran 2024)
Alüvyonla tıkalı
Pencere
Merdiven
Kubbeli oda, alüvyonla tıkalı
Merdiven
Giriş
Alüvyonla tıkalı
0
20
40m

GÜRPINAR YERALTI ŞEHRİ

Gürpınar Yeraltı Şehri, Melikgazi ilçesine bağlı Gürpınar ve Kuruköprü köyleri arasında, 38.699450 K, 35.696424 D koordinatlarında yer almaktadır. Aşağıda mevcut uydu fotoğrafından da bariz bir şekilde görülebileceği gibi büyük bir taş ocağının tehdidi altındadır. Kayseri Koruma Kurulu'nun 24.03.2022 tarihli ve 5901 no.lu kararı ile vadinin bu kısmının 1. Derece Arkeolojik Sit ilan edilmesi Gürpınar Yeraltı Şehri'ni bir ölçüde korumaktadır.

Diğer yandan, ana tünelin batıya uzanan üç kolundan en kuzeyde bulunanın ucundaki açıklığın hafriyat alan bir ekskavatör tarafından yapıldığını da belirtmekte fayda var.

Toplam uzunluğu 256 m olan ve içinde hiçbir oda bulunmayan bu tünel sisteminin yapımı yarım kalmış bir yeraltı şehri olduğu tahmin ediliyor.





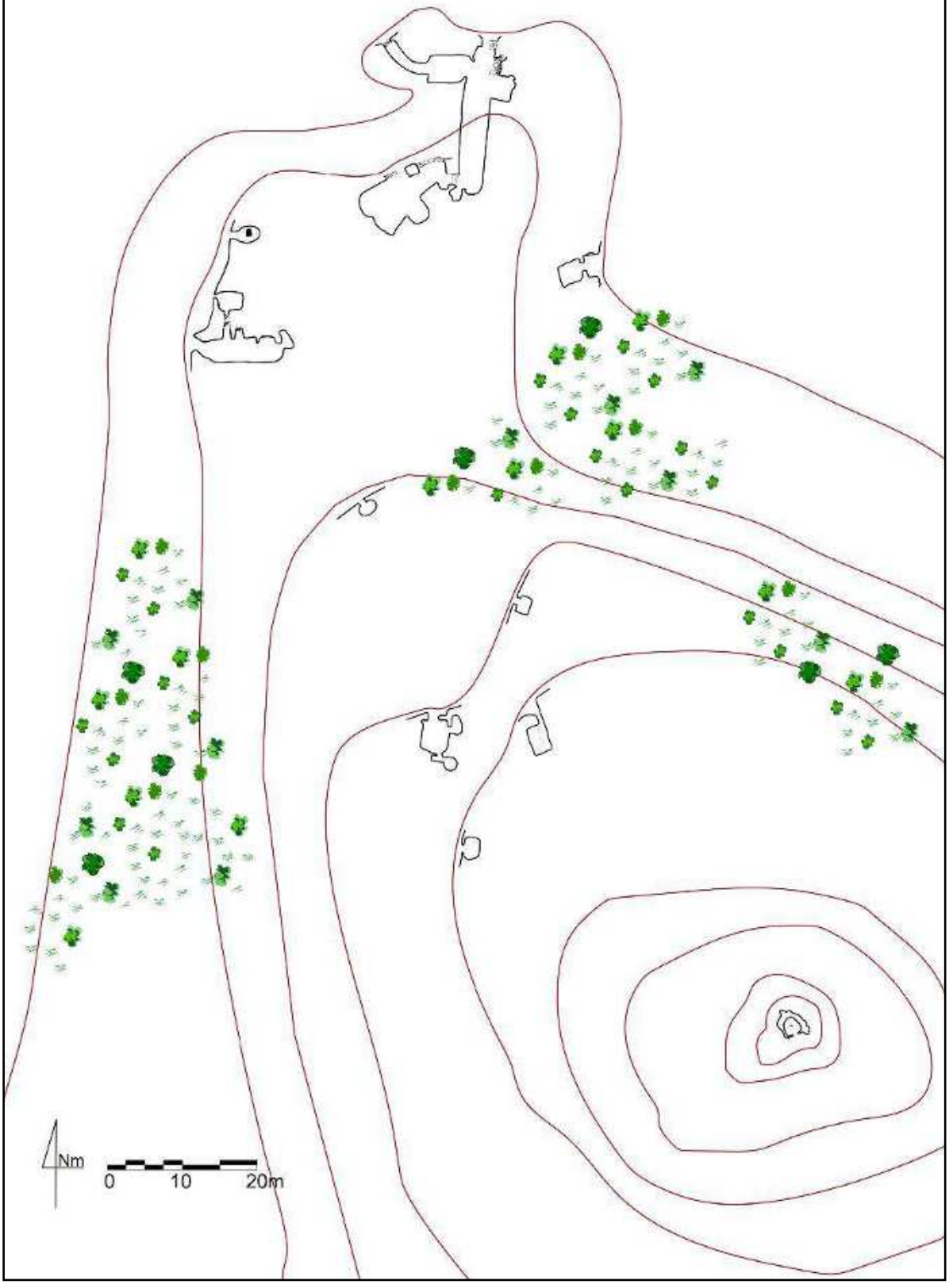






SÜMENGEN YAYLASI KAYA YERLEŞİMLERİ
Söğütlü Köyü - Tomarza - Kayseri
38.356418 K, 35.784641 D

Çizim: K. Kendirciler, M. Alpargun, A. Yamaç
(Haziran 2024)



SÜMENGEN YAYLASI KAYA YERLEŞİMLERİ

Tomarza ilçesi, Sümengen Yaylası'nda 38.356418 K, 35.784641 D koordinatlarında yer alan kayalığı çevreleyen kaya oyması 11 oda ölçülerek bu yapı kompleksinin genel bir haritası hazırlandı.

Kayseri Koruma Kurulu'nun 25.11.2020 tarihli ve 2020 no.lu kararına istinaden 1. Derece Arkeolojik Sit ilan edilen bu bölge Pusatlı Köyü'nün 7 km güneydoğusunda, Söğütlü Köyü'nün ise yaklaşık 5 km kuzeyinde yer almaktadır.

Koruma Kurulu'nun yazdığı rapora karşın, bölgenin bir yerleşim alanından ziyade, mono blok kireçtaşı bir kütlenin etrafındaki hafif eğimli kayalara kazılmış irili ufaklı çok sayıda mezar ve birkaç mezar odası ile bir nekropol veya kült alanı olma olasılığı vardır. Söz konusu mono blok kireçtaşı kaya kütlesinin tam merkezinde yer alan kaya mezarı dikdörtgene yakın bir form özelliği göstermektedir.

Tomarza'nın güneyindeki dağlık arazide birkaç farklı 'Sümengen Yaylası' mevcuttur (bkz. Kayseri Yeraltı Yapıları Envanteri Dördüncü Ara Rapor). 15. yüzyıl kayıtlarında idari birim olarak geçen 'Sümengen' daha sonraki kayıtlarda cemaat olarak zikredilmiş bir yörük aşiretidir.









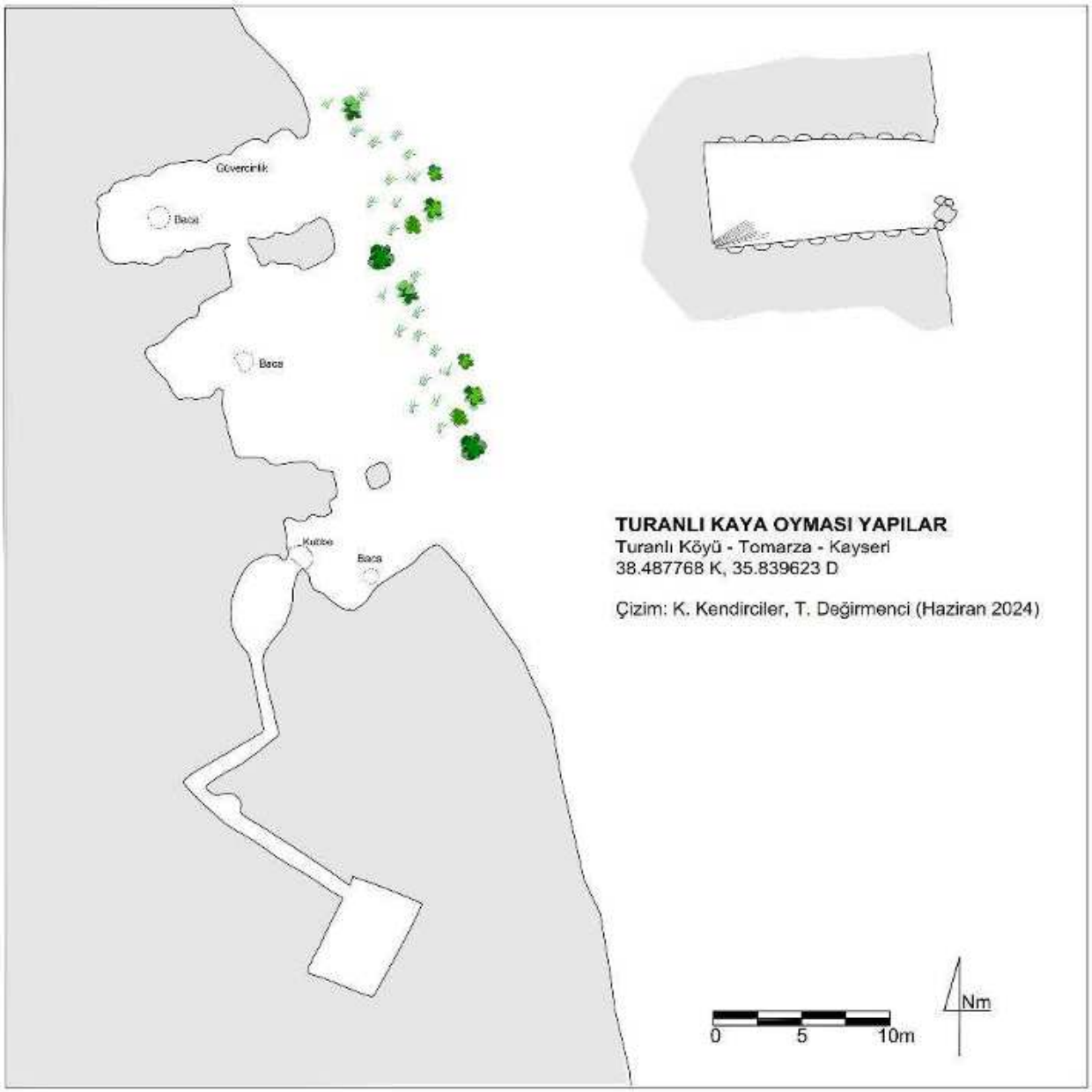












TURANLI KAYA OYMASI YAPILAR
Turanlı Köyü - Tomarza - Kayseri
38.487768 K, 35.839623 D

Çizim: K. Kendirciler, T. Değirmenci (Haziran 2024)

TURANLI KAYA OYMASI YAPILAR

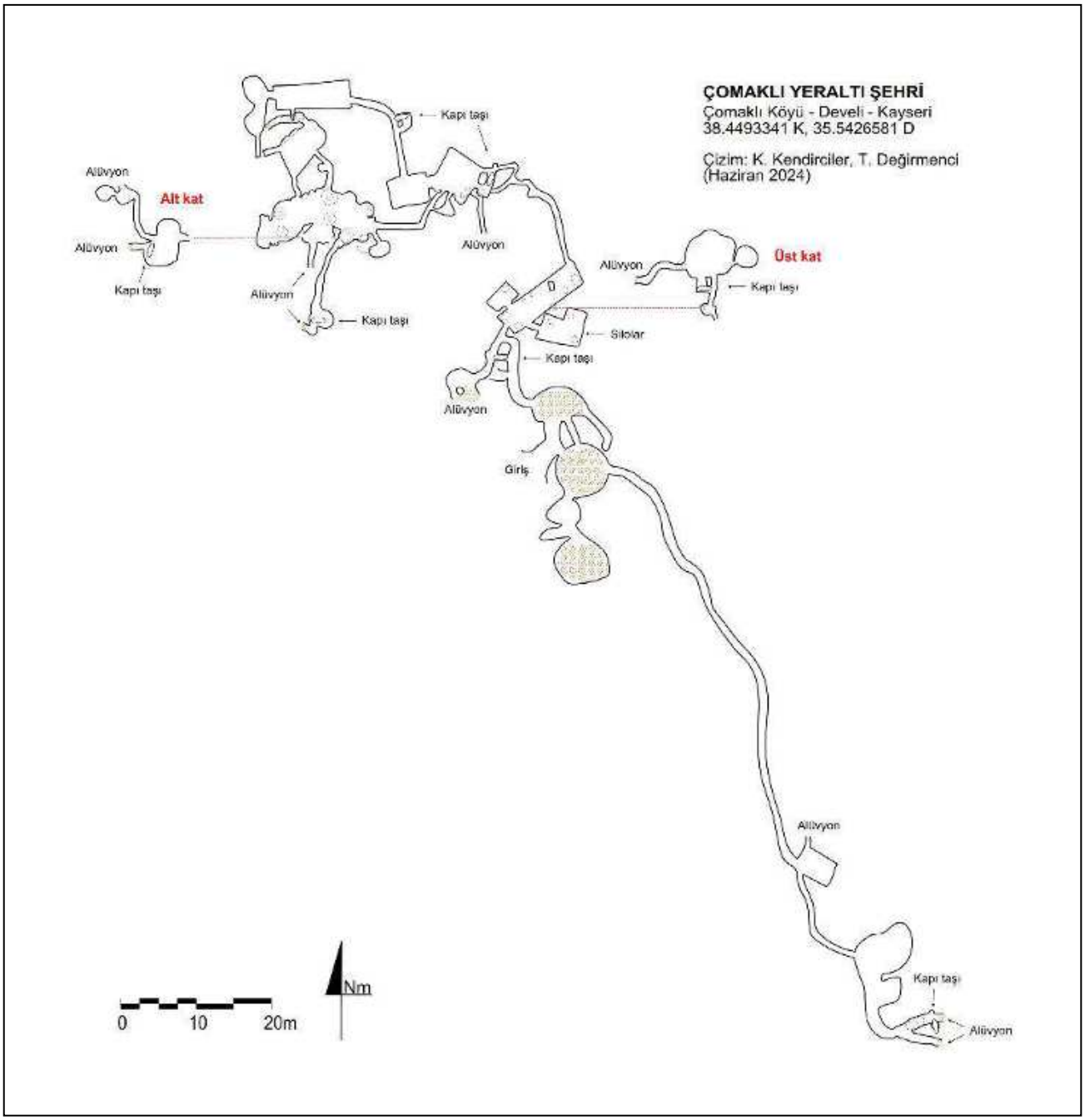
Tomarza - Turanlı Köyü'nün doğusunda, Kızılinönü mevkiinde, 38.487768 K, 35.839623 D koordinatlarında üç kaya oyması yapı, bir küçük sığınak ve bu yapıların 30 m doğusunda büyükçe bir besi yeri mevcuttur. Her iki duvarında sekizerden 16 yemlik niş bulunan bu besi yeri 80 m^2 dir.

Kuzeyde bulunan yapı bir dönem güvercinlik olarak kullanılmaya çalışılmışsa da olasılıkla çökmeler sonucu terk edilmiştir. Güneye doğru uzanan ve yaklaşık 18 m^2 büyüklüğünde bir oda ile sonlanan tünelin savunma amaçlı kazıldığı belirgindir.








ÇOMAKLI YERALTI ŞEHRİ
Çomaklı Köyü - Develi - Kayseri
38.4493341 K, 35.5426581 D
Çizim: K. Kendirciler, T. Değirmenci
(Haziran 2024)
Alt kat
Üst kat
Kapı taşı
Alüvyon
Silolar
Giriş
Nm
0
10
20m

ÇOMAKLI YERALTI ŞEHRİ

Develi'ye bağlı Çomaklı Köyü'nde, 38.4493341 K, 35.5426581 D koordinatlarında bulunan Çomaklı Yeraltı Şehri 918 m uzunluğuyla Kayseri Yeraltı Yapıları Envanteri Projesi'nde bugüne dek araştırılan ve ölçülüp haritalanan 43 yeraltı şehri arasında en büyüklerden birisidir.

Yeraltı şehrinin iki farklı kısımdan oluştuğu söylenebilir. Girişten itibaren kuzeye uzanan kısım birbirlerine tünellerle bağlı büyük odalardan oluşmakta iken güneye doğru eğimli bir şekilde 70 m devam eden, ortalama 60 cm eninde ve 70 - 80 cm yüksekliğindeki dar tünelin sadece son kısmında üç ufak oda mevcuttur. Bu odaların ardından tünelin devamı bir kapı taşı ile savunulmaktaysa da pasaj alüvyonla tıkanmıştır.

Buna karşılık, kuzey kısmında bulunan odalar çoğunlukla birbirlerine kısa ve nispeten daha geniş tünellerle bağlanmıştır. Bu kısımda dokuz farklı oda ve bir üst, bir de alt kat mevcuttur. Bazıları 50 m^2 den daha büyük olan bu odaların çoğunun zemininde silolar mevcuttur. Toplam olarak üç kata yayılan yapıdaki tünellerin 12 si, yani neredeyse tümü alüvyonla tıkalıdır. Araştırılabilen kısımlarda yedi adet kapı taşı tespit edilmiştir.

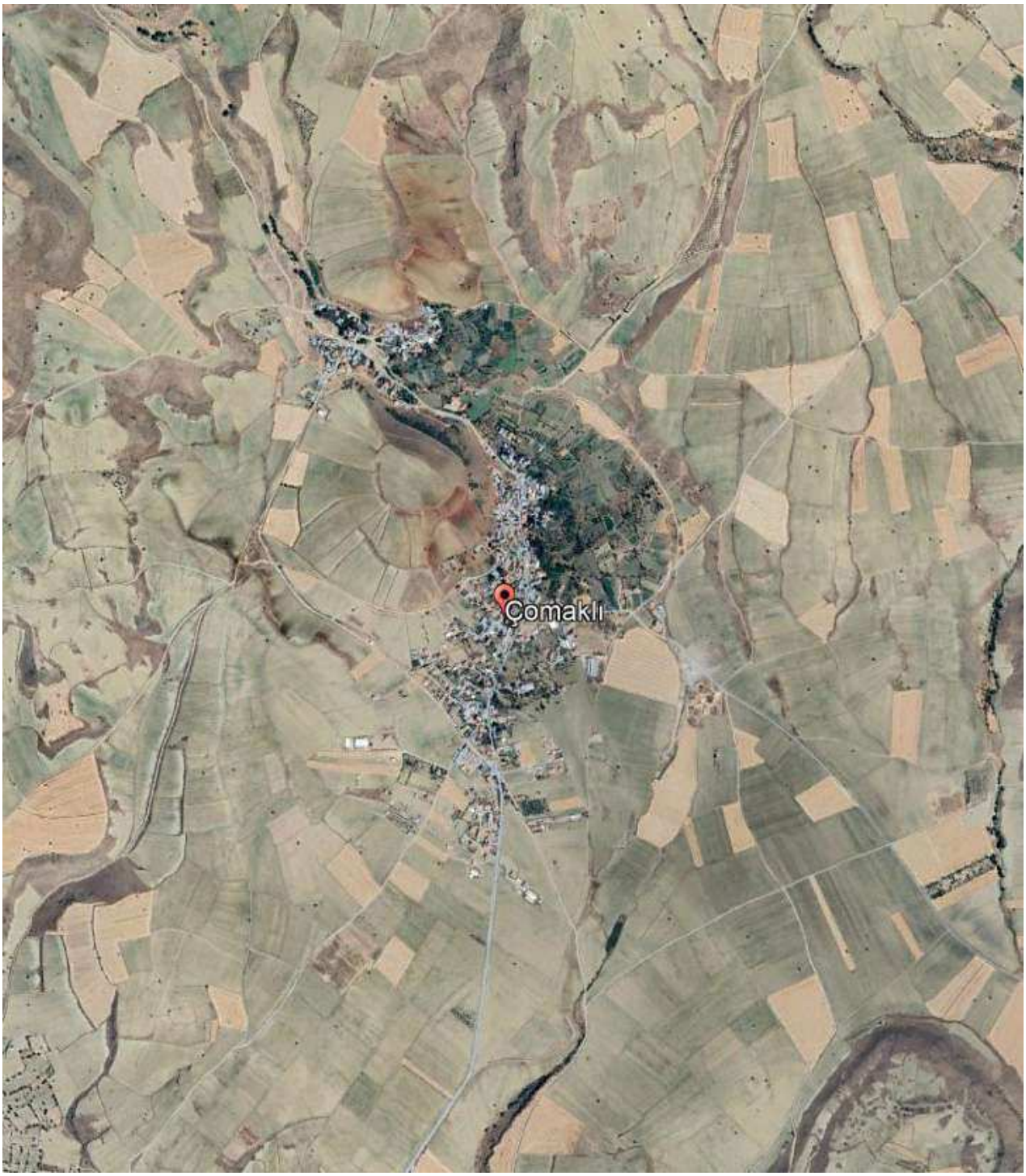
Giriş kısmında ve kuzeyde bulunan, kazılmadan yarım bırakılmış bazı tüneller dolayısıyla bu yeraltı şehri için 'bitirilmeden terk edilmiş' demeyi düşünüyorduk, fakat duvarlara oyulmuş tüm kandil nişlerinde yoğun is olması yapının kullanılmış olduğunu göstermektedir.





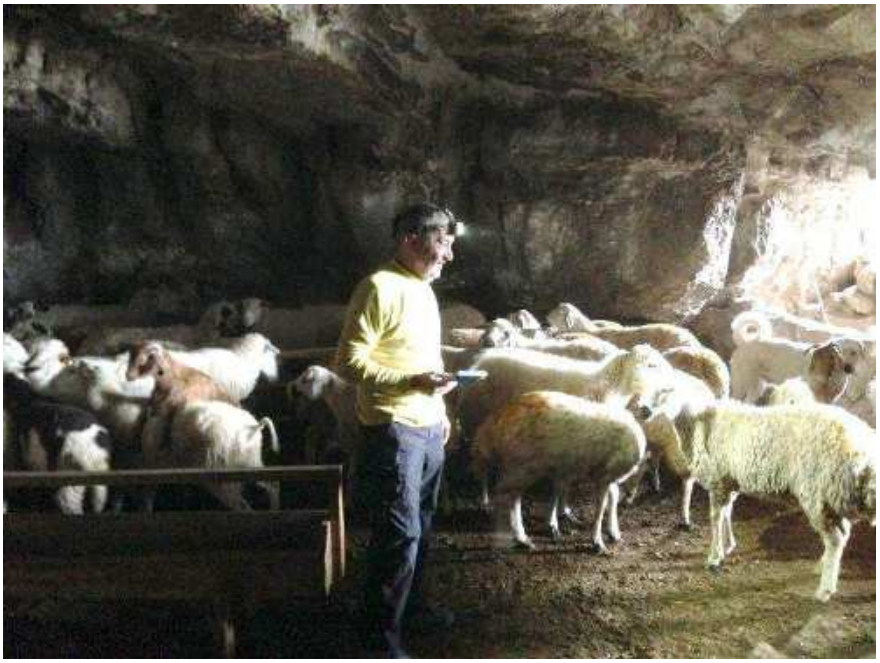





Çomaklı



Hisarcık - Kıranardı kalay madenlerinin bulunduğu bölge



Kıranardı Kalay Madeni No. 2

HİSARCIK – KIRANARDI KALAY MADENLERİ

Melikgazi'ye bağlı Hisarcık – Kıranardı'nda MÖ 4.000 yılına tarihlenen on farklı kalay maden ocağı bulunmaktadır. Birçok makaleye konu olan ve Anadolu'nun bugüne dek bilinen bu en eski kalay madenleri ne yazık ki bugün birer koyun ağılıdır.

MÖ 2. binyıl yazılı kaynaklarına dayanarak oluşan ve arkeolojide bugüne kadar hakim olan görüş, Kestel'de keşfedilen İlk Tunç Çağ'ı kalay işletmelerinin varlığına karşın, Anadolu'da kalay yataklarının olmadığı yönünde idi.

Bu kapsamda Hisarcık'ta bulunan bu madenler tarih öncesi kalayın kaynağı açısından önem taşımaktadır. Bölgede andesitten oluşan volkanik kayaçların çatlaklarında hematitle birlikte kalay cevherine rastlanmıştır. Ayrıca yer yer cepler ve galeriler açılarak tarihöncesi dönemlerde buradan cevher alınmıştır. Böylece Anadolu'da Kestel'in yanısıra yeni bir kalay işletmesinin varolduğu anlaşılmaktadır.

MÖ 4.000 yılına ait olduğu belirlenen bu kalay madenlerinin bulunması, Anadolu uygarlıklarının kalayı sadece ticaret ile elde etmediğini, aynı zamanda üretebildiğini de işaret etmektedir.

Kıranardı'nda, dağın yamacına kazılmış bu on maden ocağı tarafımızdan ölçülerek haritalandırılmıştır.

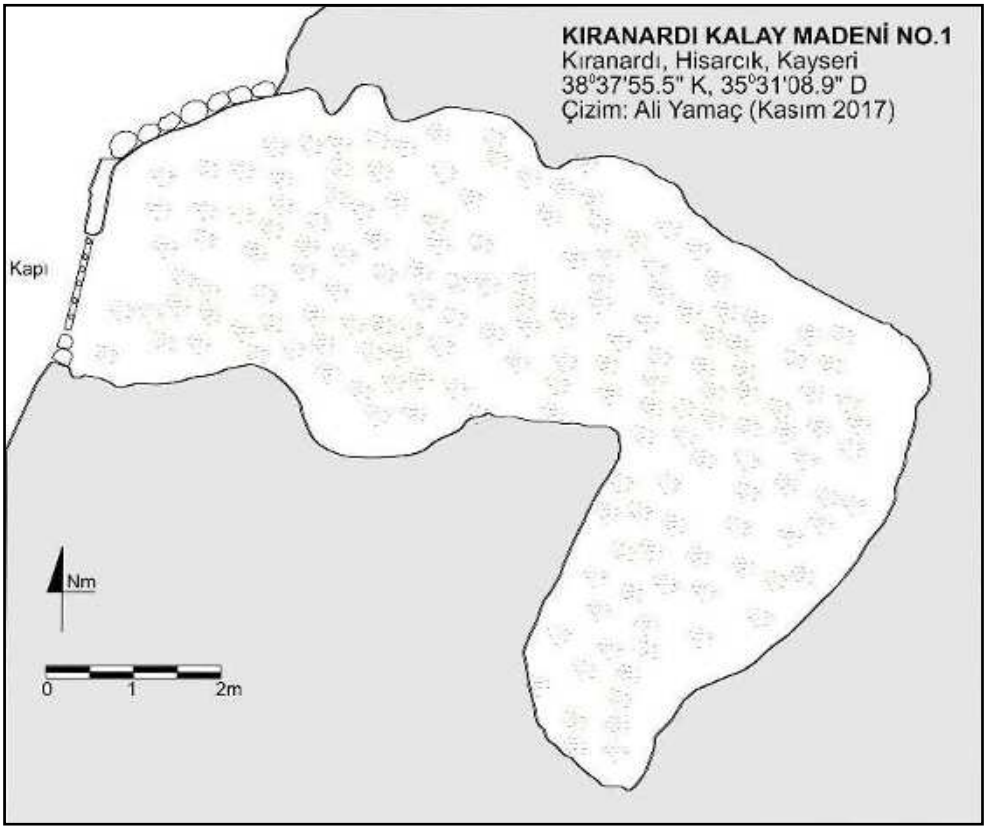
Kaynaklar:

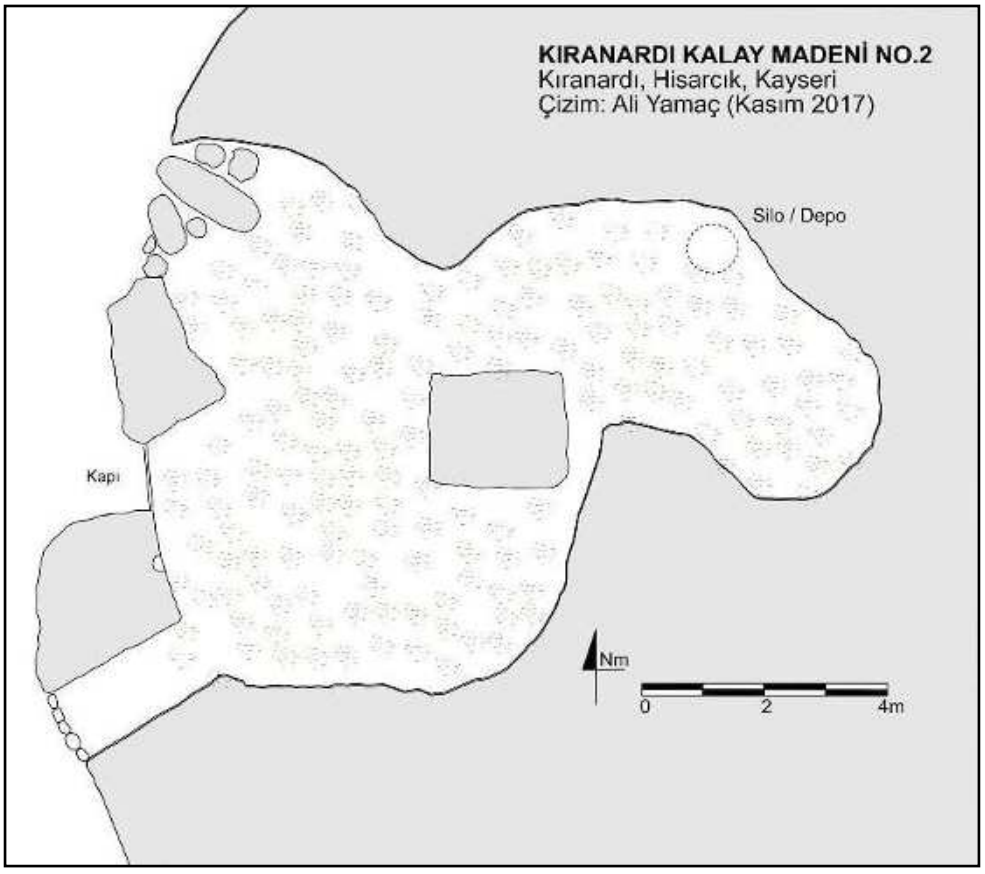
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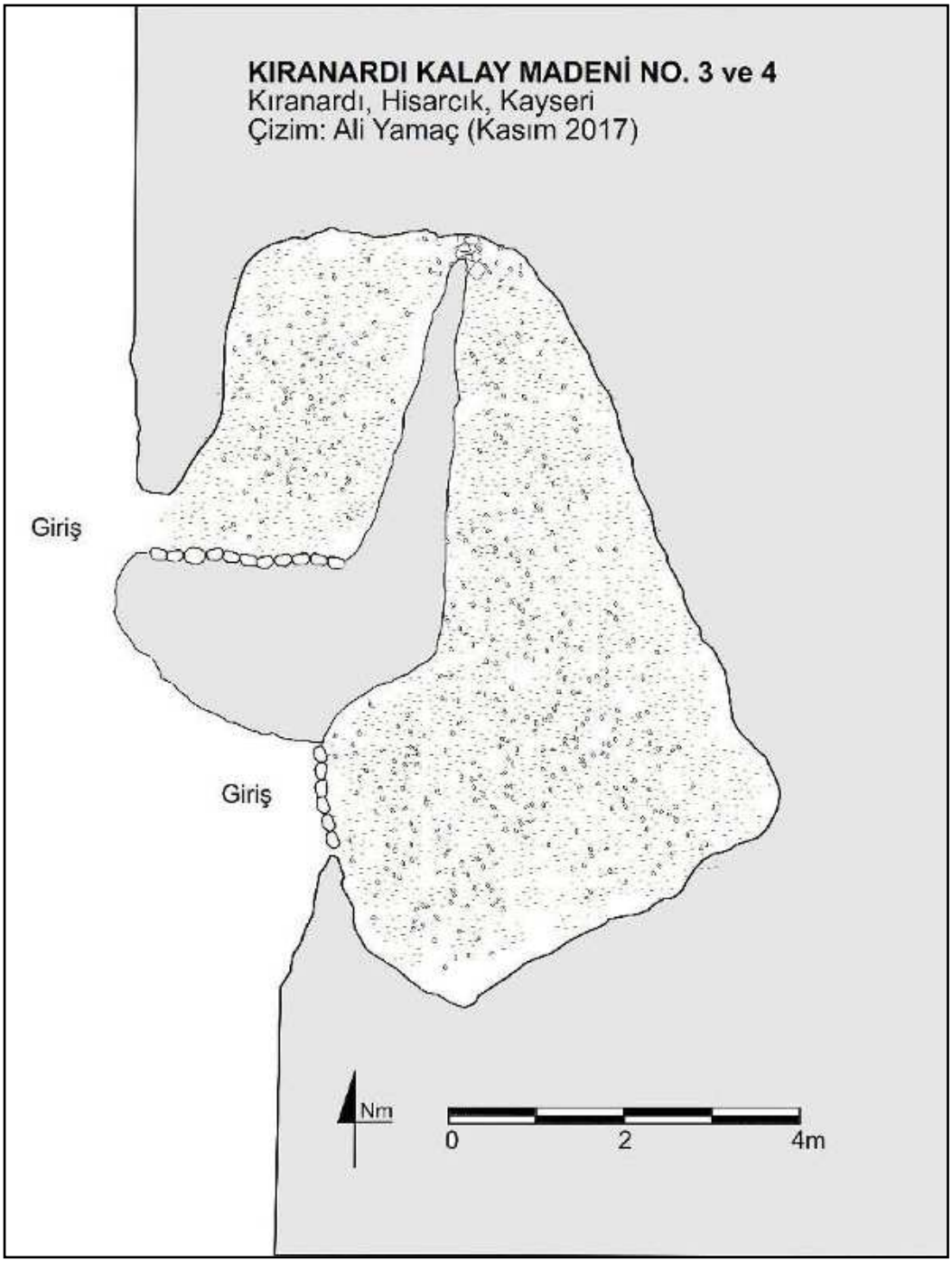
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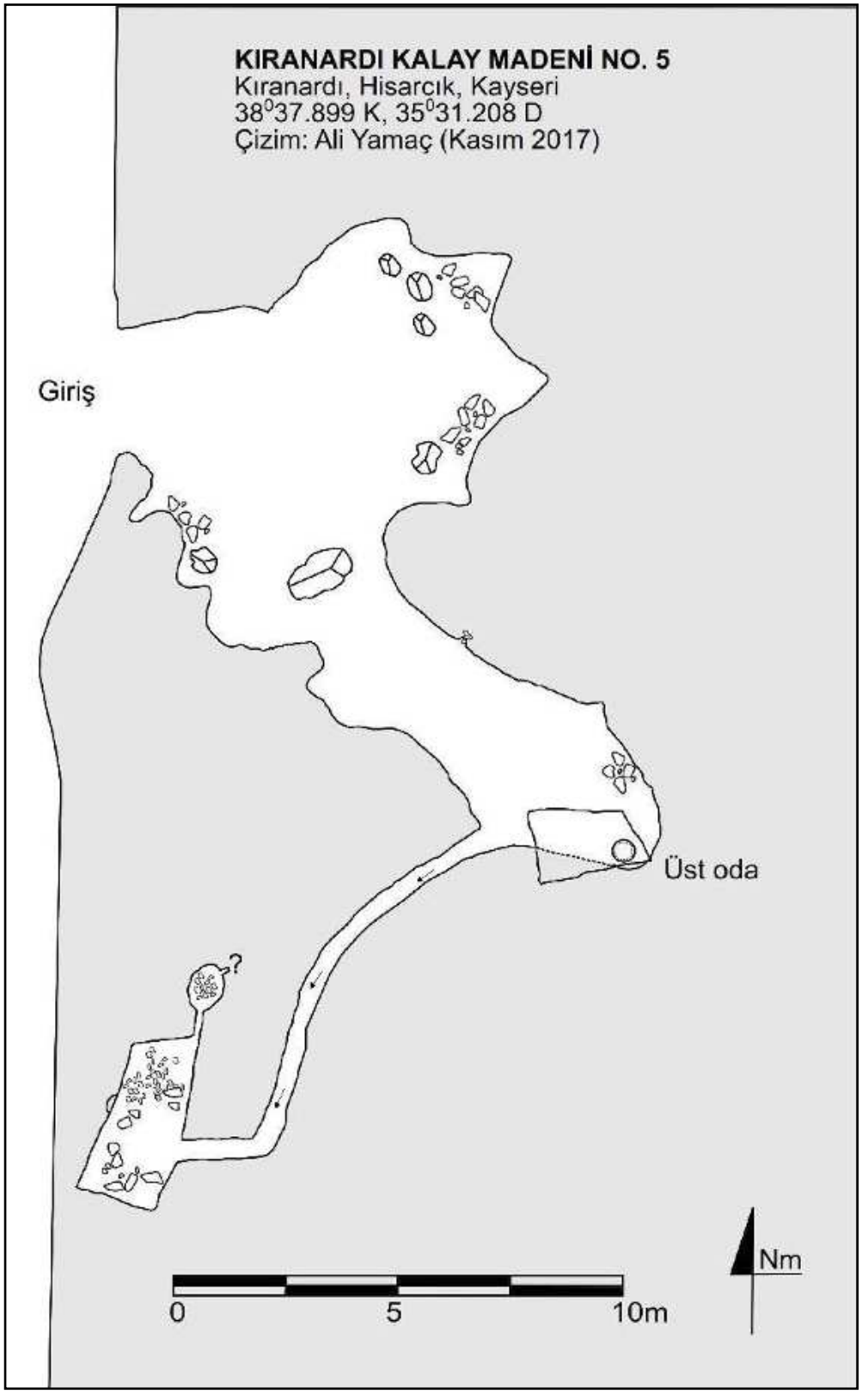
Yalçın, Ü., & Özbal, H. (2009). Ein Neues Zinnvorkommen in Kayseri-Hisarcık, Zentralanatolien: Ein Vorbericht. TUBA-AR, 12.

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KIRANARDI KALAY MADENİ NO.1
Kıranardı, Hisarcık, Kayseri
38°37'55.5" K, 35°31'08.9" D
Çizim: Ali Yamaç (Kasım 2017)
Kapı
Nm
0
1
2m


KIRANARDI KALAY MADENİ NO.2
Kıranardı, Hisarcık, Kayseri
Çizim: Ali Yamaç (Kasım 2017)
Silo / Depo
Kapı
Nm
0
2
4m


KIRANARDI KALAY MADENİ NO. 3 ve 4
Kıranardı, Hisarcık, Kayseri
Çizim: Ali Yamaç (Kasım 2017)
Giriş
Giriş
Nm
0
2
4m

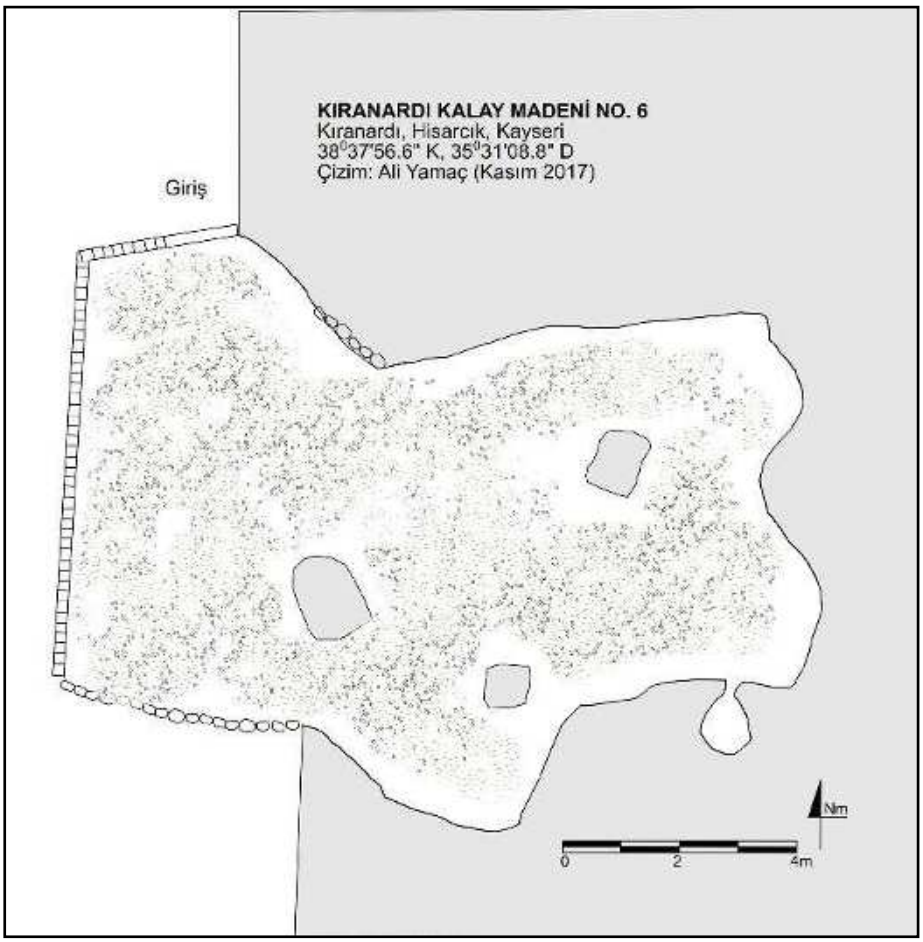

KIRANARDI KALAY MADENİ NO. 5
Kıranardı, Hisarcık, Kayseri
38°37.899 K, 35°31.208 D
Çizim: Ali Yamaç (Kasım 2017)
Giriş
Üst oda
?
0
5
10m
Nm

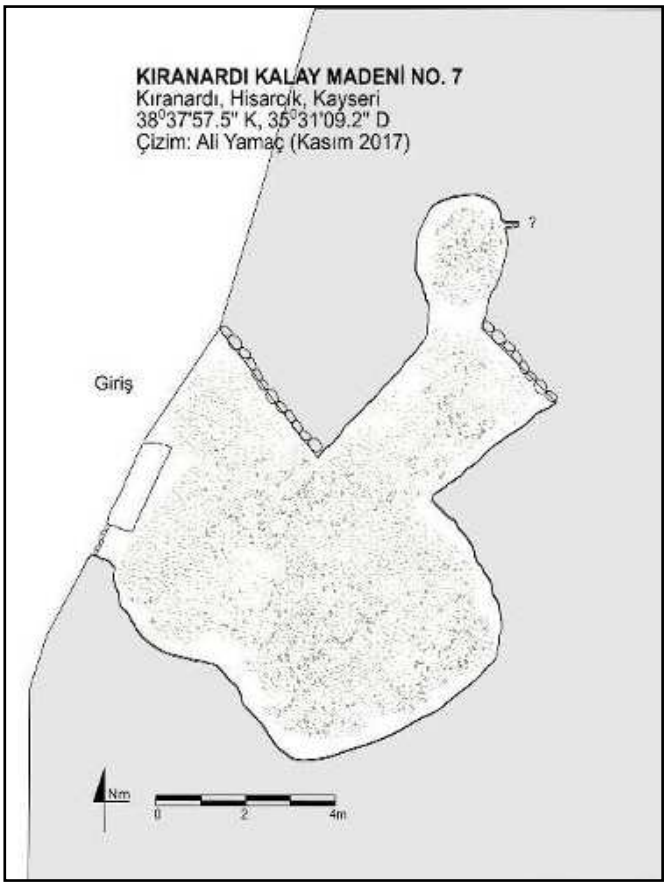


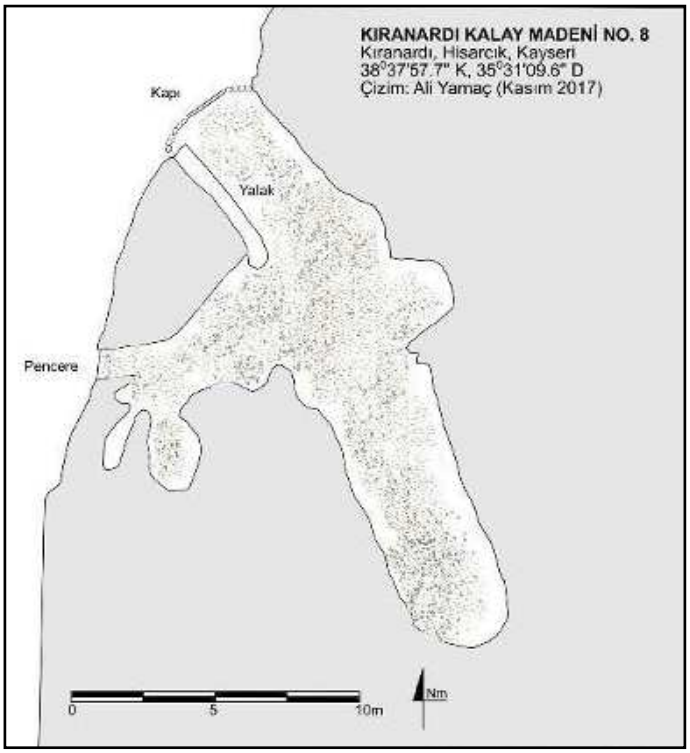
Kıranardı kalay madenlerinin bulunduğu kayalık yamaç

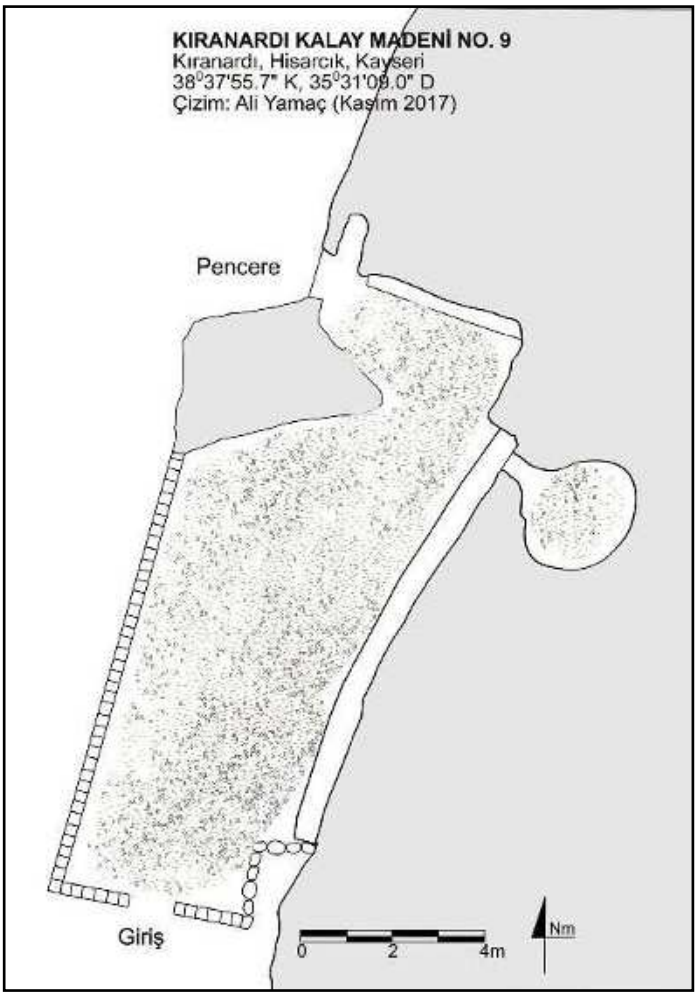


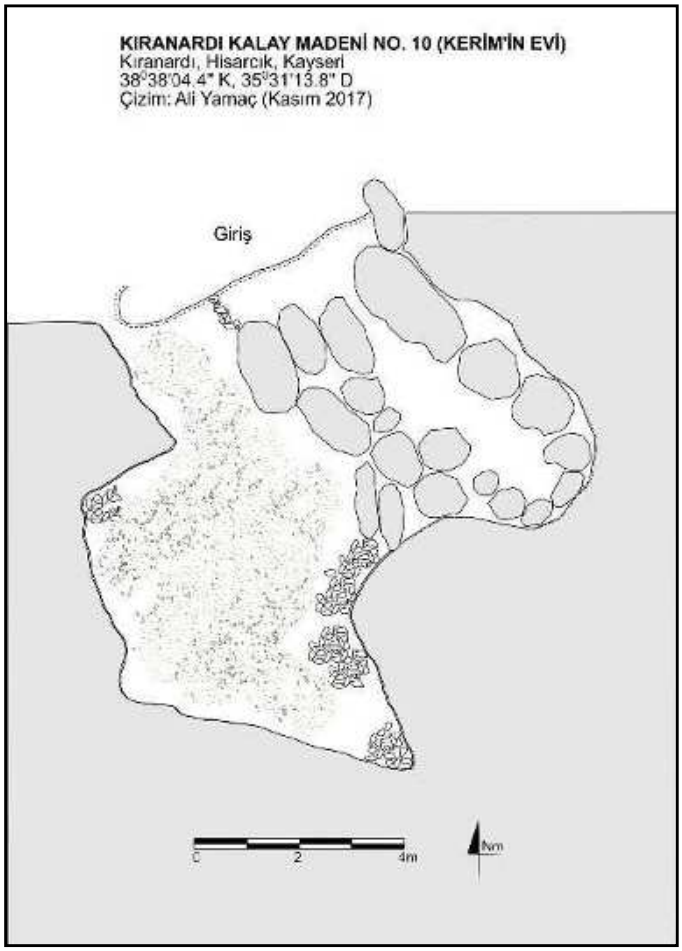
Kıranardı Kalay Madeni No. 5


KIRANARDI KALAY MADENİ NO. 6
Kıranardı, Hisarcık, Kayseri
38°37'56.6" K, 35°31'08.8" D
Çizim: Ali Yamaç (Kasım 2017)
Giriş
Nm
0
2
4m


KIRANARDI KALAY MADENİ NO. 7
Kıranardı, Hisarcık, Kayseri
38°37'57.5" K, 35°31'09.2" D
Çizim: Ali Yamaç (Kasım 2017)
?
Giriş
Nm
0
2
4m


KIRANARDI KALAY MADENİ NO. 8
Kıranardı, Hisarcık, Kayseri
38°37'57.7" K, 35°31'09.6" D
Çizim: Ali Yamaç (Kasım 2017)
Kapı
Yalak
Pencere
0
5
10m
Nm


KIRANARDI KALAY MADENİ NO. 9
Kıranardı, Hisarcık, Kayseri
38°37'55.7" K, 35°31'09.0" D
Çizim: Ali Yamaç (Kasım 2017)
Pencere
Giriş
0
2
4m
Nm





Fotoğrafın alt kısmında 2 numaralı madenin kapısı, üst solda ise 9 numaralı madenin briket duvarları ve kapısı görülüyor

Ek 1: Protokol

KAYSERİ'DE YERALTI YAPILARI ENVANTERİ

HAZIRLANMASI İŞİ PROTOKOLÜ

MADDE 1- PROTOKOLÜN KONUSU

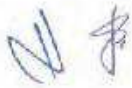
Kayseri merkezi ve ilçeleri Kayseri ili merkezi ve civar ilçeleri yüzyıllar süren kesintisiz bir iskana sahiptir. Özellikle; bölgedeki yanardağlar tarafından yüzeye püskürten ve kalınlığı yer yer 400 m'yi geçen, yumuşak ve kazılması kolay tüf kayaçlar oyularak oluşturulan yeraltı şehirleri, yerleşimler, tüneller Kayseri'nin tarihsel birikiminin en önemli unsurlarından birdir.

Hem Kayseri merkezde, hem de ilçelerde yaygın olarak rastlanan ve bazı örneklerin tarihleri yüzyıllarla ölçülen bu yeraltı yerleşimlerinin yer yer hızlı yapılaşmanın kurbanı olduğu bilinmektedir. Mülkiyetleri 2863 sayılı kanunla devlete ait olan ve aynı kanunla koruma altına alınmış olan bu yeraltı yapılarına yüzeydeki herhangi bir inşaat veya temel kazısıyla zarar verilmesinin önüne geçilmesi gerekmektedir. Bunun ilk ve en önemli adımı da tüm bu yeraltı yapılarının envanterlenerek kayıt altına alınmasıdır. Bu envanter çalışması tarihi öneme sahip söz konusu mimari yapının haritalanması ve coğrafi bilgi sistemleri aracılığıyla konumlandırılmasının yanı sıra yerleştiği jeolojik birimin ilgili yer bilimi disiplinleri açısından incelenmesi ve bölge tarihi ile ilişkilendirilmesini de kapsamalıdır.

Sonuç olarak; en az yerüstü kadar önemli ve değerli bir yeraltı birikimine sahip olan Kayseri'nin bu tarihsel mirasının en kısa sürede belgelenmesi, kayıtlara geçirilmesi ve tüm değerleri ile bir bütün halinde korunmaya alınması gerekmektedir.

MADDE 2- TARAFLAR

- BELEDİYE: Kayseri Büyükşehir Belediyesi
- OBRUK Mağara Araştırma Grubu
- ÇEKÜL: Çevre ve Kültür Değerlerini Koruma ve Tanıtma Vakfı





2008 yılında İstanbul'da kurulan OBRUK Mağara Araştırma Grubu, farklı kulüp ve derneklerden 30'dan fazla deneyimli üyeye sahiptir. Bu üyelerin yanı sıra, yürütülen proje kapsamında çeşitli disiplinlerde faaliyet gösteren birçok akademisyenden de teknik destek almaktadır. Grup daha önce Orman ve Su İşleri Bakanlığı, Milli Parklar Genel Müdürlüğü ile işbirliği içinde Küre Dağları Milli Parkı Mağaraları ve Kahramanmaraş Kuzeyi Mağaraları envanterlerini tamamlamıştır. Yeraltı yapılarının araştırılması ve haritalanması konusunda Türkiye'nin en tecrübeli mağaracılarını bünyesinde barındıran grup üyeleri 2009 yılında, proje yürütücüsü Dr. Çiğdem Aygün nezaretinde Ayasofya ve Topkapı Sarayı yeraltı yapıları araştırma projesini gerçekleştirmiştir. Gaziantep Büyükşehir Belediyesi ve ÇEKÜL Vakfı ile birlikte yürütülen Gaziantep Yeraltı Yapıları Envanterleme Projesi ise geçen yıl tamamlanmıştır. Bu çalışmalar dışında; Nevşehir Müze Müdürlüğü nezaretinde sürdürülen Derinkuyu, Mazı, Tatlarin ve Aksaray Müze Müdürlüğü nezaretinde sürdürülen Saratlı – Aziz Mercurius yeraltı şehirleri haritalama çalışmaları da ekibin yürüttüğü diğer çalışmalardan bazılarıdır. OBRUK Mağara Araştırma Grubu Türkiye'nin mağaracılık alanında tek süreli yayınını da yapmaktadır. Geçen yıllar içinde National Geographic ve Atlas dergilerinde yayımlanan 11 makaleye ek olarak yurtdışı kongrelerde 8 tebliğ verilmiş ve yabancı hakemli dergilerde 6 bilimsel makale yayımlanmıştır.

MADDE 3- PROTOKOLÜN AMACI

Bu projenin amacı, Kayseri ili sınırları içinde bulunan ve farklı sebepler yüzünden her geçen gün biraz daha tahrip olan ve bazıları tümüyle yok olma riski taşıyan yeraltı yapılarının; görsel materyal ve coğrafi bilgi sistemi araçları ile belgelenmesi, uygun teknik ekipmanlar kullanılarak haritalanması, yapıyı barındıran jeolojik birimin ilgili yer bilimi disiplinleri açısından incelenmesi, tarihsel süreçte yüklendiği işlevler hakkında varsa mevcut bilgilerin derlenmesi ve bütün bu çalışmalar ışığında toplanan verilerin uygun bir formata getirilerek envanterlerinin yapılmasıdır.

Bu çalışma; hem bazılarının tarihi yüzyıllarla ölçülen bu tarihsel mirasın korunmasını sağlayacak, hem de bu yapıların gelecekte mümkün olabilecek kullanım alanlarının projelendirilmesi için bir ilk adım olacaktır.

MADDE 4- YÖNTEM

- Yapılması planlanan çalışma temel olarak Kayseri'de mevcut yeraltı yapılarının (mağara, yeraltı şehri, barınak, yerleşim, tünel, vs.) tespit edilmesi, ölçülmesi ve haritalanmasından ibarettir.
- Bu çalışma sırasında başlangıç olarak Kayseri şehri alınacak, şehir merkezindeki çalışmaların tamamlanmasının ardından çalışmalar ilçelere yönlendirilecektir.
- Çalışmada ağırlık verilecek noktalar Kayseri Büyükşehir Belediyesi, Kayseri Müzesi yetkilileri ve ÇEKÜL Vakfı'nın önerileriyle oluşturulacaktır.
- İlk aşamada, hakkında bilgi sahibi olunan tüm yeraltı yapıları bölge haritası üzerine işaretlenecek, ardından şehir merkezinden başlayarak tüm bölgede yeraltı yapıları araştırmasına geçilecektir.
- Bu, ikinci aşamada, varlığının bilgisine sahip olunan tüm yapılar tespit edilip ölçülecek ve ana plana işlenecektir. Tünel, yeraltı şehri gibi arkeolojik ve mimari öneme sahip yapılar ise; mimari ölçümler dışında, eğim ve yönleri de ölçülerek araştırılacak, yüzeye bağlantılı oldukları noktalar referans alınarak mümkün olduğunca doğru bir şekilde bölge yüzey haritasına işlenecektir.
- Bu çalışma sırasında; her yeraltı yapısı ayrı bir föy halinde envanterlenecek, yapının planı, çizimi, özellikleri ve fotoğrafları bu şekilde; ayrı fişler halinde kayda alınacaktır.

MADDE 5- ÇALIŞMA EKİBİ

Proje, OBRUK Mağara Araştırma Grubu'na üye mağaracılar ve OBRUK Mağara Araştırma Grubu'nun bilimsel gözlem ve olası teknik incelemeleri kapsayan tamamlayıcı faaliyetleri gerçekleştirmek üzere anlaştığı ve taraflar tarafından onaylanan iştirakçiler tarafından yürütülecektir.

Yeraltı ölçüm çalışmalarında 3, azami 4 kişilik ekipler halinde çalışılması ideal olduğu için, bu projede görev alacak ekip çoğunlukla gün başına 4-6 kişi civarında olacaktır. Ölçüm ve haritalama çalışmaları yanı sıra gerçekleştirilecek bir başka çalışma daha mevcut ise ekip azami 6-8 kişi olacaktır.

MADDE 6- SÜRE

Elimizde Kayseri yeraltı yapılarına ait herhangi kapsamlı bir veri olmaması ve bölgede daha önce tespit edilmiş bazı yeraltı yapılarının büyüklüğü göz önüne alındığında bahsi geçen projenin yaklaşık üç yıl ve toplam 1400 adam/gün sürebileceği öngörülmektedir.

MADDE 7- TARAFLARIN SORUMLULUKLARI

- Belediye'nin Yükümlülükleri;
  - A. Çalışmanın idaresinin sağlanması,
  - B. Bir kısmı özel mülkiyette, diğer bir kısmı ise kamu alanlarında yer alan tüm yeraltı yapıların araştırılması için gerekli izinlerin sözlü ve/veya yazılı olarak alınması,
  - C. İşin yapılabilmesi için çalışma ekibinin ihtiyaç duyacağı; ulaşım, konaklama, iaşe giderlerinin karşılanması.

- OBRUK'un Yükümlülükleri;

  - A. Kayseri ili sınırları içinde mevcut yeraltı yapılarının (mağara, yeraltı şehri, barınak, yerleşim, tünel, vs.) tespit edilmesi, ölçülmesi, haritalanması ve envanterlerinin yapılması,
  - B. Araştırma sırasında çalışılacak yeraltı yapılarında rastlanabilecek hiçbir tarihi buluntuya dokunulmadan korunması,
  - C. Mimari yapıların yanı sıra tüm buluntuların fotoğraflarla belgelenmesi,
  - D. Tarihsel öneme sahip herhangi bir buluntu ile karşılaşılması durumunda yetkililere bildirilmesi,
  - E. Çalışmaya katılan ekibin, iş güvenliğinin sağlanarak olası kazalara yönelik önlemlerin alınması,

- ÇEKÜL'ün Yükümlülükleri;
  - A. Çalışmanın koordinasyonu ve sekretarya görevleri ÇEKÜL Vakfı Kayseri Temsilciliği tarafından yürütülecektir.

MADDE 8- DİĞER HÜKÜMLER

A. Çalışma esnasında meydana gelebilecek can ve mal kayıplarından Belediye ve ÇEKÜL sorumlu tutulamaz.

B. Çalışma arşivleri ve çıktıları Belediye'ye ait olup, Belediye'den izin almaksızın kullanılamaz ve yayınlanamaz.

MADDE 9-YÜRÜTME/YÜRÜRLÜK

A. İşbu protokol imzalandığı tarihten itibaren yürürlüğe girer.

B. Protokolden doğan ihtilaflar iyi niyet çerçevesinde taraflar arasında çözüme kavuşturulmaya çalışılır. Bu mümkün olmadığı takdirde Kayseri Mahkemeleri yetkilidir.

C. Dokuz (9) maddeden oluşan bu protokol ilgili taraflarca 3 nüsha olarak .../.../2017 tarihinde imzalanmıştır.

Av. Hüseyin BEYHAN Başkan a. Genel Sekreter	Prof.Dr. Metin SÖZEN ÇEKÜL Vakfı	Ali M. YAMAÇ OBRUK

Ek 2: Sunum ve Yayınlarımız

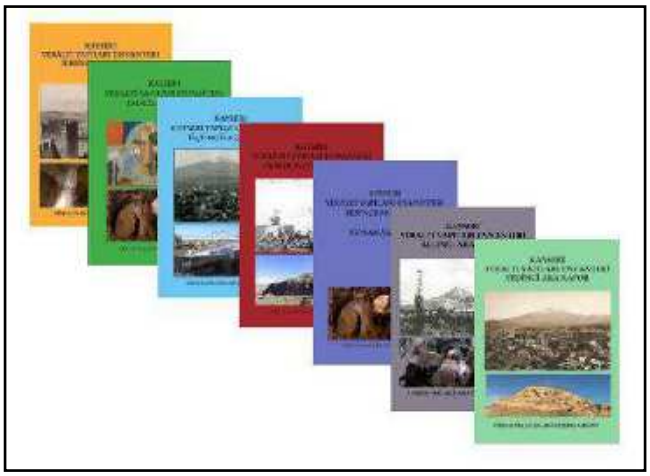
"Kayseri Yeraltı Yapıları Envanteri Projesi" ne başladığımız 27 Aralık 2013 tarihinden bugüne dek geçen on yıl içinde bu yapılarla ilgili olarak yurt içinde ve yurt dışında toplam 31 yayın yapıldı ve bu proje başlamadan önce çok az yayını olan Kayseri Yeraltı Yapıları dünya çapında bir öneme kavuştu. Bu yayınların dökümleri ise şöyle:

1 Kitap
8 Uluslararası Sempozyum Bildirisi
11 Uluslararası Makale
11 Ulusal Yayın

Bu yayınların 25 i daha önceki altı ara raporumuzun ekinde basılmıştı. 6. Ara Rapor'un basıldığı Kasım 2022 tarihinden bugüne dek geçen üç yıl içinde yayımlanan üç uluslararası makalemizi, iki uluslararası sempozyum bildirimizi ve kitabımızı ise aşağıdaki sayfalarda görebilirsiniz.

Yapay mağaralar ve bunların araştırılmaları ile ilgili yayın yapan ve dünyanın bu konuda en önemli hakemli dergisi olan Opera Ipogea da bugüne dek Kayseri yeraltı yapıları ile ilgili on makalemiz yayımlandı. Bu makalelerin yayınlandığı dört sayının kapak fotoğrafları ise projemize aitti.

Hepsinden önemlisi ise, geçen bu süre zarfında toplamı 1200 sayfayı aşkın yedi ara rapor yayımlanmış olmasıdır.



Yedi ara raporumuz



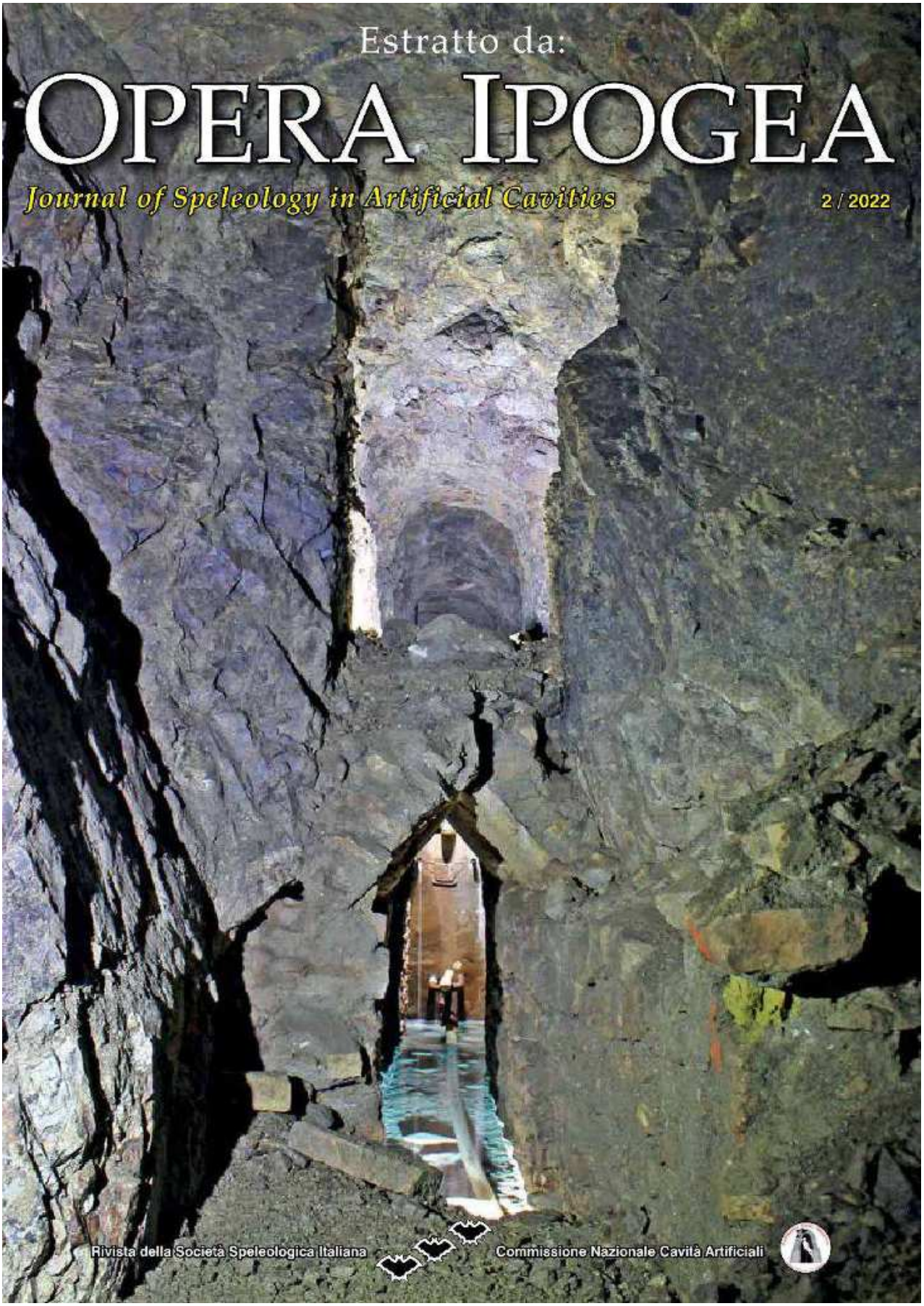
Opera Ipogea dergisinde kapak fotoğraflarımız

Estratto da:

OPERA IPOGEA

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Derevank rock-cut monastery of Kayseri (Turkey)

Il monastero rupestre di Derevank a Kayseri (Turchia)

Ali Yamaç

Abstract

With a total of 16 rock-cut structures, Derevank Monastery, also known as St. Sergius/Surp Sarkis Monastery, is one of the most prominent religious sites in the region. It is located east of Kayseri in the Derevank Valley. Even though it has been referenced in numerous books, this rock-cut monastic structure has never been fully examined. A number of the articles written about it, are also inaccurate and incomplete, as you'll see below. This rock-cut structure, together with Subaşı Monastery, is one of Kayseri's two largest rock-cut monasteries. In this article, all previous studies on this structure were evaluated and analyzed in addition to the survey and research we conducted at Derevank Monastery.

Keywords: Cappadocia, Kayseri, Derevank, Armenians, rock-cut monastery.

Riassunto

Dopo una panoramica sui siti rupestri dell'Asia Minore, in particolare quelli di origine armena, tra cui Urfa, Ani e Ahlat nella Turchia orientale, viene presentato un breve *excursus* sui ritrovamenti delle strutture sotterranee, tra cui quelle di culto, nell'ambito di un progetto pluriennale di ricerca sul territorio di Kayseri, capoluogo di una delle province dell'Anatolia centrale, già capitale in epoca romana dello storico *thema* di Cappadocia. Oggetto del contributo è, nello specifico, il Monastero di Derevank, la cui denominazione testimonia l'origine armena. Si trova nella omonima Valle di Derevank, contigua alla periferia est di Kayseri. È conosciuto anche come Monastero di San Sergio/Surp Sarkis. Con un totale di 16 concamerazioni che si estendono su un fronte di 120 m, parallelo alla falesia, e risulta essere, assieme al Monastero di Subaşı, uno dei principali siti di culto cristiano scavati nelle rocce vulcaniche della regione.
Nonostante che il complesso monastico sia citato in numerose pubblicazioni, in realtà non è mai stato indagato sistematicamente. Molti articoli scritti sull'argomento sono risultati sia imprecisi sia incompleti, come vedremo nello sviluppo dell'articolo in cui vengono riportati i risultati delle indagini condotte dal 2014 dall'Obruk Cave Research Group di Istanbul in accordo con le Istituzioni locali.
Ad integrazione delle osservazioni puntuali sui vari settori che compongono l'insediamento, evidenziando peculiarità e anomalie, sono stati presi in considerazione e analizzati i dati rilevati dagli studi precedenti mettendo, tra l'altro, a confronto le varie ipotesi di datazione che riconducono ad un'epoca almeno precedente al XVI secolo, ma verosimilmente risalente al tempo delle razzie arabe, tra VII e XI secolo. Inoltre, si sottolinea il fatto che tuttora, nonostante le più recenti e specifiche indagini, ancora troppo poco si conosce di questo insediamento; sussistono, persino, dubbi sulla sua effettiva destinazione d'uso, tra luogo di culto e residenza.

Parole chiave: Cappadocia, Kayseri, Derevank, armeni, monastero rupestre.

Armenian rock-cut architecture

Artificial cavities and rock dwellings are common not only in the Cappadocia region but also in almost every part of Anatolia. Although located hundreds of kilometers apart and spanning thousands of years, all these structures, serve similar but varied purposes from residential to the storehouse, and from religious to defensive structures.
In addition to several singular rock-cut structures that have been carved in provinces such as Konya-Kilistra and Sille, Bitlis, Ankara-Nallıhan, Batman, Mardin-Midyat or Çorum, there are also dense rock-dwellings carved close to one another in different parts of Anatolia. Apart from Cappadocia, one of the most common places where such structures are seen is the region known as the "Phrygian Highlands", in the provinces of Eskişehir-Afyon in Northwest Anatolia. There are hundreds of rock-cut shrines and settlements in this area of approximately 4,000 km². The rock-cut structures in this region were first carved by the Phrygians in 600-700 BC; some of them were used for residential

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purposes or converted into churches over time. In addition, many more rock-cut churches were carved during the Byzantine Period (Uçkan, 2010).

In Karaman Province, in Central Anatolia, there are also numerous rock-cut structures carved into the soft Neritic limestone. Although first discovered by the Russian geographer Pierre De Tchihatcheff as early as the middle of the nineteenth century, only some of these structures that are concentrated around Manazan and Gödet villages, but which are part of large cliff settlements, have been subjected to scientific studies. In the second volume of his monumental work "Asie Mineure: Description physique, statistique et archeologique de cette contree", published in five volumes between 1853-60, he stated regarding Gödet Village "*This rock settlement, on the walls of a deep canyon, is very impressive*" (De Tchihatcheff, 1853-60).

There are numerous Armenian rock-cut structures and churches in some regions with dense Armenian settlements, for example in Eastern Anatolia, especially Urfa, Ani, and Ahlat. In Urfa Province, both on the walls of the Euphrates River and within the city there are numerous Armenian rock-cut structures. Among these structures, some of which have been studied by us in recent years, there are houses, churches, and even a five-story monastery. A rock-cut church with Armenian inscriptions on its walls that we found during our studies around Urfa–Halfeti, along with the well-known Hromgla Castle on the opposite shore, can be dated to the 12th or 13th century (Obruk, 2019).

In eastern Anatolia, especially in Ani and Ahlat, hundreds of rock-dwelled settlements were explored, surveyed, and documented during years of archaeological work. Dwellings carved in volcanic rocks in the east of Kars, on the slopes of the ancient Armenian site of Ani facing the Arpaçay River (Ahurian), and in the citadel were investigated by Kipshidze in 1915. After his death, Kipshidze's notes were published by Tokarski in the Armenian Academy of Sciences in 1972. These notes mention the impressive number of 823 underground structures, mostly dwellings, but also churches, passages, cemeteries, and dovecotes in Ani (Kipshidze, 1972). Most of these artificial cavities found in Ani were extensively researched and published by Centro Studi Sotterranei of Genoa (Bixio *et al.*, 2009).

During the four-year surface investigations in Ahlat, on the west coast of Lake Van, more than 400 rock-cut structures were identified and surveyed in 17 different zones. Although it is difficult to determine the age of all these structures carved in the pyroclastic rocks, which is not unusual in the case of artificial cavities, they are likely to date to a period between the twelfth and fourteenth centuries, both by comparing the architectural features of the Armenian church and by examining the potteries found during the underground tunnels excavations (Bixio & De Pascale, 2011; Bixio *et al.*, 2013; 2014; 2015).

Despite being a dense Armenian settlement, academic studies on Armenian rock-cut structures around Lake Van are still very insufficient. The only exception is a study of Armenian rock-cut churches in Gevaş – Üçpınar (Başak *et al.*, 2018).

In some other regions, Armenian churches are intertwined with the rock-cut structures of other religious groups. Like many other regions, Cappadocia is one of the regions where places of worship of several different faiths coexist, but this area is very different from all the other regions mentioned above. The difference is that in Cappadocia, besides the sheer number of rock-cut churches or dwellings, there lived a troglodyte population in a very large area that lasted hundreds of years. Cappadocia's underground and rock-cut structures are both incredible in number and variety. The inventory of these rock-cut sites, which are also known to contain dozens of Armenian churches, is still incomplete (Akyürek *et al.*, 2015).

Rock-cut religious architecture of Kayseri

Cappadocia, in general, and Kayseri, particularly, is considered the cradle of Christianity in Anatolia. In this region, where Christian communities began to take shape in the second century, the first religious buildings started to be built in the 4th century, influenced by important religious figures such as St. Basil, and numerous rock-out churches were excavated in the following centuries. There are more than 300 rock-cut churches -which can be dated between the 6th and 13th centuries- and they have always been the most significant cultural artifacts of Cappadocia. The rock-cut churches of Cappadocia, some of which are located within Göreme National Park, which was accepted as a World Heritage Site in 1985 by UNESCO, are covered with frescoes, some of which date back to the 6th and 7th centuries. 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.

During this project, till now, we have explored, researched, and surveyed 47 Byzantine rock-cut churches, 35 underground settlements, 10 Assyrian tin mines, three underground aqueducts, and six different cliff settlements. Forty-five of these 47 rock-cut churches that we researched and surveyed had never been the subject of any scientific publication previously. Within the scope of the project five preliminary reports have been published so far. Apart from these preliminary reports, we published many articles in scientific journals about rock-cut structures that we researched during our studies, and three of them were specifically about rock-cut churches (Strauh *et al.*, 2019; Yamaç, 2021; Yamaç & Tok, 2015).

Most of the 47 rock-cut churches are single nave, small, without any ornaments, and only a few have some 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. One of the few exceptions is one out of two rock-cut churches which we photographed and surveyed in Değirmendere Valley. It was dated by Cath-

erine Jolivet-Levy from mid to late 8th century, despite its frescoes are destroyed (Jolivet-Levy, personal communication, 2020). Two churches were examined by Karakaya before we started working in the region. Even though Karakaya dates the Ispıdın Church No.1 and Subaşı Church to the 10th–11th and 11th–13th centuries, respectively, these dates either cannot be considered as references for all other churches in the same region, or they are rather argumentative (Karakaya, 2013; 2014). On the other hand, in Belağası, located in a rock-dwelled village, "Holy Cross Church" was constructed in 1842. The southern wall of the church had been built by carving the rocks and the northern façade is stonewalled. The church was exposed to the devastation of time and illegal "treasure hunters" after 1915. Only a very small part of decoration and Armenian epigraphs within the building have reached the present day (Yamaç & Tok, 2015).
Forty-two of these 47 rock-cut churches we researched are located in Koramaz Valley, east of Kayseri. There are seven villages on the slopes of this valley, which has a total length of 16 km from east to west; they are Büyük Bürüngüz, Üskübü, Küçük Bürüngüz, Ağırnas, Dimitre, Vekse, and Ispidin. The distribution of the rock-cut churches according to the villages is as follows:

Koramaz Valley	
VILLAGES	**CHURCHES**
Büyük Bürüngüz	-
Subaşı	1 (monastery)
Küçük Bürüngüz	-
Ağırnas	15
Dimitre	7
Vekse	5
Ispıdın	14
TOTAL	**42**

The "Kayseri Underground Structures Inventory Project", which is still ongoing after eight years, has allowed the investigation of brand-new structures that have not been researched before, identified in each of our explorations. The last of these and perhaps one of the most important is the Derevank Monastery, in the omonimous valley orthogonal and not far (10 km west) from the above said Koramaz Valley, the details of which are reported below.

Derevank Valley and village

The name of Derevank Valley, which is 4 km east of Kayseri and eroded by the Karasu Stream (fig. 1), has been transformed into Turkish from the Armenian original name. Poghosyan writes that the first form of the name is "Dzoravank", and it turns into "Teravank" and then "Derevank" over time and adds: "*... in the Armenian language the word 'vank' means a monastery, and 'dzor' means a gorge; and in Turkish the gorge sounds like 'dere'...*" (Poghosyan, 2018).



Fig. 1 – Location map showing Kayseri and Derevank Valley (after Google Maps and Google Earth - elaboration A. Yamaç).
Fig. 1 – Mappa di posizionamento di Kayseri e della Valle di Derevank (da Google Maps e Google Earth - elaborazione A. Yamaç)

Located in the east of Talas district, in the northwest-southeast direction, this valley stretches from Tavlusun to the south, up to Zincidere. A stream carrying a large amount of water flows into the riverbed in winter and spring. There are many large and small artificial caves on both steep slopes in the northern part of the valley (fig. 2). The small village at the northwest exit of Derevank Valley is also called Derevank Village. This settlement, which



Fig. 2 – General view of Derevank Valley from the north entrance towards south. The Derevank Monastery is located on the steep cliffs on the right of the photo (photo A. Yamaç).

Fig. 2 – Panoramica della Valle di Derevank vista dall'imbocco settentrionale verso sud. Il Monastero di Derevank è posizionato sulla ripida balza sulla destra della foto (foto A. Yamaç).

does not have much remains today and is considered a part of Tavlusun district, had 70 households in the 1806 census. Many important people of the city had their homes in this village, which was a summer resort of Kayseri at that time.

Quoting Alboyajian, who describes both the valley and the village in detail, Poghosyan said that the fronts of all the houses in Derevank Village were made of cut stone and their backs are adjacent to the rocks and have carved like-cave rooms used as storage facilities and even refrigeration rooms. There were two churches and a modest school in the village (P'oghosyan, 2018).

The Balyan family, which has eight important architects during the last period of the Ottoman Empire and left their mark on the late Ottoman architecture, was from Derevank. After the imperial architect Merametçi Bali Kalfa (death 1803), other architects of the family created dozens of important public structures such as Çırağan Palace, Ortaköy Mosque, Aksaray Valide Mosque, Beyazıt Fire Tower, II. Mahmud Tomb, Abdülmecid Tomb, Beylerbeyi Palace, Galatasaray High School, Ihlamur Pavilion, Küçüksu Pavilion in Istanbul (Pamukciyan, 2003).

Sarkis Karakoçyan (1865-1944) is an important Ottoman lawyer who was the compiler of many laws and regulations, especially the Corpus of Laws and Registry of Laws. The Karakoçyans are an Armenian family from Derevank with a history of more than 300 years. The oldest known member of the family is Karakoç, the son of Koca Zakar, and this name is written on a 1669 Bible belonging to the Derevank Monastery (Akgündüz, 2001).

Apart from the monastery in Derevank Valley, there were two more Armenian masonry churches inside Derevank Village: Surp Toros and Surp Asdvadzadzin (Surp in Armenian, corresponds to Saint).

They were in use until the 1890s. In the list prepared by the Patriarchate, it is seen that the Surp Toros Church on the upper side of the village was built in 1626. Surp Asdvadzadzin Church, which was destroyed in the earthquake of 1825, was re-

built in 1859 with an edict of 1848 (Açıkgöz, 2007; Penoni, 2015).

Derevank Monastery (St. Sergius - Surp Sarkis Monastery)

Along with its church, there is a huge rock-cut Armenian monastery in Derevank Valley, which is the origin of the valley's name, as "vank" means "monastery" in Armenian. Although it is one of the most important rock-cut monasteries in the whole of Kayseri, this structure, which has only been briefly mentioned in a few different publications, has not been extensively researched and historical information about it is very limited. The first date of construction of the Monastery is unknown and even its name is misspelled in some sources.

For example, its name, which is stated to be St. Sergius or Surp Sarkis, is referred to as Surp Toros both in Güner Sağır's Master's Thesis and in the article she wrote by quoting from this thesis (Sağır, 2000; 2005), and Poghosyan corrects this error with the following sentence in his article: "*... the young researcher in the 5th issue of the journal 'Turkish Archeology and Ethnography' for 2005 published an article 'A group of Armenian churches built in the Ottoman period in the province of Kayseri', in which one of the four parts was dedicated to the church in the village of Derevank and was called 'Surp Toros Kilisesi'. The researcher in his article erroneously presented the cult center of the monastery of St. Sergius as the church of St. Toros*" (Poghosyan, 2018).

Indeed, this rock-cut monastery complex in the Derevank Valley is referred to in all sources as St. Sergius or Surp Sarkis, and Surp Toros, written by Güner Sağır, is the name of another church in Derevank Village. On the other hand, Poghosyan, who made the most comprehensive study on this structure, did not even come to the region, not to mention the fact that he never saw the monastery complex. In the "The Derevank Cave Complex" presentation he made at the Speleology and Spelestology IX International Scientific Conference in 2018, he says: "*Due to the fact that the relevant structure is inaccessible to research, references to it mainly refer to modern times, i.e. to the period of the 18th - 20th centuries*".

The positive aspect of Poghosyan's study is the research of all Armenian sources about this monastery. As he himself emphasized, all information he wrote in his presentation about this structure refers to old and recent sources. For example, he is the first researcher to translate the detailed description of this structure written by Arshak Alboyajian (Alboyajian, 1937).

However, we point out that Derevank Valley, described as "*inaccessible to research*", according to Taliyol (http://taliyol.com/2011/04/13/derevenk-vadisi/ access March 14, 2022) is today one of the favorite hiking routes of the region. We can also note that the plan of the church, taken from the Master's Thesis of Sağır's, quoted above, is very imprecise and, however, it is the only existing one. We will discuss this in detail in the Architectural Details section below. It is very difficult to find and read this 2500-page work, which was published in Armenian in Cairo and was not translated into another language, Poghosyan has the great merit, as mentioned above, of having read this work and of having extrapolated several quotations. Apart from Alboyajian, he also quoted the following lines from Inchichyan's work of 1806: "*There is a monastery near the village, the brethren of which consisted of only 3 - 4 monks. There are many caves in the rocks around the village, in one of them St. Sergius was once a hermit, and the monastery is dedicated to him. The main church of the monastery is carved into the rock. The passage to it is difficult and dangerous, and in front of it, there is a chapel, also carved into the rock*" (Poghosyan, 2018).

There are only two western travelers who have seen the rock-cut monastery in Derevank Valley and mentioned it in their works. Charles Texier, in his book published in 1849, expressed the opinion that the man-made caves in the Derevank Gorge was very ancient, dated back to the beginning of Christianity, and served as a place of prayers (Texier, 1849). And, 50 years after Texier, Vital Cuinet in the first volume of his four-volume work, suggested that the caves in the Derevank Gorge served as a place for hermits (Cuinet, 1890-95).

Apart from all these sources we have mentioned, there are only very short notes about Derevank Monastery in some other contemporary studies. For example, there is only one line about Derevank Valley in the article of Tavlusun in Hild and Restle's book "Kappadokien" and a rock-cut small church and rock-cut monasteries are mentioned around the valley (Hild & Restle, 1981). There is no detailed information about Derevank Monastery in the work titled "Kayseri with its Armenian and Greek Cultural Heritage" prepared under the editorship of Altuğ Yılmaz. The only note about this structure, which is mentioned as a line in the database, consists of the caption of a photo: "*The remains on the southern slope of the Derevank Valley of Talas are thought to belong to Surp Sarkis Armenian Monastery, which was built in the 17th century*" (Yılmaz, 2016).

There is no information about the complex even in the work prepared under the editorship of Banu Pekol, named "Kayseri, Adana, İzmir, Elazığ, Niğde, Bursa; Assessment Report of Architectural Cultural Heritage". However, in this work, the other two Armenian churches in the village located at the exit of Derevank Valley are described in detail (Pekol, 2018).

Architectural details

Derevank Monastery is indisputably different from all the rock-cut structures we have searched and surveyed in Kayseri for eight years, and architecturally it has a much more advanced conformation than any of the structures we have examined so far. Located 35 m above the valley floor, this monastery complex

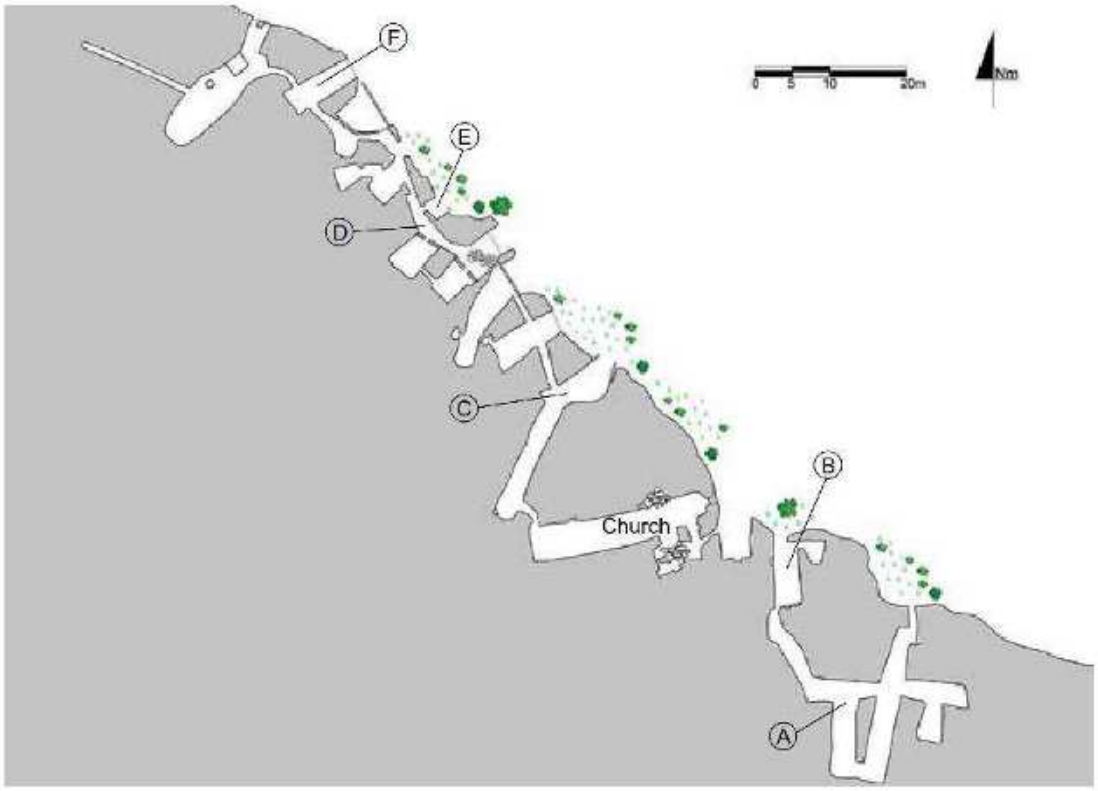


Fig. 3 – Plan of Derevank Monastery rock-cut complex (drawing H.I. Kala, A. Yamaç - January 2022).
Fig. 3 – Pianta del complesso rupestre del Monastero di Derevank (grafica H.I. Kala, A. Yamaç - gennaio 2022).

was completely excavated into soft volcanic tuff and the front of the complex, extending in the northwest-southeast direction, has a total axis length of 120 m. Apart from 12 different structures facing the valley – one of which is a church – there are also a few more chambers on the backside (fig. 3).
Derevank Monastery embodies a few different peculiarity from an architectural point of view. The first feature is that all chambers on the front and rear facades in the last part of the building, which continues to the northwest after the church, are connected by a longitudinal rock-carved internal corridor (D), more or less parallel to the profile of the external cliff. All rock-cut chambers of the backside still have doors opening to this underground corridor. The reason for such a difficult architectural practice, which is not intended for any protection, is unclear but this internal passage could be carved simply to avoid snow and cold during winter (fig.4).
In other examples such as the Subaşı Rock-cut Monastery, the necessary small passages were provided by individual short independent tunnels dug into the rocks, and the outside passage in front of the structures was used for all other connections. Of course, also in the case of the Derevank Mon-



Fig. 4 – Entrances of Derevank Monastery rock-cut complex. Harsh winters (up to 25 degree below zero), and hot summers, are probably the earliest reason that pushed the inhabitants to take advantage of the thermal inertia that characterizes the spaces excavated into the cliff (photo A. Yamaç).
Fig. 4 – Ingressi del complesso rupestre di Derevank. Inverni rigidi (sino a 25 gradi sotto zero) ed estati calde, sono verosimilmente la prima ragione che ha spinto gli abitanti a sfruttare l'inerzia termica che caratterizza gli ambienti scavati nella falesia (foto A. Yamaç).



Fig. 5 – A large basket vaulted gallery in the southeast section of Derevank Monastery (photo A. Yamaç).

Fig. 5 – Una delle ampie gallerie con "volta a paniere" del settore SE del Monastero di Derevank (foto A. Yamaç).

astery, along the facade of the cliff there is a large external path that can still be used today to reach the various entrances.

Another architectural peculiarity of the complex is the gigantic galleries located both in the southeast of the settlement and in the continuation of the church. These galleries start from the easternmost entrance of the monastery. The fact that there are no niches on the walls and no silos on the ground proves that the large galleries with basket vault, 4 m wide in places and 2.5 - 3 m ceiling height, were not used functionally. Following the first entry in the southeast, these galleries formed a triangle and continue in both directions along its long side, and are not part of the longi-



Fig. 7 – Barrel vaulted Church of the Derevank Monastery: view to the east, toward the apse and the outside (photo A. Yamaç)

Fig. 7 – Chiesa del Monastero di Derevank con volta a botte: vista verso est, in direzione dell'abside e verso l'esterno (foto A. Yamaç).



Fig. 6 – Chamber (B), view from the opening in the valley, looking south towards the back wall. The passage on the right, now closed by squared stones, was in connection with the galleries of the sector (A). Remnants of plaster on the walls can be seen (photo A. Yamaç).

Fig. 6 – Camera (B), vista dall'affaccio sulla valle, guardando a sud verso la parete di fondo. Il passaggio sulla destra, ora chiuso da pietre squadrate, era in connessione con le gallerie del settore (A). Sulle pareti sono visibili resti di intonaco (foto A. Yamaç).

tudinal rock-carved corridor we mentioned above. The reason for the carving of these galleries, which were too large to be connection tunnels is unclear (Point A in the map and fig. 5).

After a narrow passage, these galleries reach another chamber that opens to the surface and has niches on its walls (Point B in the map and fig. 6). The structure after this room and another contiguous corresponds to the church of the monastery (fig. 7). The narrow and short tunnel leading to the church is not original and apparently the church had no connection with any of these structures of the southeast.

Before our study, the only plan for the church of this monastery -as we mentioned above- was available in Sağır's thesis and article. The plan drawn by us of this church, whose interior details we measured with 46 different stations, was so different from Sağır's sketch that we simply thought there was another church in a different part of the valley (fig. 8). The church in this sketch -along with all the other monastery rock-cut buildings- is located on the west slope of the Derevank Valley, and its apse should face east. Although there is no direction arrow in Sağır's sketch, it is very clear that the rock wall and the entrance are oriented to the east and the apse is instead shown to the west.

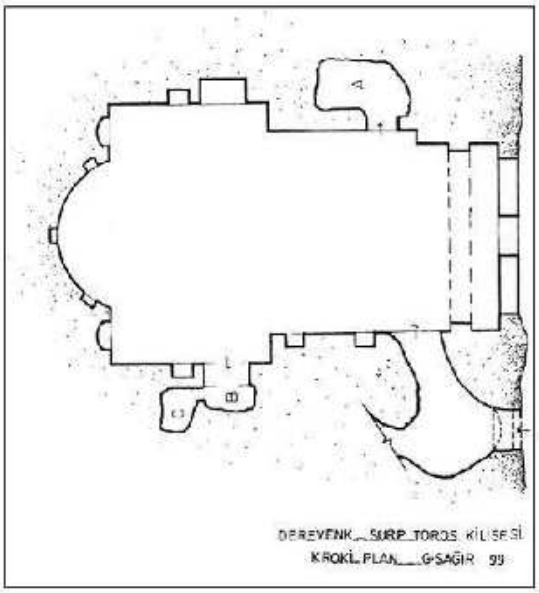


Fig. 8 – Reproduction of Sağır's 1999 sketch (without orientation and scale) of the Church of Derevank Monastery, which was wrongly referred as to Surp Toros Church (drawing after Sağır 2000).

Fig. 8 – Riproduzione dello schizzo del 1999 di Sağır (senza orientamento e scala) della chiesa del Monastero di Derevank, che è stato erroneamente attribuito alla Chiesa di Surp Toros (grafica da Sağır 2000).

If Sağır and Poghosyan are not describing another church located on the opposite slope of Derevank Valley but from the photos they have posted it seems not to be so, this sketch of the church and what they wrote about the building may not be exact. Most of the statements about this church that Sağır wrote in her thesis and article appear also incorrect.

As can be seen from our plan (fig. 3), the apse of the church is towards the east. There is a window on the upper part of the semicircular apse, whose altar has been completely destroyed. The nave is 26.5 m long and 5 m wide on average. The 3.80 m high ceiling of the nave is entirely barrel-vaulted, and the walls of both the apse and the nave are plastered, although partially spilled. Except for a few small marks on the north wall of the apse, there are no frescoes in the church. The part on the north wall of the nave, which we assume to be a chamber, is completely blocked by large blocks of rock fallen away from the ceiling. The other chamber, located on the south wall opposite this chamber, has a double connection to the nave. The outer connection tunnel of this second chamber, which opens to the surface, is not original and was excavated later - as we wrote above.

The next structure from the church to the north is another gallery–corridor whose function is uncertain. This basket vault gallery, which has one or two niches



Fig. 9 – The large straight basket vaulted gallery, 21 m long, which connects to the church (photo A. Yamaç).

Fig. 9 – La grande galleria rettilinea con volta a paniere, lunga 21 m, collegata alla chiesa (foto A. Yamaç).

on its walls, is 3.20 m wide and extends straight for 21 m (Point C in the map and fig. 9). After this gallery–corridor, the purpose of which cannot be understood, the above-mentioned "rock-carved longitudinal corridor" and chambers to the left and right begin. The architraves and jambs of entrance doors of some chambers are single-piece rock-cut basalt and stand intact (Point D in the map and fig. 10). Poghosyan makes the following comment in his article for another chamber, the front of which is completely open to the valley:

"On the left side of the vestibule are the ruins of an intermediate room, which some authors took for a chapel, which is quite probable. This idea is prompted by several details. First, there are preserved niches both in



Fig. 10 – The doors of the chambers along the longitudinal flat-ceiling corridor (D). One can note the walls partially composed of squared stones, as well as jambs and lintels made from monolithic blocks (photo A. Yamaç).

Fig. 10 – Le porte delle camere lungo il corridoio longitudinale a soffitto piatto (D). Si notano i muri parzialmente composti da pietre squadrate, nonché stipiti e architravi ricavati da blocchi monolitici (foto A. Yamaç).



Fig. 11 – Niches and frescoes in the chamber (E), entirely built with ashlars and a pointed (two-centered) vault, claimed to be a chapel (photo H.I. Kala).

Fig. 11 – Nicchie e affreschi nella camera (E), interamente costruita con conci e volta a sesto acuto (a due centri), che si ritiene fosse una cappella (foto H.I. Kala).

the adjacent part of the rock and in the perpendicular parts. Secondly, a vaulted roof resting on transverse walls. And finally, thirdly, the entire upper part of the described room is covered with frescoes. The fresco, located directly above the passage from the vestibule to the church, most likely depicted the two-storey school of St. Translators. Based on this, we can conclude that the frescoes are contemporary with the construction of the school building in the village of Derevank, i.e. belong to the 19th century and not earlier than the 18th century" (Poghosyan, 2018).

This paragraph is open to discussion for different reasons:

* The front façade of this chamber is completely open and there are not many wall remainings on it.
* Poghosyan does not show any reference when he says "*which some authors took for a chapel*".
* Again, niches that the author offers as supporting examples for the chapel are available in many different chambers of this complex, for example at Point B.
* The above mentioned frescoes, which are one of the most important elements of this chamber and even of the entire complex, are a subject of separate discussion. Although it is clear that all them were possibly made in the 19th century, as he states, he wrote that the masonry structure depicted in the fresco was built in Derevank Village in the early 1800s and that it is a two-story religious school named after St. Translators. We point out that the Derevank Village, which was completely rebuilt after the 1825 earthquake, has no remains of this structure today and there is no historical evidence that the two-storey building seen in this fresco is the St. Translators religious school. These frescoes, which have suffered great damage over the years, have been virtually reconstructed by Bilgin Yazhk (Point E in the map and fig. 11, fig. 12).

The ceilings of the following two chambers, which were oriented towards the valley, were partially supported by stone vaults. The valley facades of both chambers, which were probably open when they were first built, were later covered with rough squared stones (Point F in the map and fig. 13). We can think that the last



Fig. 12 – On the left, the current state of the fresco *in situ*; on the right, a virtual reconstruction (photo and drawing B. Yazlık).
Fig. 12 – A sinistra, lo stato attuale degli affreschi in situ; *a destra, una sua ricostruzione virtuale (foto e grafica B. Yazlık).*



Fig. 13 – Chamber (F) of Derevank Monastery towards the north, with a stone arch at the entrance, closed by squared stones, partially collapsed (photo A. Yamaç).
Fig. 13 – Camera (F) del Monastero di Derevank verso nord, con un arco in pietra all'ingresso, chiuso da pietre squadrate, in parte crollate (foto A. Yamaç).

chamber, located in the northwest of the Monastery, in consideration of the presence of a winepress and a silo inside, could be a kitchen. From this last room a narrow tunnel, 15 m long, leads nowhere, towards northwest: evidently there was a project to expand the settlement, stopped during the excavation for unknown reasons.

Although conflicting dates are given in different sources, there is no historical record or document about the construction date of the Derevank Monastery. Poghosyan, in his article, objects that Kevorkyan and Pabujyan write in their works published in 1992, without referring to any source, that the monastery was built in the first half of the 17th century. Alboyajian also claimed that Armenians settled in Tavlusun and Derevank in the 17th century (Pog-

hosyan, 2018). But we know that the suffix "vank" in the name Derevank came from this monastery in the valley, and both Tavlusun and Derevank villages were already in Ottoman tax registrations dated 1500 (Inbaşı, 1993).

On the other hand, we believe that the 70 cm wide and 15 m long tunnel in the last chamber we mentioned above, which was abandoned without any further excavation, was a clue about the first construction date of Derevank Monastery. This tunnel, which looks like a typical entrance of a defense shelter, is very similar to its common counterparts in Cappadocia, and it is thought that such refuges were dug by local people to protect themselves from Arab raids that attacked the region between the 7th and 11th centuries AC. After the 11th century, no shelter was excavated in the region. If this tunnel was started to be excavated for defense purposes by the residents of this monastery and it was left unfinished when it was realized that there was no need, the latest construction date of the monastery -or at least that part of the complex- may be around the 11th century.

Conclusion

Although it is mentioned in many different sources and there are even a few articles about it, our information about Derevank Monastery is extremely limited. As there is no reliable historical source and no scientific study has been done to date, we do not have any significant information about this complex at present. We are even of the opinion that, despite the name, it is debatable whether this complex was a monastery or not, when even information about the first date of construction are unfortunately uncertain. Although it does not seem possible to have a residential rock-cut complex in such a desolate place, not even the court, kitchen, or refectory, typical of the Cappadocian monasteries, seem evident in this settlement. Contrary to popular belief, "trapeza" (table and sitting places carved into the bedrock), which is thought to be a tradition in monastic refectories, is not a characteristing requisite (Ousterhout, 2010). But, in this complex, even the location of the kitchen is uncertain, let alone the refectory. On the other hand, huge galleries with uncertain functions, located south of the building, are another question mark. Therefore, Derevank Monastery needs much more detailed and scientific research than has been done so far. It is our hope and wishes that this structure, which has an extraordinary historical value, is not destroyed until the day when these detailed studies are carried out.

Acknowledgement

It is a pleasure to express my sincere gratitude to Prof. Osman Özsoy, Kayseri Coordinator of ÇEKÜL Foundation, who, eight years ago, created the "Kayseri Underground Structures Inventory Project" from nothing, and has since transformed it into a project of worldwide importance with his dedicated attitude and extraordinary efforts.

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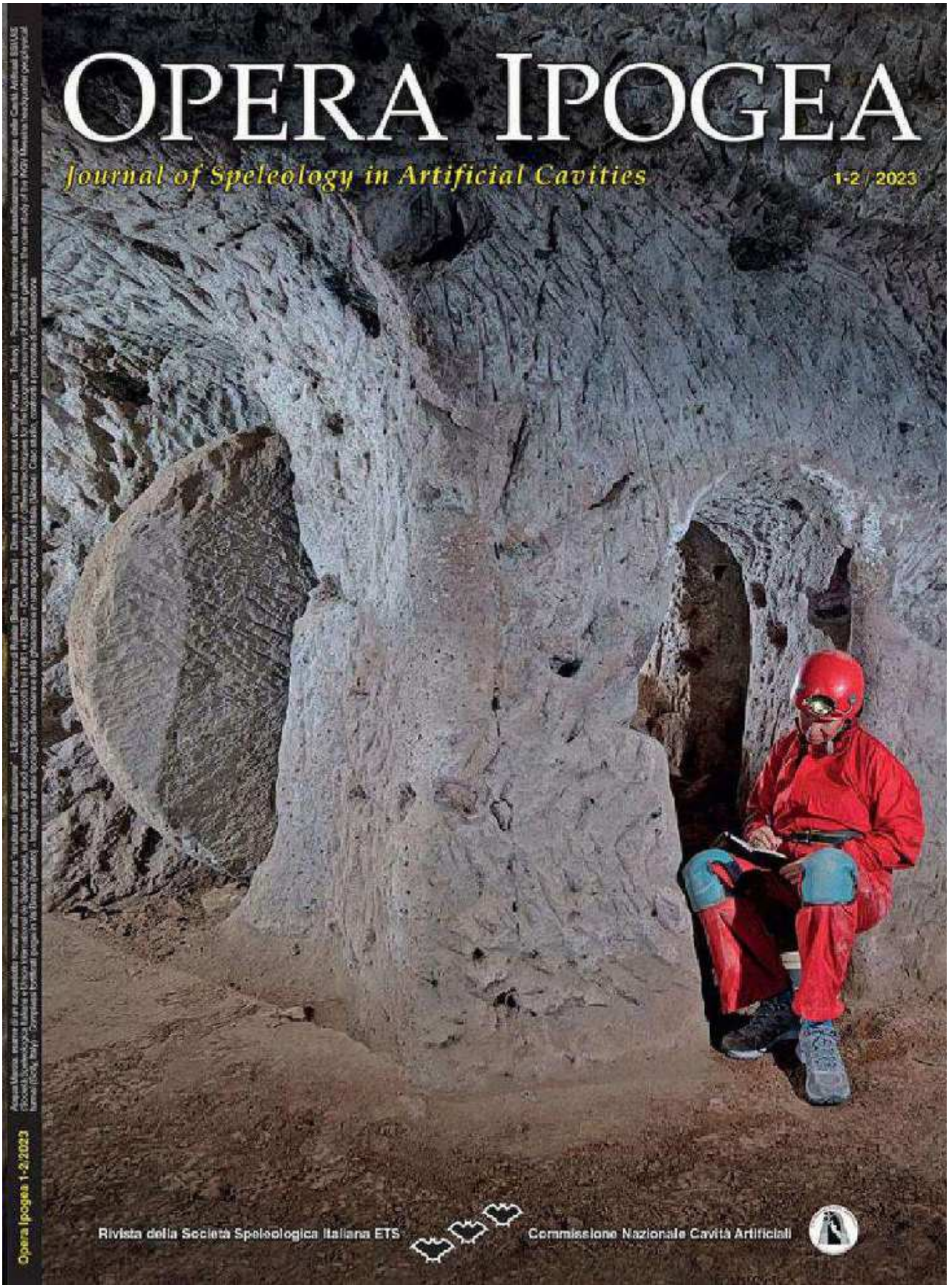


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Dimitre, a long linear rock-cut village (Kayseri - Turkey)

Dimitre, un esteso villaggio rupestre lineare (Kayseri - Turchia)

Ali Yamaç

Abstract

There are rock-cut villages in many different parts of the world; also in Turkey and, in particular, in Cappadocia they are widespread. Although many of these groups of dwellings, also called "cliff settlements" ("linear", "terraced" or "wall villages", according to their style), are abandoned today, some of them are still being used. As OBRUK Cave Research Group, we started to work for the "Kayseri Underground Structures Inventory Project" in January 2014. This project includes the research, survey, mapping, and documentation of all the underground structures in Kayseri territory. During this nine-year project, along with other underground structures, Dimitre Village, one of the longest linear cliff settlements in Turkey, abandoned only in 1966, was extensively explored and surveyed by us for the first time. In this article the conformation and modifications of the cavities on this complex, consisting of 229 dwellings and their rural facilities, 5 churches and 10 shelters, plausibly dating back to the 7th century or earlier, are discussed.

Key words: Cappadocia, Kayseri, Dimitre, cliff settlements, artificial cavities.

Riassunto

I villaggi scavati nelle pareti di roccia sono presenti in ogni parte del mondo. Questi tipi di agglomerati risultano ampiamente diffusi anche su tutto il territorio della Turchia e, in particolare, della Cappadocia, nel centro della Provincia Vulcanica Anatolica. Vengono genericamente definiti "insediamenti di falesia" e, secondo la conformazione morfologica e la collocazione, sono identificati come "villaggi rupestri lineari", "terrazzati" o "a parete" (o, molto spesso, "misti"). Sono costituiti da abitazioni, magazzini, stalle, opere idriche, piccionaie, ma anche chiese e opere di difesa, ricavate in rocce tenere, facili da lavorare e a inerzia termica. Sebbene siano per la maggior parte ormai abbandonati e in rovina, alcuni sono ancora oggi utilizzati.
Nell'area di Kayseri, in antico *Caesarea*, capitale della grande provincia dell'Impero Romano di Cappadocia, poi "tema" dell'Impero Bizantino, vi sono diversi villaggi di questo tipo, distribuiti in almeno sei valli, tra loro vicine. L'insediamento rupestre di Dimitre ha la particolarità di estendersi tra due basse falesie orizzontali, nella parte superiore (1293 m s.l.m.) di una diramazione della profonda valle di Koramaz, su un fronte ininterrotto di rocce di 920 m, collocandosi, probabilmente, tra i più estesi villaggi rupestri lineari della Turchia.
Le indagini di questo complesso, completamente abbandonato nel 1966 a causa della minaccia di crolli, hanno consentito di documentare 229 abitazioni e loro servizi, 5 chiese bizantine e 10 rifugi, di piccole dimensioni ma dotati di porte-macina. Questi, verosimilmente, risalgono al periodo in cui i cristiani residenti nella ragione dovevano difendersi dalle razzie arabe, iniziate nel VII secolo d.C., mentre le tombe di epoca romana sulla sommità del plateau fanno pensare ad una datazione ancora anteriore. Inframezzati alle strutture scavate nella roccia e ad esse connessi vi erano diversi edifici costruiti in superficie. Dal 1500, secondo i registri ottomani, qui risiedevano 37 nuclei familiari, saliti a 119 nel 1831, tutti composti da genti musulmane. Dopo l'abbandono, le abitazioni in muratura furono pressochè demolite per recuperare le pietre reimpiegate per edificare il villaggio moderno sul tavolato opposto, lasciando a vista gli ingressi delle strutture sotterranee retrostanti che, peraltro, si presentano molto rimaneggiate dall'uso continuato nel corso quasi due millenni.
Il villaggio rupestre di Dimitre è stato per la prima volta esplorato e documentato sistematicamente dall'OBRUK Cave Research Group di Istanbul, nell'ambito del "Kayseri Underground Structures Inventory Project", promosso nel 2014 dalla Metropolitan Municipality e dal ÇEKÜL Foundation, con l'intento di individuare e mappare tutte le strutture rupestri e sotterranee della provincia.

Parole chiave: Cappadocia, Kayseri, Dimitre, insediamento di falesia, cavità artificiali.

Introduction

Situated in the Central Anatolian Volcanic Province (CAVP), in the middle of the Anatolian Plateau in Turkey, Kayseri and its vicinity (Fig. 1) had tremendous volcanic activity, which started approximately 11 million years ago and continued until the Early Holocene (ca. 10,000 – 8,000 years ago), (Aydar et al.,

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2012; Innocenti, Mazzuoli, Pasquarè, Radicati Di Brozolo, & Villari, 1975). Countless volcanoes deposited pyroclastic rocks of enormous thickness on the surface. In Cappadocia, of which Kayseri was the ancient capital, an area of approximately 20,000 km² is now covered by rocks of this origin.

It is not known when the tufaceous rocks of the region were dug by man for the first time and the inhabitants began to use the subsoil as dwellings. Indeed, the continuous usage of the rock-hewn structures for thousands of years has made archaeological investigation difficult to undertake and interpret. The earliest dated rock-hewn structures encountered in Cappadocia are probably the Roman rock-cut tombs in Nevşehir / Mazıköy and south of Kayseri, especially Ayşepınar and Yenikōy (Durukan, 2012). Then, the variety of underground and rock-cut structures has increased incredibly from the times of Roman Empire to the Byzantine. The structures carved into the rocks are not limited to houses, barns, dovecotes, tombs, and churches: monasteries, aqueducts, cisterns, and even apiaries are housed in the tuff outcrops (Bixio A., Bixio R., De Pascale, 2023). Many of these rock-cut structures observed in different parts of Cappadocia, over the centuries have been abandoned and collapsed, others have been continuously used until recent time, often changing purpose, and only a few still retain their function today (R. Bixio, 2012; R. Bixio, Castellani, & Succhiarelli, 2002; Gilli & Yamaç, 2017).

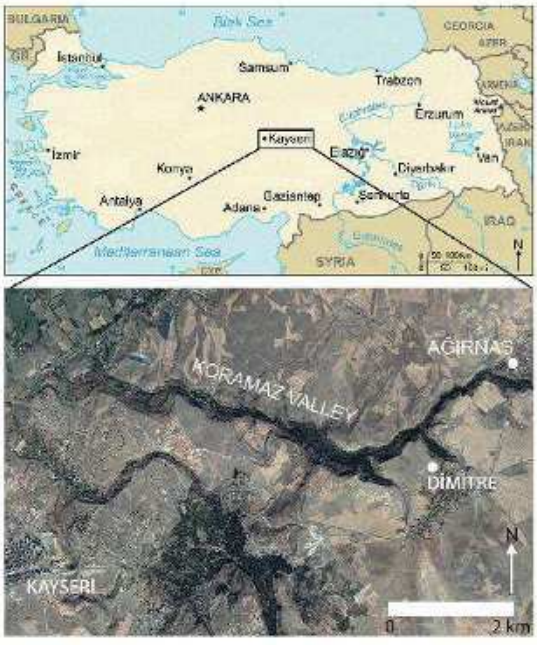


Fig. 1 – Location map showing Kayseri and Dimitre Village (after Google Maps and Google Earth-elaboration A. Yamaç).

Fig. 1 – Mappa con posizione di Kayseri e del villaggio di Dimitre (da Google Maps e Google Earth-elaborazione A. Yamaç).

The different natural formations of Cappadocia and the very numerous artificial cavities dug in these formations have drawn the attention of multiple travellers-scholars since 300 years ago, and have been subject to various research and scientific studies. These surveys started primarily for the frescoes and architectural elements of the countless rock-cut churches, and then have expanded to other rock-cut structures. Today, there are hundreds of scholarly works and studies ranging from underground shelters to hydraulic structures (Bixio R, De Pascale, 2022), dovecotes (Bixio A., Bixio R., De Pascale, Yamaç, 2023), and even rock-cut apiaries in the area (Bixio R., Bixio A., De Pascale, 2022).

Although these studies refer to a territory generically named Cappadocia, in reality nearly all have been performed only in the Nevşehir - Ürgüp - Göreme triangle, but this area represent only a small part (ca. 5,500 km²) of the ancient historical region.

In AD 371, it was the largest province of the Roman Empire, with a total area of 58,000 km² and its capital, as said, was Kayseri (Mitchell, 2018; Ramsay, 1890). This city was named "Mazaca" from the Hattians to Strabo, and it was changed to "Caesarea" in honor of Caesar Augustus in AD 14. After the 3rd century AD, it was the largest city of the Byzantine theme, in Central Anatolia. The name become Quaisarya by the Arabs, transformed into Kaysareya by the Seljuk Turks (late 11th century), then Kayseri in Ottoman times, and now is chief town of the homonymous Turkish district.

Despite being the capital of Cappadocia during ancient times, no comprehensive scientific research has been carried out so far in terms of the rock-cut architecture in Kayseri. To fill this deficiency, we, as OBRUK Cave Research Group, started to work for the "Kayseri Underground Structures Inventory Project" in January 2014. The project, carried out based on a triple protocol with the ÇEKÜL Foundation and Kayseri Metropolitan Municipality, includes the research, survey, and documentation of all the underground structures located in Kayseri Province. This project, covering the entire territory with an area of 17,500 km² and ongoing for nine years, has become very significant especially due to the findings in Koramaz Valley.

Koramaz Valley

There is a 700-800 m elevation difference between the plain where Kayseri is located, at 1054 m a.s.l., and the mountains 30 kilometers east of this plain; as a result, each creek flowing down these slopes has formed its valley by eroding the soft pyroclastic rocks. East of Kayseri, there are six different valleys; on their rock sides there are structures carved by the inhabitants dwelling in the area for hundreds, or even more, for thousands of years. The longest of these six valleys is Koramaz Valley. In this 16 km long stream course, there are, in total, seven different villages. From west to east, these are Büyük Bürüngüz, Üskübü (Subasi), Küçük Bürüngüz, Ağırnas, Dimitre,

Vekse, and Ispıdın. Both the interior and surroundings of these seven villages, located on the slopes of Koramaz Valley, are full of structures carved into the rocks. Though it is tough to date these structures due to their continuous usage, the experts have ascribed some of the rock-cut churches in the valley to the 9th and 11th centuries. On the other hand, it is a generally accepted assumption that the underground shelters in Koramaz Valley were dug between the 7th and 10th centuries by Christians living in the region as a protection against the Arab raids.

In addition, the experts examining the rock-cut structures near Ağırnas have stated that, though these structures have changed over time due to different usages, by taking into consideration the entrance decoration and interior architecture, at least 18 of the cavities in the valley have been dug as Roman chamber tombs and 16 as *columbarium* (Gilli, 2017; Yazlık, 2022). To sum up, it is possible to say that the background of all these structures carved in rocks in the Koramaz Valley dates back to at least 2000 years ago and probably to even earlier times (Yamaç, 2018). Recently accepted to the UNESCO World Heritage Site tentative list, new projects for restoring and protecting various structures and churches in this area have already begun.

Cliff Settlements

A cliff settlement is a village carved into the rock faces with all its structures, including houses, storage rooms, barns, cisterns, religious buildings, and defense shelters.

According to Italian "Commissione Nazionale Cavità Artificiali", there are several types of "cliff rock-cut villages", depending on the morphology on which the facilities have been carved: a "linear settlement" consists of a series of dwellings and their infrastructures carved into a long, and generally low crag, mostly in an single level; when the dwellings are dug on overlapping levels in high vertical walls, we will have a "wall settlement"; if the rock-cut structures are on misaligned levels, such as a series of rock steps, we will have a "terraced settlement". Of course, this classification is schematic and the different types are often mixed in the same site (Bixio R., Galeazzi, 2009a; Bixio R., Galeazzi, 2009b, slide 88; (Bixio A., Bixio R., De Pascale, 2023).

Throughout history, in various regions of the world, people have dug all these structures into the rocks, and all these dwellings, dug side by side, have merged over time to form troglodyte villages (Kempe, 1988). Rather than constructing a structure on the surface, there are different reasons for preferring to live in an artificial cavity. The first and probably most important reason is that rock dwellings are easier to implement than surface structures (Öztürk, 2009). If the rock one is planning to dig is relatively soft and suitable for being carved, a few people working together can dig a small house in a short time, and it will cost much less than a house built on the surface. The other advantage of a rock-cut dwelling is that it is easier to keep warmer during the winter and naturally cool during the summer.

Cliff settlements can be of different sizes. Along with the small settlements consisting of a few dwellings dug side by side and housing a small population, there are colossal troglodyte villages. In numerous different regions of the world, there are countless settlements, some of which have been abandoned and have become cultural heritage, and others are still inhabited. For example, today, in several regions, from France (Loire Valley) to Iran (Kandovan), or Italia (Massafra, Matera or Ginosa) to Greece (Santorini), or Spain (Saragossa), people continue to live in these types of cliff settlements, and often this style of troglodyte living has become a tourist attraction point.

There are cliff settlements in different regions of Turkey, such as Gödet in Central Anatolia, Ahlat and Ani in Eastern Anatolia, and Phrygia in West Anatolia. However, Cappadocia is different from all these other regions in Anatolia in certain respects. The first and most crucial difference is that, while there is a single settlement in one or two valleys in other regions, the number of cliff settlements in Cappadocia is extensive. In the provinces of Aksaray, Nevşehir, and Kayseri, there are more than 30 cliff settlements of all sizes. The soft pyroclastic rocks eroded by streams have formed various morphologies throughout Cappadocia (valleys, cliffs, isolated hills, badlands), where numerous troglodyte villages have been dug. The settlement of Çavuşin, for example, located between Göreme and Avanos, has over a hundred rock-cut structures and is an excellent evidence of a mixed "terraced and wall" settlement. This village, which was dug on overlapping levels on a 60 metres high slope and along the entire extension of the hill, was abandoned in the 1950s with the start of the rock collapses: afterward, the frontage of the hill collapsed completely. Zelve, where two different valleys intersect each other forming a triangle, has a rock-cut village, partly linear and partly on wall, with four churches, a mosque, and a total of 67 rock-cut structures. Until 1954, people lived in these rock-cut dwellings and, as happened in Çavuşin, the village was abandoned due to the rock collapses (Pekin, 2014).

Also on numerous other walls of the valleys, such as Meskendir, Kızılçukur, and Kılıçlar around Göreme, or Gesi and Değirmendere around Kayseri, there are countless rock-dwelled settlements, churches and shelters of all sizes, still not fully documented, but to which every year relevant new discoveries are added (A. Bixio, Bixio, De Pascale, & Maifredi, 2018; R. Bixio, 2012). In the province of Kayseri, apart from the most known cliff settlements such as Soğanlı, Erdemli, and Güzelöz, we have explored 11 different rock-cut settlements and completed surveys of some of them.

On the east of Kayseri, seven different valleys are eroded by the streams flowing down from the high hills, similar to those of western Cappadocia. Several cliff settlements can be found in the valleys of Avedik, Değirmendere, Gesi, and Koramaz, which are only a few kilometres apart. We have explored and surveyed



Fig. 2 – Satellite view of Dimitre Cliff Settlement (after Google Earth-elaboration A. Yamaç).

Fig. 2 – Vista satellitare dell'insediameto di falesia di Dimitre (da Google Earth-elaborazione A. Yamaç).

most of these relevant structures in the past few years, noting that the number of rock-cut dwellings differs a lot from valley to valley (OBRUK, 2017a, 2017b, 2017c, 2018, 2020). For example, there are 35 rock-cut structures in the cliff settlements of the Değirmendere Valley, while there are as many as 476 in four different cliff settlements of Koramaz Valley. Though two of these settlements have few dwellings, the other two troglodyte villages include not only dwellings, storage rooms, barns, or underground shelters but also Ro-



Fig. 4a – The northwestern part of the Dimitre Cliff Settlement. Between the entrances of the dwellings dug into the rock facing southwest, the remains of masonry houses are still visible (photo B. Langford).

Fig. 4a – La parte nordovest dell'insediamento di falesia di Dimitre. Inframezzati agli ingressi delle abitazioni scavate nella roccia che si affacciano a sudovest, sono tuttora visibili i resti delle case in muratura (foto B. Langford).



Fig. 3 – View of Koramaz Valley fork from one of the rock-cut dwellings of Dimitre (photo D. Albov).

Fig. 3 – Confluenza con la Valle di Koramaz vista da una delle abitazioni rupestri di Dimitre (foto D. Albov).

man tombs, churches, and columbaria. Ağırnas Cliff Settlement is a substantial rock-cut village with 195 different rock-dwelled structures carved into three separate walls of Koramaz Valley. However, Dimitre Cliff Settlement is entirely different from all the other structures stated above.

Dimitre Cliff Settlement (Ka27)

Koramaz Valley reaches "Dimitre Cliff Settlement" three km downstream of Ağırnas Village in Melikgazi district (Fig. 1). Its number is Ka27 in the "Kayseri province's list" of the "Turkey Artificial Cavities Inventory" (Yamaç and Bixio, 2022).

The rock-cut dwellings of Dimitre are not located on the main line of the Koramaz Valley, but on the right bank of a branch extending upstream, to the southeast (Fig.2). This is the point with the greatest difference in height that Koramaz Valley has along its route. At the fork of Dimitre (1240 m a.s.l on the bottom), the valley's depth from the top of the plateau reaches 80 metres (Fig. 3). Unlike the dwellings dug on three separate rocky walls of the valley in nearby Ağırnas, the entire ancient Dimitre Cliff Settlement has been dug in the walls of a long belt of low and irregular rocky outcrops, extending in a sort of almost uninterrupted line along the slope facing southwest, at 1293 m a.s.l., thus 53 m above the stream bed. Such belt is between two low crags that run parallel, almost horizontal, from northwest to southeast, the highest of which is the crowning of the tableland that extends to the northeast, at about 1320 m a.s.l., that is, 27 m in average above the rock-cut settlement, and right in front of the today's masonry village of Dimitre, positioned on the opposite plateau. (Figs. 2, 4a, 4b).

According to Ottoman Registration dated 1500, in Dimitre Village there were 37 households, living in rock-cut dwellings, which increased in the intervening three centuries, reaching 119 in the census of 1831 (Cömert, 2008; Inbaşı, 1993). Although according to the first Registration, the entire village was Muslim, even the village's name shows that the residents were not Muslims before 1500. Its history may date back to much earlier centuries. Moreover, the presence of "millstone doors" in the tunnels inside the old rock-



Fig. 4b – The middle part of the Dimitre Cliff Settlement. The entire rock-cut village develops in a linear rock band just below the crag that crowns the plateau (photo B. Langford).

Fig. 4b – La parte centrale dell'insediamento di falesia di Dimitre. L'intero villaggio rupestre si sviluppa in una fascia di roccia lineare appena sotto la falesia che corona l'altipiano (foto B. Langford).



Fig. 5 – Northwest corner of the rock-cut settlement with the remains of stone masonry houses in the foreground (photo R. Straub).

Fig. 5 – Estremità nordovest dell'insediamento rupestre con i resti, in primo piano, delle case in muratura di pietra (foto R. Straub).

carved structures, that later turned into dwellings, proves that in origin they were built for defensive purposes. As observed in Cappadocia, Christians dug these underground structures to defend themselves against the Arab raids that started in the 7th century. The residents of Dimitre Village have continued to live in this cliff settlement until very recently. Over time, the original underground structures have been repeatedly modified, and even several stone masonry houses have been built over and between them. When the site became uninhabitable due to the rock collapses, in 1966 people moved to their current settlement, in the opposite plateau, on the top of the valley. During the village's relocation, the homeowners removed the stones from the abandoned masonry houses and used them to construct their new ones. As a result, the terraced slope looks like a ruin today (Fig. 4a-b, Fig. 5). On the other hand, there is a magnificent view behind these ruins: the disappearance of the stone houses built in surface has brought the entrances of the old rock-carved structures back into the daylight. It is impressive to see that all the houses of the ancient village were connected with structures carved into the rock. Our explorations in the region have also confirmed this fact. For example, during our surveys, while we were preparing to measure the tunnel behind a house where all the structures in front of and behind it were dismantled years ago, and the parts that were not dismantled collapsed, an elderly resident, who came to visit us, said that this building was his aunt's house and that he spent his childhood there. On the back wall of this house, which his aunt used as her residence until 60 years ago, there were two tunnels carved into the rock, one 30 m long, where two large millstone doors were placed. This is one of the case that an underground shelter dug for defense purposes centuries ago, when it was no longer needed was converted into a dwelling–storage room. As a result of a tradition of continuously living in rock-cut structures for centuries or even thousands of years, examples of which can be found almost everywhere in Koramaz Valley, we can see that such structures have undergone a constantly evolution in parallel with the residents' changing needs. Although we can partially recognize the last period of use of buildings by looking at the shape of the front door and the condition of the niches and feeding troughs inside, as we wrote above, the use spanning such a long time actually makes it difficult to distinguish between a dwelling, a warehouse, and a barn. The biggest problem created by this phenomenon is that it has become almost impossible to understand the original construction date of the rock-cut structures and their original intended use after so many years of constant change. Some of these structures lost their original functions by integrating with the stone houses built in front of them, which

no longer exist today. However, based on the underground shelters and Byzantine rock-cut churches, the Dimitre Cliff Settlement can be dated back to the seventh and eighth centuries at the earliest. But if, according to experts (*ibidem*, see above), it were confirmed that the tombs on the plateau above were also Roman (see below), the origin of the settlement could realistically be backdated.

The surveys

At the beginning of the survey work, a 920 m-long guideline was drawn on the path in front of the cliff. This corresponds to the polygonal extending from northwest to southeast represented in Fig. 6. The settlement was then divided into six sectors (Figs. 6a-b-c), and surveys were done by six separate teams (Fig. 7). All surveys were connected to stations along the guideline.

During this survey, 229 rock-cut structures were explored, documented and mapped. As seen on the maps, the structures are denser in the northwest and southeast parts of the slope (Figs. 6a and 6c); however, they are less dense in the middle parts (Fig. 6b). The dwellings in the densest sectors, especially in the northwest part, extend for three or even four floors over the entire height of the rock faces, and are interconnected with rock-cut stairs. In the segments where the rock texture is appropriate for digging, the relevant floors extend along the entire length, one on top of another. Nevertheless, the soft and fragile structure of the rock has caused collapses inside or at the entrance of numerous structures or has wholly blocked specific segments.

Although most of these 229 structures are dwellings, barns, and storage rooms, there are also five churches and 10 underground shelters. These five small rock-cut churches scattered throughout the cliff settlement are architecturally similar, all 6-7 metres long with a horseshoe apse. Three of these churches are located in the northwest, one in the middle, and the other one is on the southeast part of the crag (Fig. 8).

Ten different underground shelters with their *in situ* millstone doors are spread to almost all sectors of the cliff settlement. The millstone doors and/or opera-

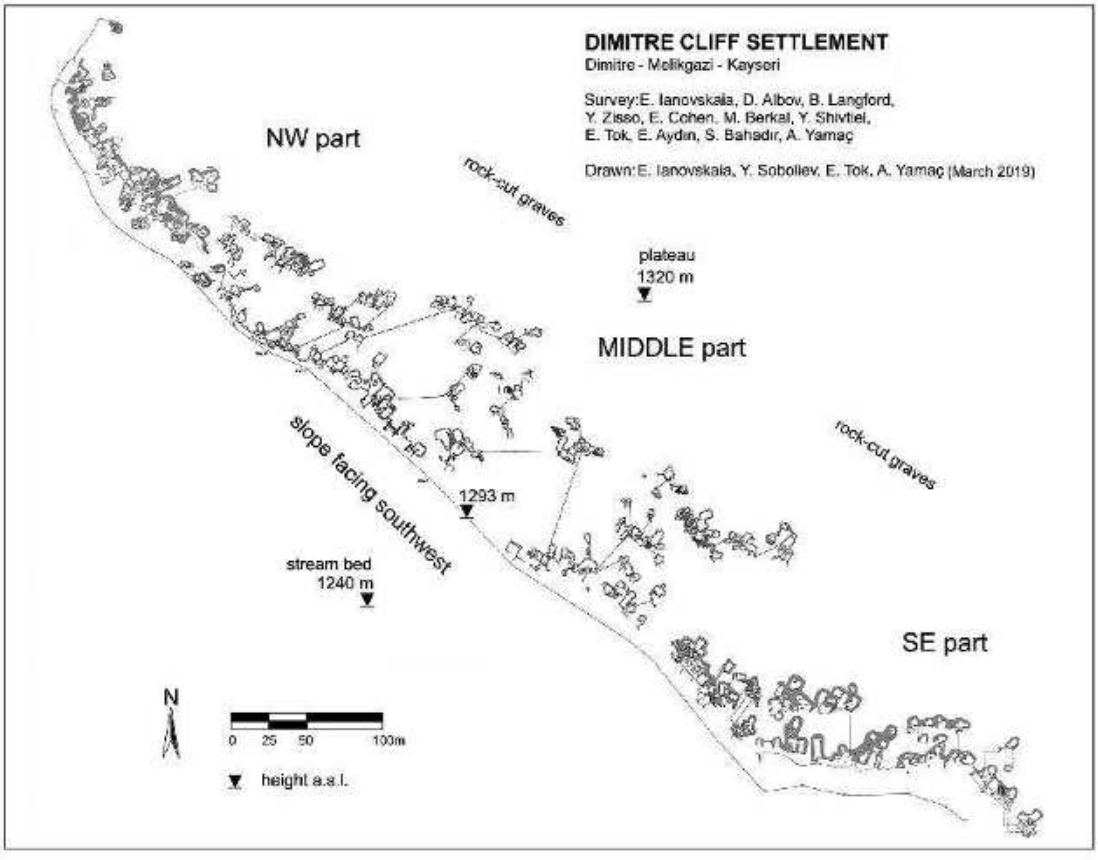


Fig. 6 – General plan of Dimitre Cliff Settlement (drawing E. Ianovskaia, Y. Soboliev, E.Tok & A. Yamaç).

Fig. 6 – Pianta generale dell'insedianto di falesia di Dimitri (grafica E. Ianovskaia, Y. Soboliev, E.Tok & A. Yamaç).

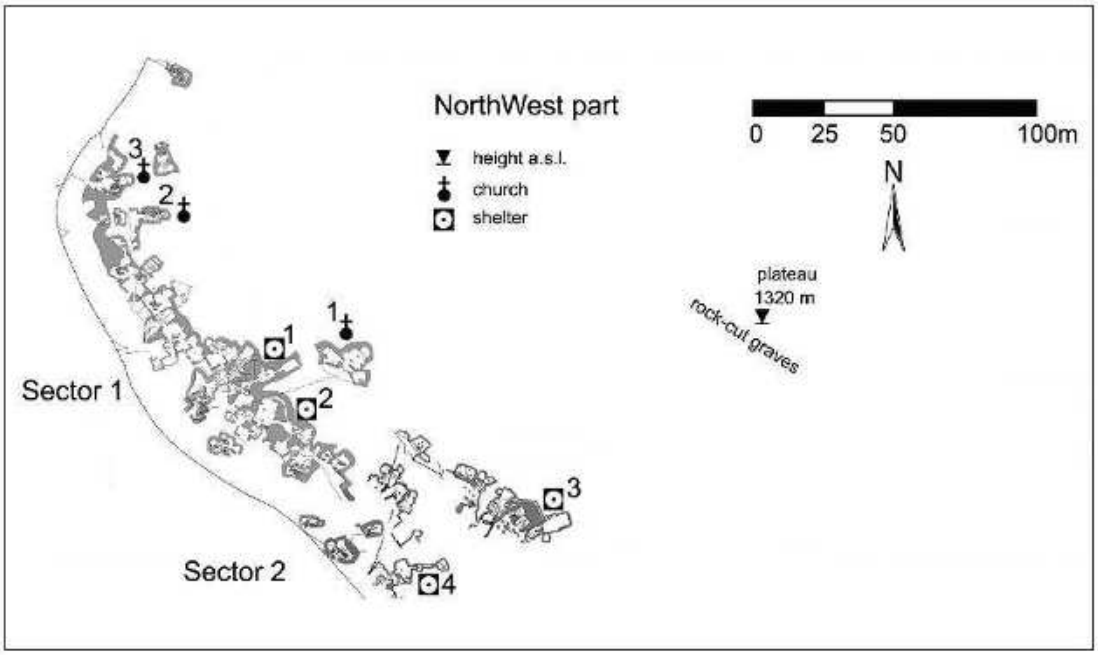


Fig. 6a – Plan of NorthWest part (drawing E. Ianovskaia, Y. Soboliev, E.Tok & A. Yamaç).
Fig. 6a – Pianta dell'area NordOvest (grafica E. Ianovskaia, Y. Soboliev, E.Tok & A. Yamaç).

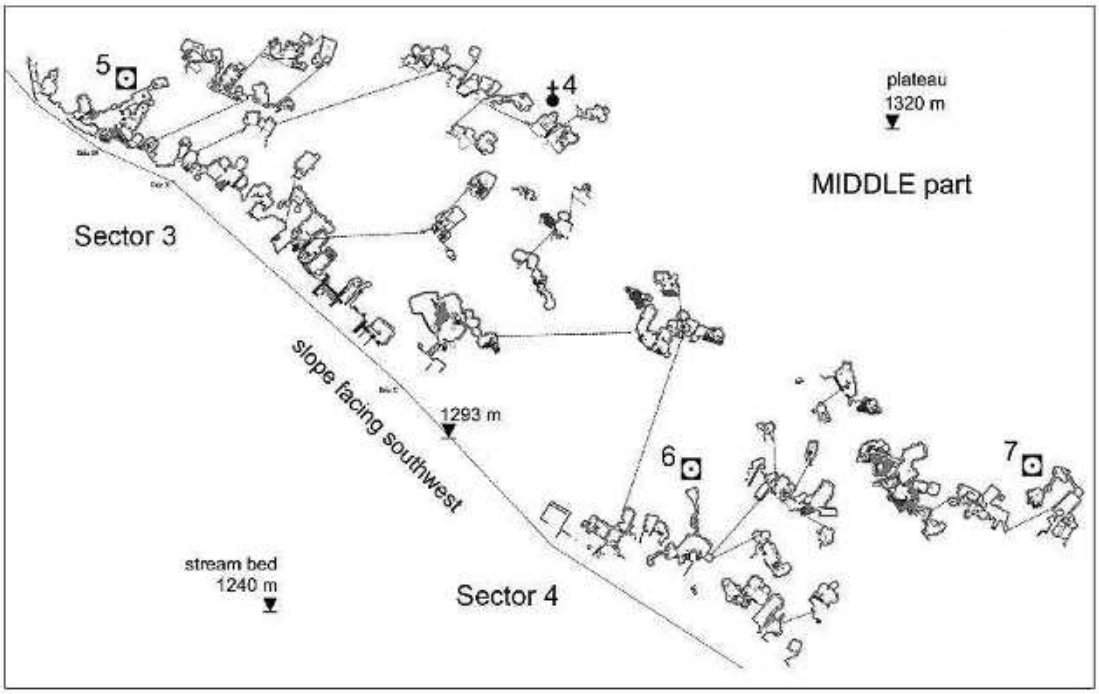


Fig. 6b – Plan of middle part (drawing E. Ianovskaia, Y. Soboliev, E.Tok & A. Yamaç).
Fig. 6b – Pianta dell'area centrale (grafica E. Ianovskaia, Y. Soboliev, E.Tok & A. Yamaç).

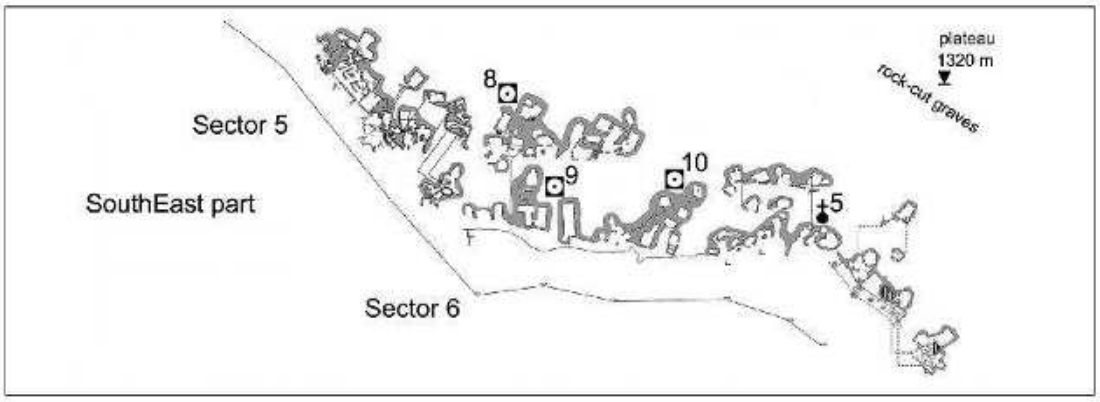


Fig. 6c – Plan of SouthEast part (drawing E. Ianovskaia, Y. Soboliev, E.Tok & A. Yamaç).
Fig. 6c – Pianta dell'area SudEst (grafica E. Ianovskaia, Y. Soboliev, E.Tok & A. Yamaç).



Fig. 7 – Team holding final briefing before starting to work (photo R. Straub).
Fig. 7 – Riunione finale della squadra prima di iniziare il lavoro (foto R. Straub).

tion rooms in the tunnels and shelters explored are incomparably smaller than in the underground cities of Büyük Bürüngüz or Ağırnas Villages. Most of the shelters have one or at most two rooms; the most significant of those we explored is a three-room structure with a tunnel of 55 meters in total, located on the southeast side of the cliff settlement (No.10 in Fig. 6c and Fig. 9). Another reason why the defense shelters in Dimitre Cliff Settlement are fewer in number and smaller compared to the other villages is that the residents of this site have lived in these dwellings until recently and, probably, constantly changed and adapted the structures to today's conditions, concealing the original shapes. However, relatively narrow tunnels connecting specific structures confirm that they were constructed as defense places but lost their functions over time.

As opposed to the nearby Ağırnas Cliff Settlement

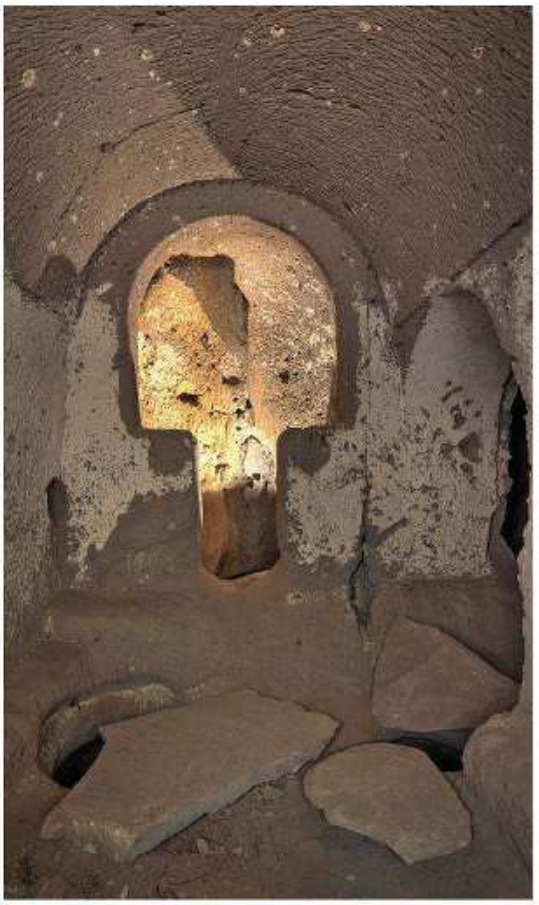


Fig. 8 – A small Byzantine rock-cut church in the northwest sector (photo D. Albov).
Fig. 8 – Piccola chiesa rupestre bizantina localizzata nel settore nordovest (foto D. Albov).



Fig. 9 – An underground shelter in southeast sector. On the left a millstone-door in its housing is visible (photo R. Straub).

Fig. 9 – Rifugio sotterraneo localizzati nel settore sudest. A sinistra è visibile una porta-macina nel suo alloggiamento (foto R. Straub)

(Fig. 1), there are not many dovecotes in Dimitre. On the other hand, dozens of graves are carved into the the rocky plateau above the right valley slope. The number of these rock-cut graves, belonging to the Roman or Byzantine periods, is much more than those in different parts of the Koramaz Valley.

Conclusion

With its 229 rock-cut structures, distributed along a continuous rocky front of 920 m, it is apparent that the ancient rock-cut Dimitre Village is one of the biggest cliff settlement village ever explored in Turkey to date. The presence of 5 churches and 10 different underground shelters, although small in size compared to other complexes that are located in the same area or in other provinces that correspond to historical Cappadocia, confirms both the religious fervour and the need for security common to all the peoples who for centuries have populated this region.

The site is also a significant example of the interaction between rock-cut dwellings and houses built outside, although now both uninhabited and in ruins, and the continuous transformations over the centuries, even if not always clearly interpretable, produced both by man and by natural events, until the final abandonment occurred only in relatively recent times, in 1966, which accelerated the process of crumbling.

This and other thousand-year-old cliff settlements in the Kayseri province and the entire region, which are slowly disappearing daily due to new rock collapses and illegal excavations, are in urgent need of protection and restoration



Fig. 10 – A large rock-cut chamber, of unusual height, with unknown function, probably for Community rural use (photo A. E. Keskin).

Fig. 10 – Una grande camera scavata nella roccia, di altezza inusuale, con funzione sconosciuta, probabilmente ad uso rurale comunitario (photo A. E. Keskin).

Acknowledgment

Nine years ago, Prof. Osman Özsoy, Kayseri Coordinator of ÇEKÜL Foundation, created the "Kayseri Underground Structures Inventory Project" from nothing and transformed it into a project of worldwide importance with his dedicated attitude and extraordinary efforts. So, it is an absolute pleasure to express our sincere gratitude to him again.

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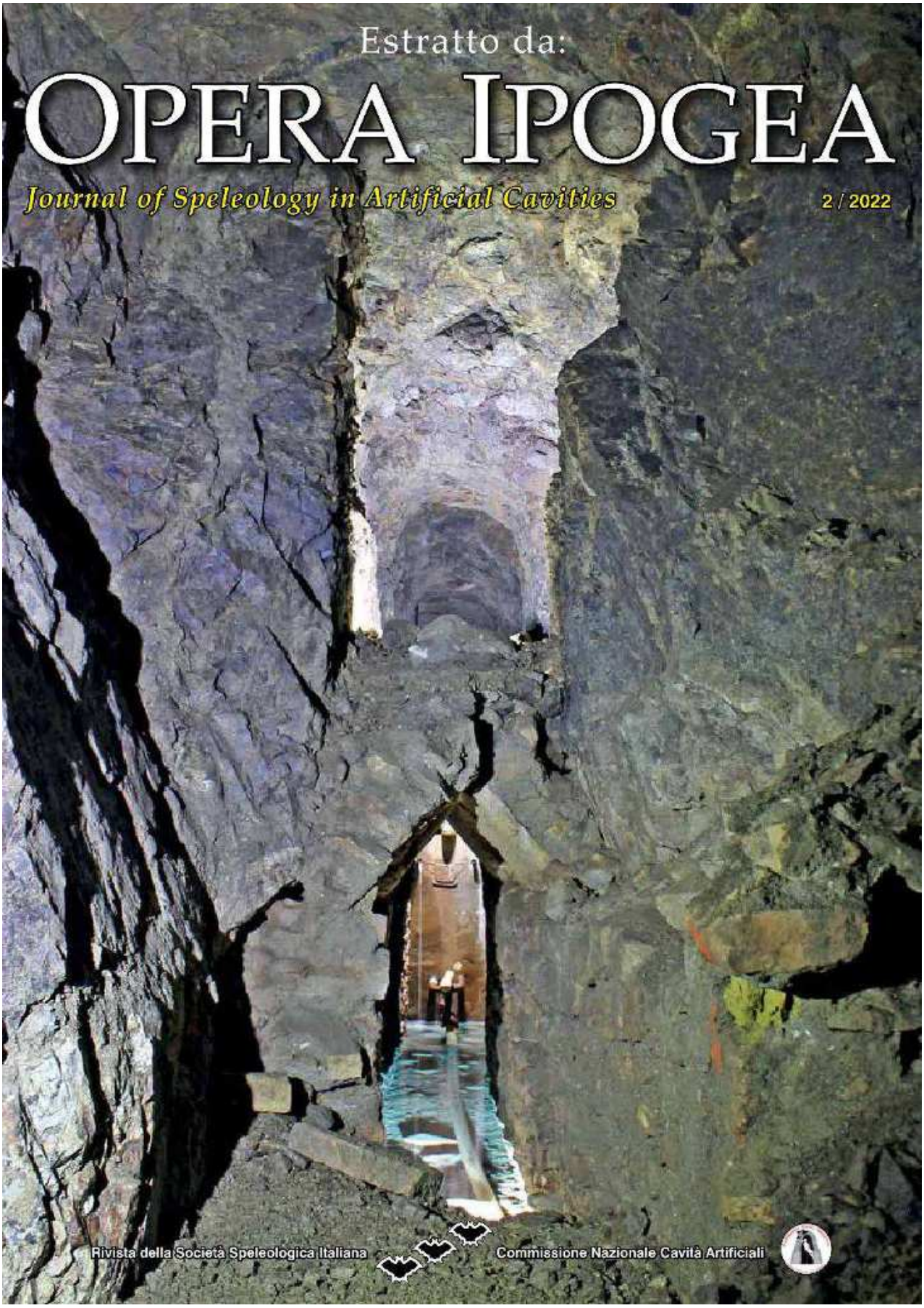
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Kayseri province (Turkey): 2022 update of the inventory of artificial cavities

Provincia di Kayseri (Turchia): aggiornamento 2022 dell'inventario delle cavità artificiali

Ali Yamaç[1], *Roberto Bixio*[2, 3]

Abstract

As part of the revision of the "Map of the Rock-cut Sites of Mediterranean", the inventory of the artificial cavities of the Kayseri Province (Central Turkey), updated in July 2022, is reported here. From 23 sites listed in the simplified first list of 1988, the number of rock-cut and underground works today geo-referenced has risen to 82, distributed over 7,000 km² of volcanic deposits, on a total province area of 16,917 km².

Keywords: Cappadocia, Kayseri, artificial cavities, inventory.

Riassunto

Nell'ambito della revisione della "Carta dei Siti Rupestri del Mediterraneo", curata dalla Commissione Nazionale Cavità Artificiali della Società Speleologica Italiana, viene qui riportato l'inventario delle cavità artificiali della Provincia di Kayseri (Turchia Centrale), aggiornato a luglio 2022. A seguito di ricerche pluriennali sul campo condotte dagli autori e della raccolta di fonti bibliografiche di diversi ricercatori, da 23 siti elencati nella prima stesura semplificata del 1988, compilata da cinque archeologi locali, il numero dei sistemi rupestri e ipogei oggi geo-referenziati è salito a 82, distribuito su una estensione dei depositi vulcanici di 7.000 km², a fronte di una superficie complessiva della provincia di 16.917 km². Molti siti non sono unità singole ma sono costituiti da diverse cavità di vario tipo.

Parole chiave: Cappadocia, Kayseri, cavità artificiali, inventario.

Introduction

Continuing the revision and updating of the inventory of artificial (anthropogenic) Turkish cavities (Bixio *et al.*, 2021), developed, we point out, on the original project of 2000 by Mario Mainetti (Bixio *et al.*, 2012), it is now presented here the new specific list of sites hitherto identified in Kayseri province (fig. 1), already reported (but without identification marks) in the general map (see figure 3: after Bixio *et al.*, 2021).

The territory of Kayseri (*Caesarea*) was included, already at the time of Strabo (ca. 14-23 AD), in the *theme* of Cappadocia (*Kapadokya*), that is to say, a district with a military administration, variously extended over the centuries, located in central Anatolia, to the eastern borders of the Byzantine Empire (fig. 2). Today Cappadocia is no longer an administrative unit; still, it is a historical area that can be considered roughly corresponding, in addition to Kayseri (in the 9th century associated with the *theme* Charsianon, and then

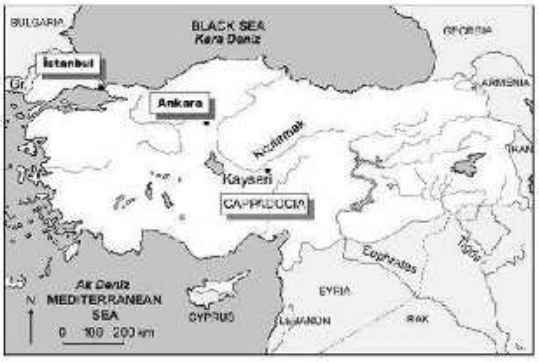


Fig. 1 – Location of the city of Kayseri in Cappadocia, Central Turkey (drawing R. Bixio).

Fig. 1 – Posizione della città di Kayseri in Cappadocia, Turchia Centrale (grafica R. Bixio).

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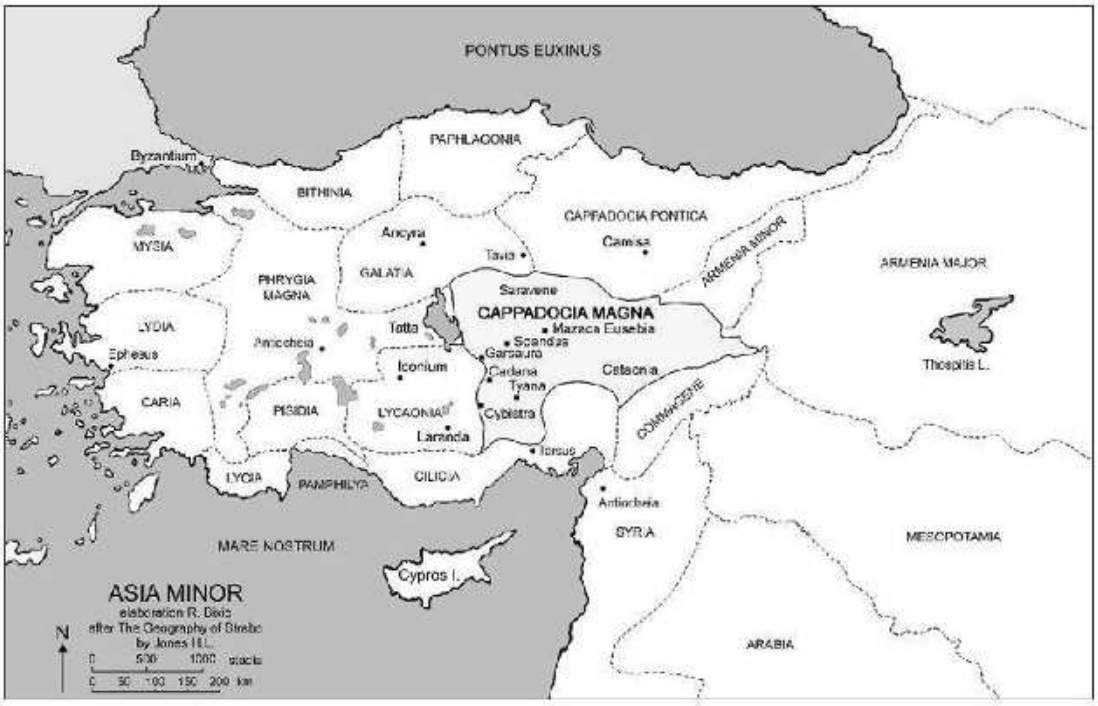


Fig. 2 – Cappadocia at the time of Strabo, with capital Mazaca-Eusebia, today Kayseri (drawing R. Bixio, after Jones, 1954).
Fig. 2 – La Cappadocia ai tempi di Strabone, con capitale Mazaca-Eusebia, oggi Kayseri (grafica R. Bixio, da Jones, 1954).

Lykandos), to the provinces of Aksaray, Nevşehir, Niğde and, partially, to those of Kırşehir and Yozgat (fig. 3). Their total area is 58,000 km². This territory, which includes over 20,000 km³ of volcanic rocks, is known worldwide for its extraordinary morphologies produced by erosion (mesas, buttes, canyons, cliffs, badlands, pinnacles).

Here, since ancient times, the local populations, taking advantage of the lithological characteristics, solicited by the climatic conditions and influenced by the historical events, have carved thousands of structures of various kinds (dwellings, utilitarian spaces, churches, shelters, water works, etc.). It is a huge historical and architectural heritage, primarily little known: "*the landscapes of Cappadocia are strange and forbidding, and beyond the well-touristed sites, many remain abandoned*" (Ousterhout, 2017, p. 171).

Many researchers, including the authors of this article, have been working for several decades to recover the memory of these extraordinary testimonies of material culture and produce e textual, photographic and topographical documentation on the rock-cut settlements present in each of the six provinces. In this context, we consider the creation of a general census of sites essential to determine their actual quantity and distribution, and to make available a helpful tool for further research.

Kayseri province

A settlement is already witnessed in the Chalcolithic Age in the archaeological site of Kültepe, 20 km northeast of today's city of Kayseri, the current capital of the homonymous Province (fig. 4). The site became the seat of the first Hittite capital known as Nesa (later Hanisa, in Hellenistic times), called Kanesh in the commercial tablets by the Assyrian who there had an important trading colony (*karum*) in the Middle Bronze Age (Beckman, 2012).

According to some authors (Khorenatsi, 1991; Uras, 1988) "*Gamirk* (EdN: the land of Cappadocia) *was conquered and annexed to the Armenian Kingdom by Aram Haykazian* (EdN: likely at mid-11th century BC) *who ordered the local population to learn Armenian. The Armenian king Aram appointed Mshak the governor of Cappadocia. Here, in the place where Caesarea occurred later on, Mshak built an estate, fenced it and named it after himself, which later on was distorted and became Mazhak* (EdN: Mazaca). *In the Roman period (1st century AD), in honour of Emperor Gaius Julius Caesar Augustus, it was renamed Caesarea, now Kayseri*" (Shahinyan, 2021, p. 99). In the region the rock-cut tombs of this period are known. In the interval (2nd century BC), the city

was named Euseb(e)ia, probably after King Ariarathe V Eusebeos.

In the 4th century AD, *Caesarea* became an important Christian centre, home to three Fathers of the Church. Several masonry churches were built during that time, most of which have been lost. The carving of some rock-cut churches also began (figs. 7, 11). Over some centuries they reached an extraordinary number: Ousterhout (2017, p. 5) estimates that there are more than 1000 remains throughout Cappadocia today. In the territory of Kayseri it is estimated that there are at least 102 churches, often grouped in restricted areas.Their vestiges have been preserved until today, most likely precisely thanks to their underground location. On the other hand, "*because of the nature of the land, much of Cappadocia's architectural infrastructure was rock-cut rather than built*" (Ousterhout, 2017, p. 9). As a result, in addition to the churches, a large number of rock-cut structures for residential use were created, as well as numerous intricate underground shelters, protected by defensive devices, including heavy millstone-doors (figs. 9, 10). Although we can not completely exclude that the origin of some shelters may be older, in principle we basically agree with Jerphanion (1925, p. 46), the first scholar who carried out systematic scientific research on the rock-cut works of Cappadocia, in particular in the Göreme/Ürgüp area, in the adjacent province of Nevşehir. According to him «...*ce genre de fermeture nous reporte à une époque d'insécurité. Et l'on pense naturellement aux siècles où les Arabes, maîtres de la Cilicie, avant les victoires de Nicéphore Phocas, faisaient de fréquentes incursions à travers le Taurus. Derrière leurs meules de pierre les habitants des monastères* (EdN: and villages) *pouvaient attendre, à l'abri des traits et du feu, que le danger se fut éloigné*". *Quaisarya*, as it was called by the Arabs, was attacked as early as AD 647 (Michel le Syrien, *Chronique*, late 12th century, in Chabot, 1899). *Caesarea* became *Kaysareya*, today Kayseri, when the Seljuk Turks (late 11th century), then Ottomans conquered these territories. However, according to Ramsey's observations, at least until the late 19th century, underground settlements were used by the Greeks (that is, the Byzantine population) who still inhabited the villages, but not by "*Mohammedans*" (*sic*, Ramsay, 1897, pp. 244-245). This is consistent with various testimonies collected by De Tapia, for example in the village of Germir, not far from Kayseri, where there is an underground shelter, according to which only the houses of the Christian people, i.e. the Greeks, were equipped with such cavities (Turkish = *in*, i.e. caves), used in everyday life as warehouses for agricultural products and wine. They were connected so as to reach, if necessary, neighbours' houses by underground routes. Even in mixed villages, the Turks did not have "*in*" or, at least, none so comprehensive, or they were only in old Christian villages later converted to Islam. As a result it is believed that the Greeks invented the "*in*" long before the Turks conquered the region (De Tapia, 2017, p. 434).

The anthropogenic cavities

The Kayseri Province has a total area of 16,917 km², divided into 16 districts, at an average altitude between 1000 and 1500 m a.s.l. About 40% of the territory consists of volcanic rocks (ca. 7,000 km²) mainly produced by the colossal caldera of Erciyes Dağı (*Argaeus Mons*, 3916 m a.s.l.), while to the south is bordered by the calcareous massif of Ala Dağları (3756 m), characterized by extensive natural cavities (caves = *in*, but also *mağara* in Turkish). The structures carved by man have been identified in the area affected by the tuffaceous deposits, within a range of about 50 km, which centre is represented by the imposing volcanic cone of Erciyes. Actually, the area is limited to the western sector of the Province, but contiguous, to the west, and lithologically comparable to the territories of Nevşehir and Niğde, equally rich in ancient rock-cut and underground settlements, which inventory is currently under revision.

In 1988, five local archaeologists (Yörükoğlu Ö., Sevil T., Taşçi Z., Türkmen K. and Uysal V.) produced the first inventory of all the underground structures they knew, located in the six provinces of Cappadocia, although generically and incompletely reported, for a total of 121 sites. For the Kayseri Province only, they compiled a list of 23 sites (Yörükoğlu, 1988). Over time and thanks to the reports of several travellers and scholars, various and extemporaneous information has been added to this first inventory. In 2002, and then in 2012, they were collected in a structured repertory: a total of 204 sites was recorded in Cappadocia, of which 29 were in Kayseri, but not all localized

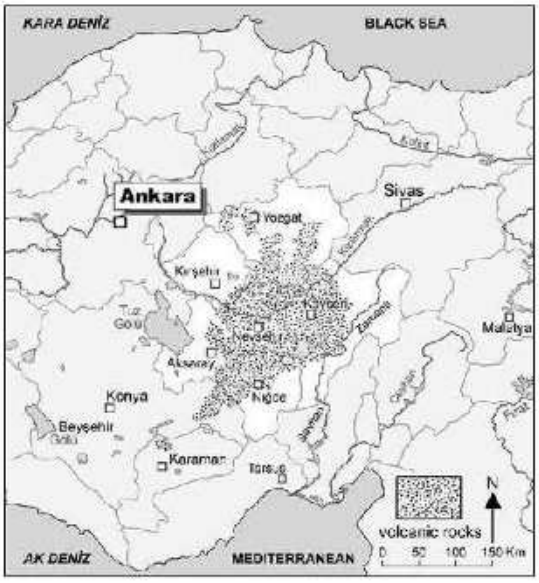


Fig. 3 – Extension of volcanic rocks in the six provinces of Cappadocia (drawing R. Bixio).

Fig. 3 – Estensione delle rocce vulcaniche nelle sei province della Cappadocia (grafica R. Bixio).

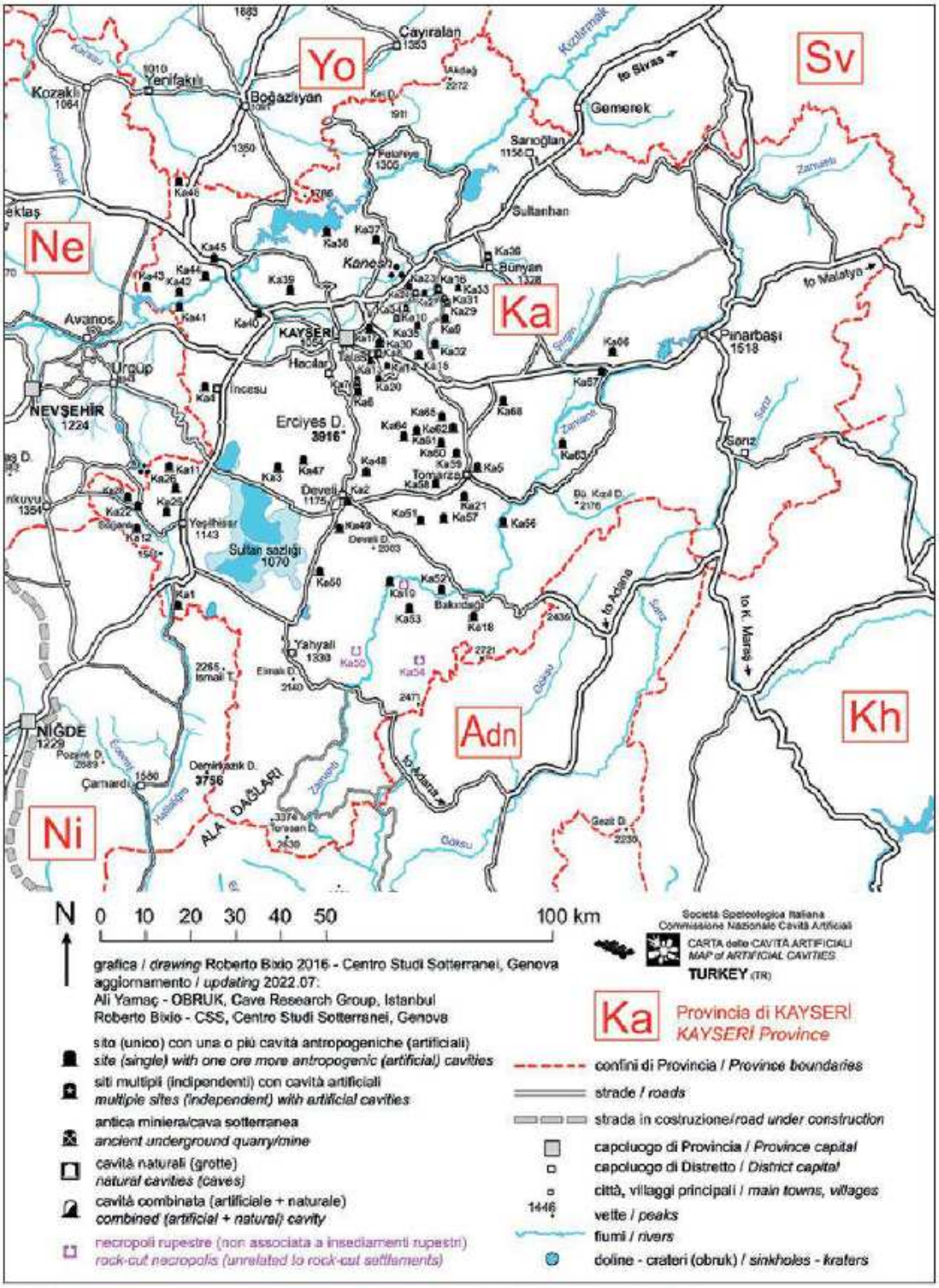


Fig. 4 – Kayseri Province. Location of sites (Artificial Cavities) listed in table 1 (drawing R. Bixio).

Fig. 4 – Provincia di Kayseri. Posizione dei siti (Cavità Artificiali) elencati nella tabella 1 (grafica R. Bixio).

(Bixio *et al.*, 2002; 2012). In 2014, at last, a project of systematic research starts, the Kayseri Underground Structures Inventory Project, promoted by the Municipality of Kayseri (*Kayseri Büyükşehir Belediyesi*), and ÇEKUL Trust (Çevre ve Kültür Değerlerini Koruma ve Tanıtma Vakfı), entrusted with an agreement to Obruk Cave Research Group (O'MAG = Obruk Mağara Araştırma Grubu) of Istanbul. Thanks to this research, which is still in progress (see for example Yamaç, 2015; 2021), the updated inventory of artificial cavities of the Kayseri Province has been compiled and published here. The sites listed are 82, all georeferenced, spread over 10 of the 16 districts (tab. 1), and marked on the map in figure 4.

We point out that black icons in the map indicate the location of each site listed; asterisks in icons correspond to very close, but independent sites (colored boxes in the list); each site may consist of only one cavity or, in most cases, several cavities (for example, cluster of churches or/and dwellings) or, often, hundreds of cavities, different in type and extent, forming real cliff villages (figs. 6, 8), or interconnected underground networks, almost always defended by countless millstone-doors (figs. 9, 10). Of course, they are considered in this inventory as a single site.

The initials of the column "type" refer to the classification developed by the CNCA-Commissione Nazionale Cavità Artificiali of the Società Speleologica Italiana (Typology Tree in fig. 5 - see, for example, Parise *et al.*, 2013; CNCA site on line/Sitography). In the last column the alphanumeric initials referring to the bibliography are reported, which appears in full in the table 2.

List of sites in KAYSERİ (Ka) province - revised version 2022.07 (July)

(Caesarea) (Qaisarya) (Eusebia) (Mazaca)

Note. This inventory is derived from the list published in 2012 (Bixio *et al.*, 2012), revised and updated.

(column 1) alphanumeric abbreviation (Id mark) to which the sites in the map refer = the first two letters (Ka) refer to the administrative Provinces into which the Turkey is subdivided. The numbers are assigned in the order each site is pinpointed.
(column 2) full name of Province.
(column 3) full name of District. Between brackets: normal = (old name); *italics* = *(historical name)*.
(column 4) locality = inhabited centre (town/village) nearest to the listed site.
Between brackets: normal = (old name); *italics* = *(historical name)*.
(column 5) latitude of the listed site.
(column 6) longitude of the listed site.
When the exact location is not yet detected, the coordinates in brackets refert to the nearest village.
(column 6) site name with presence of anthropogenic (artificial) cavities (if different from the locality) and any other information Main independent rock-cut chamber tombs/cliff necropolis are listed in violet.
(column 7) type = rock-cut type/intended use = abbreviations (Id marks) in the "Tree of Types" of SSI-CNCA.
(column 8) source = Tr + number = bibliographic references (see specific table) / pc = personal communication.
Note: not always all existing bibliography is reported in this inventory.

In Turkish:
Great Region=BÖLGE // Province=İL // District=İLÇE // Town=ŞEHRİ/ŞEHİR // Village=KÖY // locality=MEVKİ

Tab. 1

Id mark	province	district	locality	latitude	longitude	name of site/cavity and other information	type	source
Ka01	Kayseri	Yeşilhisar	Doğanlı Köy *(Govdefes)*	38°10'27.09"N	35°05'31.63"E	**Doğanlı** - underground shelter	D7	Tr056-Tr061 Tr064-Tr077 Tr204-Tr209 Tr236
Ka02	Kayseri	Develi	Bahçebaşı	38°22'48.09"N	35°29'37.22"E	**Öksenek** - rock-cut church	C1	Tr212
Ka03	Kayseri	Develi	Kulpak Köy	38°27'28.91"N	35°18'57.93"E	**Kulpak Dağı** - cliff settlement	B1	Tr064
Ka04	Kayseri	İncesu *(Sadacora)*	İncesu	38°37'23.04"N	35°09'27.80"E	**Eski Köy İnlort** - cliff settlement (11 rock-cut dwellings and 3 rock-cut churches nearby)	B1 C1	Tr219
Ka05	Kayseri	Tomarza	Tomarza	38°27'48.11"N To be checked	35°49'49.28"E To be checked	**Tomarza** - 4 rock-cut churches are reported in the surroundings of Tomarza, without a precise location)	C1	Tr135 pp 49/197
Ka06	Kayseri	Melikgazi	Hisarcık Köy	38°36'45.57"N	35°31'10.07"E	**Kırlangıç Valley** - underground shelter	D7	Tr064-Tr209 Tr236
Ka07	Kayseri	Melikgazi	Hisarcık Köy	38°37'52.50"N	35°31'08.98"E	**Asarkaya** (also **Hisarcık**) - 10 Assyrian tin mines, no underground settlement	E2	Tr064 pc Yamaç
Ka08	Kayseri	Talas						
Ka08.1	Kayseri	Talas	Talas	38°40'28.29"N	35°33'28.75"E	**Ali Dağı** - underground shelter (528 m tunnel length and a huge cistern)	D7	Tr064 Tr077 Tr058 Tr204 Tr209 Tr236
Ka08.2	Kayseri	Talas	Talas	38°40'45.76"N	35°32'57.63"E	**Harman Yeri** - underground shelter	D7	Tr211
Ka08.3	Kayseri	Talas	Talas	38°41'16.19"N	35°33'30.08"E	**Ali Saip Paşa** - underground shelter (a single tunnel 916 m and a millstone-door)	D7	Tr058 Tr209 Tr236

Id mark	province	district	locality	latitude	longitude	name of site/cavity and other information	type	source
Ka09	Kayseri	Melikgazi	Büyük Bürüngüz	38°45'37.42"N	35°44'29.44"E	**Büyük Bürüngüz (Koramaz Vadisi)** - underground settlement (coordinates of one entrance, but the underground settlement extends 12/3 m under the whole surface village. There are 27 millstone doors)	D7	Tr063
Ka10	Kayseri	Melikgazi/Gesi						
Ka10.1	Kayseri	Melikgazi/Gesi	Belağası Köy	38°46'05.00"N	35°38'18.45"E	**Belağası** + cliff Settlement: 28 rock-cut dwellings, underground aqueduct and a church) + underground shelter No 1 + underground shelter No 2: only one millstone but 52 very small rooms	D7 A3 B1 C1	Tr058 Tr205 Tr209 Tr238
Ka10.2	Kayseri	Melikgazi/Gesi	Belağası Köy	38°45'38.34"N	35°38'35.42"E	**Ötedere Valley 1** - underground shelter No 1	D7	Tr058-Tr206 Tr209-Tr238
Ka10.3	Kayseri	Melikgazi/Gesi	Belağası Köy	38°46'02.41"N	35°38'33.15"E	**Ötedere Valley 2** - underground shelter No 2 (maybe also **Hasan Efengi**)	D7	Tr058-Tr206 Tr209-Tr238
Ka10.4	Kayseri	Melikgazi/Gesi	Mimar Sinan / Demokrasi	38°45'34.12"N	35°37'28.73"E	**Avadik Valley** - cliff settlement (5-6 dwellings and a small rock-cut church)	B1 C1	Tr211
Ka11	Kayseri	Yeşilhisar	Gülbayır Köy	38°26'37.50"N	35°03'57.20"E	**Gülbayır**	D77	Tr237
Ka12	Kayseri	Yeşilhisar	Soğanlı Köy *(Soandos)*	38°20'40.51"N	34°58'16.41"E	**Soğanlı** - rock-cut settlement (consisting of 16 churches / small monasteries, tombs and dovecotes, and at least two shelters / redoubts with millstone-doors, located along the two branches of the valley. On the upper edge of the plateau, perhaps dovecotes)	D7 C1 C2 B7	Tr135-Tr137 Tr159-Tr160 Tr167-Tr176 Tr185-Tr187 Tr216-Tr218
Ka13	Kayseri	Talas	Gülistan Köy	38°39'39.04"N	35°34'13.02"E	**Gülistan** - underground shelter (also named as **Reşadiye** shelter)	D7	Tr211 Tr230 Tr238
Ka14	Kayseri	Talas	Reşadiye Köy	38°40'03.23"N	35°35'49.71"E	**Karaağaç** - underground shelter	D7	Tr230 Tr238
Ka15	Kayseri	Talas	Kuruköprü	38°41'08.75"N	35°41'31.69"E	**Kuruköprü** - underground shelter	D7	Tr211
Ka16	Kayseri	Melikgazi						
Ka16.1	Kayseri	Melikgazi	Ağırnas Köy *(Aragena)*	38°48'48.31"N	35°42'59.23"E	**Ağırnas 1 (Koramaz Vadisi)** - underground shelter (with a church inside)	D7 C1	Tr064-Tr077 Tr219-Tr238
Ka16.2	Kayseri	Melikgazi	Ağırnas Köy *(Aragena)*	38°48'58.47"N 38°48'58.31"N	35°42'52.05"E 35°42'55.72"E	**Ağırnas 2 "Mimar Sinan" (Koramaz Vadisi)** - underground shelter (coordinates of only one entrance but the underground settlement covers the entire surface village) **Mustafa Bozdemir** (possibly a segment of Mimar Sinan underground shelter)	D7	Tr060 Tr206 Tr210 Tr217 Tr238
Ka16.3	Kayseri	Melikgazi	Ağırnas Köy *(Aragena)*	38°48'57.21"N	35°42'28.07"E	**Ağırnas 3 (Koramaz Vadisi)** - cliff settlement (195 rock-cut dwellings and 15 rock-cut churches in three valleys)	B1 C1	Tr062-Tr067 Tr135-Tr170 Tr210-Tr213 Tr229-Tr238
Ka17	Kayseri	Melikgazi	Germir *(Konaclar)*	38°44'9.56"N	35°33'35.18"E	**Germir** (also **Konaclar**) - underground shelter	D7	Tr064 Tr195 pp 208/211
Ka18	Kayseri	Develi	Küçük Künye	38° 8'34.29"N	35°49'2.22"E	**Küçük Künye** - rock-cut village	B1	Tr135 pp 49/197
Ka19	Kayseri	Develi	Ayşepınar Köy	38°13'43.17"N	35°36'58.56"E	**Ayşepınar** - rock-cut village and 10 Roman rock-cut tombs dating around second century AD)	B1 C2	Tr135 (p 197) Tr212 Tr215
Ka20	Kayseri	Talas	Zincidere Köy	38°38'33.92"N	35°34'32.10"E	**Zincidere** - underground shelter (several entrances below the houses of the village, all blocked + one rock-cut church)	D7 C1	Tr135 (p 198) Tr226 Tr230 Tr238
Ka21	Kayseri	Tomarza	Göbü	38°24'37.45"N	35°48'5.90"E	**Göbü** - rock-cut church	C1	Tr135 pp 49/197
Ka22	Kayseri	Yeşilhisar	Güzelöz Köy *(Mavrucan)*	38°23'21.23"N 38°23'15.31"N	34°57'16.32"E 34°57'17.36"E	**Güzelöz 1** (underground shelter) **Güzelöz 2** (more than 14 rock-cut churches and several rock-cut dwellings, barns and wine-presses on the slopes of Mavrucan Valley – roman tombs)	D7 B1 C1 C2	Tr058-Tr062 Tr127-Tr135 Tr170-Tr185 Tr187-Tr209 Tr214-Tr221 Tr222-Tr223 Tr224-Tr229 Tr238
Ka23	Kayseri	Melikgazi	Ispıdın Köy (Bağpınar)	38°48'46.87"N	35°39'19.08"E	**Ispıdın (Koramaz Vadisi)** (7 rock-cut dwellings + 14 rock-cut churches)	B1 C1	Tr067
Ka24	Kayseri	Melikgazi						
Ka24.1	Kayseri	Melikgazi	Vekse Köy *(Özlüce)*	38°48'12.05"N	35°39'32.57"E	**Vekse 1 Village (Koramaz Vadisi)** (2-3 dwellings + an underground shelter with several entrances below the houses of the village and a huge millstone but all tunnels blocked)	D7 C1	Tr062 (p 241) Tr067 Tr213
Ka24.2	Kayseri	Melikgazi	Vekse Köy *(Özlüce)*	38°48'28.48"N	35°40'26.77"E	**Vekse 2 North Wall (Koramaz Vadisi)** rock-cut churches (3 dwellings + 5 rock-cut churches)	B1 C1	Tr213
Ka25	Kayseri	Yeşilhisar	Keşlik Köy	38°22'23.74"N	35°02'48.07"E	**Keşlik** - rock-cut dwellings + apiary	B1 B8	Tr059 (p 365)
Ka26	Kayseri	Yeşilhisar	Erdemli Köy	38°24'53.03"N	35°04'10.73"E	**Erdemli** (large rock-cut settlement with facilities and churches/monastery)	B1 C1	Tr059-Tr062 Tr065-Tr231 Tr232-Tr233 Tr234-Tr235 Tr236

Id mark	province	district	locality	latitude	longitude	name of site/cavity and other information	type	source
Ka27	Kayseri	Melikgazi	Turan Köy	38°46'14.09"N	35°42'00.67"E	**Dimitre (Koramaz Vadisi)** cliff settlement (229 rock-cut dwellings and 7 rock-cut churches)	B1 C1	Tr067 Tr213
Ka28	Kayseri	Yeşilhisar	Başköy (Ortaköy)	38°23'36.02"N	34°56'16.96"E	**Başköy** (today get together **Ortaköy**) - rock-cut village and 9 rock-cut churches, dwellings and wine-press)	B1 C1	Tr082-Tr127 Tr135-Tr170 Tr185-Tr187 Tr214-Tr221 Tr222-Tr223 Tr224
Ka29	Kayseri	Melikgazi						
Ka29.1	Kayseri	Melikgazi	Subaşı Köy	38°47'49.41"N	35°44'04.10"E	**Subaşı 2 (Koramaz Vadisi)** - underground shelter No 2 (5 millstone doors, entrance collapsed)	D7	pc Yamaç
Ka29.2	Kayseri	Melikgazi	Subaşı Köy	38°47'52.05"N	35°44'00.53"E	**Subaşı Monastery** - rock-cut monastery	C1	Tr212
Ka30	Kayseri	Melikgazi	Aydınlar *(Tavlusun)*	38°41'32.96"N	35°34'45.06"E	**Derevank** - cliff settlement (also **St. Sergius monastery**)	B1 C1	Tr061-Tr068 Tr179-Tr239 Tr240
Ka31	Kayseri	Melikgazi						
Ka31.1	Kayseri	Melikgazi	Küçük Bürüngüz	38°47'57.14"N	35°43'51.78"E	**Subaşı 3 (Koramaz Vadisi)** - underground shelter No 3 (Same rock cliff with other structures, small and unfinished)	D7	pc Yamaç
Ka31.2	Kayseri	Melikgazi	Küçük Bürüngüz	38°48'01.69"N	35°43'34.95"E	**Küçük Bürüngüz (Koramaz Vadisi)** - cliff settlement	B1	Tr213
Ka32	Kayseri	Melikgazi	Gürpınar Köy	38°42'39.14"N	35°42'38.75"E	**Gürpınar** - cliff settlement (few rock-cut dwellings interconnected)	B1	Tr230
Ka33	Kayseri	Melikgazi	Subaşı Köy (Üskübü) *(Skopu-Manda)*	38°48'48.68"N	35°46'11.27"E	**Subaşı 1 (Koramaz Vadisi)**- underground shelter No 1	D7	Tr210
Ka34	Kayseri	Melikgazi/Gesi						
Ka34.1	Kayseri	Melikgazi/Gesi	Güney Köy	38°47'00.09"N	35°40'05.35"E	**Güney** - rock-cut church	C1	Tr212
Ka34.2	Kayseri	Melikgazi/Gesi	Bahçeli Köy	38°46'46.24"N 38°46'43.04"N	35°39'19.22"E 35°39'18.07"E	**Penzikli** - underground shelter 1 **Çatalin** - underground shelter 2	D7	Tr058 Tr209 Tr238
Ka34.3	Kayseri	Melikgazi/Gesi	Kayabeğ Köy *(Darsiyah)*	38°46'26.93"N	35°39'41.37"E	**Değirmendere Valley (also Darsiyah)** - cliff settlement (3 churches, more than 30 dwellings and several Ottoman dovecotes)	B1 C1	Tr064 Tr209
Ka35	Kayseri	Melikgazi	Güzelköy Köy	38°44'35.26"N	35°40'45.53"E	**Talasıra** - underground shelter	D7	Tr211
Ka36	Kayseri	Bünyan						
Ka36.1	Kayseri	Bünyan	Bünyan	38°50'50.18"N	35°51'08.89"E	**Kayabaşı** - cliff rock-cut settlement (10-15 rock-cut dwellings and an underground shelter)	D7 B1	Tr226 Tr230
Ka36.2	Kayseri	Bünyan	Bünyan	38°50'42.57"N	35°51'23.33"E	**Bünyan** - underground shelter (2 millstone doors and 5 chambers)	D7	pc Yamaç
Ka37	Kayseri	Kocasinan	Akın Köy	38°51'48.69"N	35°31'44.61"E	**Akın** - cliff settlement (10-15 rock-cut dwellings)	B1	Tr220
Ka38	Kayseri	Kocasinan	Çevril Köy	38°55'46.87"N	35°27'41.28"E	**Old Çevril** - cliff settlement (30 rock-cut dwellings)	B1	Tr220
Ka39	Kayseri	Kocasinan	Melu Köy	38°48'06.25"N	35°22'23.10"E	**Kopoz Hill** - cliff settlement	B1	Tr229
Ka40	Kayseri	Kocasinan	Boğazköprü	38°45'12.97"N	35°18'11.81"E	**Hörin Hill** - cliff settlement	B1	Tr230
Ka41	Kayseri	Kocasinan	Küllü Köy	38°47'10.87"N	35°04'55.91"E	**Old Küllü** - cliff settlement (hundreds of rock-cut dwellings)	B1	Tr220 Tr229
Ka42	Kayseri	Kocasinan	Yuvalı Köy	38°47'48.88"N	35°05'16.59"E	**Old Yuvalı** - cliff settlement (numerous rock-cut dwellings and 2-3 rock-cut churches)	B1	Tr220 Tr229
Ka43	Kayseri	Kocasinan	Bayramhacı	38°48'04.59"N	34°59'51.75"E	**Bayramhacı** - quarries (or storage structures: 9 huge rock-cut structures, some larger than 400 m²)	B1?	Tr220 Tr230
Ka44	Kayseri	Kocasinan	Yuvalı Köy	38°49'15.41"N	35°09'18.03"E	**Bostanlı** - cliff settlement (18 rock-cut dwellings)	B1	Tr220
Ka45	Kayseri	Kocasinan	Yamlıha Köy	38°52'17.03"N	35°11'04.25"E	**Bilig Bağları** - cliff settlement (20-30 rock-cut dwellings)	B1	Tr220 Tr229
Ka46	Kayseri	Kocasinan	Elmalı Köy	(39°00'33.44"N)	(35°05'30.85"E)	**Elmalı** - cliff settlement (coordinates centre village)	B1	Tr230
Ka47	Kayseri	Develi	Kulpak Köy	38°26'32.47"N	35°21'05.84"E	**Kulpak Innikaya** - cliff settlement	B1	Tr229
Ka48	Kayseri	Develi *(Gebedonia)*	Çomaklı Köy	38°26'57.07"N	35°32'32.54"E	**Çomaklı** - underground shelter (entrance blocked few years ago)	D7	Tr230
Ka49	Kayseri	Develi	Tombak Köy	38°19'34.92"N	35°29'03.79"E	**Tombak** - underground shelter and rock-cut dwellings	D7 B1	Tr212
Ka50	Kayseri	Develi	Gazi Köy	38°14'32.72"N	35°26'2.95"E	**Gazi** - underground shekter + rock-cut cistern	D7 A3	Tr212 Tr238
Ka51	Kayseri	Develi	Şahmelik Köy	38°21'04.87"N 38°21'03.68"N 38°21'12.44"N	35°41'44.67"E 35°41'50.84"E 35°41'45.14"E	**Şahmelik 1** - underground shelter within the east cliff settlement **Şahmelik 2** - underground shelter within the east cliff settlement **Şahmelik 3** - west cliff settlement	D7 B1	Tr212
Ka52	Kayseri	Develi	Yenice Köy	38°12'19.09"N	35°44'35.02"E	**Mahmutçuk** - underground shelter (now submerged)	D7	Tr212
Ka53	Kayseri	Develi	Hoşça Köy	38°10'30.82"N	35°40'26.98"E	**Hoşça** - cliff rock-cut settlement	B1	Tr230

Id mark	province	district	locality	latitude	longitude	name of site/cavity and other information	type	source
Ka54	Kayseri	Develi	Yenikôy	38°04'25.21"N	35°41'50.23"E	Yenikôy - 3 Roman rock-cut tombs dating around second century AD)	C2	Tr212 Tr215
Ka55	Kayseri	Yahyalı	Taşhan Köy	38°05'15.14"N	35°31'23.28"E	Taşhan - rock-cut tombs	C2	Tr235 Tr236
Ka56	Kayseri	Tomarza	Şıh Barak Köy	38°20'27.23"N	35°53'24.78"E	**Fatinler** - underground shelter	D7	Tr211 Tr238
Ka57	Kayseri	Tomarza	Pusatlı Köy	38°21'18.70"N	35°45'45.30"E	**Silmengen** - underground shelter	D7	Tr211
Ka58	Kayseri	Tomarza	Pusatlı Köy	38°25'37.92"N	35°44'16.65"E	**Eski Pusatlı** -underground shelter + several underground dwellings	D7 B1	Tr211
Ka59	Kayseri	Tomarza	Tomarza	38°28'53.16"N	35°48'08.66"E	**Kirkor** - underground shelter	D7	Tr211
Ka60	Kayseri	Tomarza	Kömür Köy	38°29'46.67"N	35°45'02.75"E	**Kömür** - underground shelter	D7	Tr211
Ka61	Kayseri	Tomarza	Kuşcağız Köy	38°31'14.83"N	35°40'52.75"E	**Kuşcağız** - underground shelter (very close to Ts01 Danalık/Talas district)	D7	Tr211
Ka62	Kayseri	Tomarza	İncili Köy	38°31'56.53"N	35°45'49.12"E	**İncili** - underground shelter	D7	Tr211
Ka63	Kayseri	Tomarza	Emiruşağı Köy	38°27'43.27"N	36°04'46.32"E	**Emiruşağı** - underground shelter	D7	Tr211 Tr238
Ka64	Kayseri	Talas (*Mustalaske*)	Çömlekçi Köy	38°30'35.48"N	35°39'40.80"E	**Danalık** - underground shelter (very close to To08 Kuşcağız/Tomarza district)	D7	Tr211
Ka65	Kayseri	Talas						
Ka65.1	Kayseri	Talas	Sosun (Ortakavak)	38°33'18.13"N	35°44'27.73"E	**Ortakavak** - underground shelter	D7	Tr230
Ka65.2	Kayseri	Talas	Sosun (Ortakavak)	38°33'09.98"N	35°44'28.52"E	**Sosun** - underground shelter (a crossing cavity with a single 340 m long tunnel, double entrance and 4 chambers, 2 millstone doors)	D7	pc Yamaç
Ka66	Kayseri	Pınarbaşı (*Anaratheia*)	Pazarören Köy	38°40'52.45"N	36°10'06.75"E	**Pazarören 1** (also **Isbidan**) - underground shelter	D7	Tr230 Tr238
Ka67	Kayseri	Pınarbaşı	Pazarören Köy	38°39'26.04"N	36°09'32.05"E	**Pazarören 2** - underground shelter (6 millstone doors and 12 chambers)	D7	pc Yamaç
Ka68	Kayseri	Tomarza	Kızılören (Kızılviran) (Yünören)	38°34'21.82"N	35°54'25.95"E	**Kızılören** - underground settlement / shelter	D7	Tr159

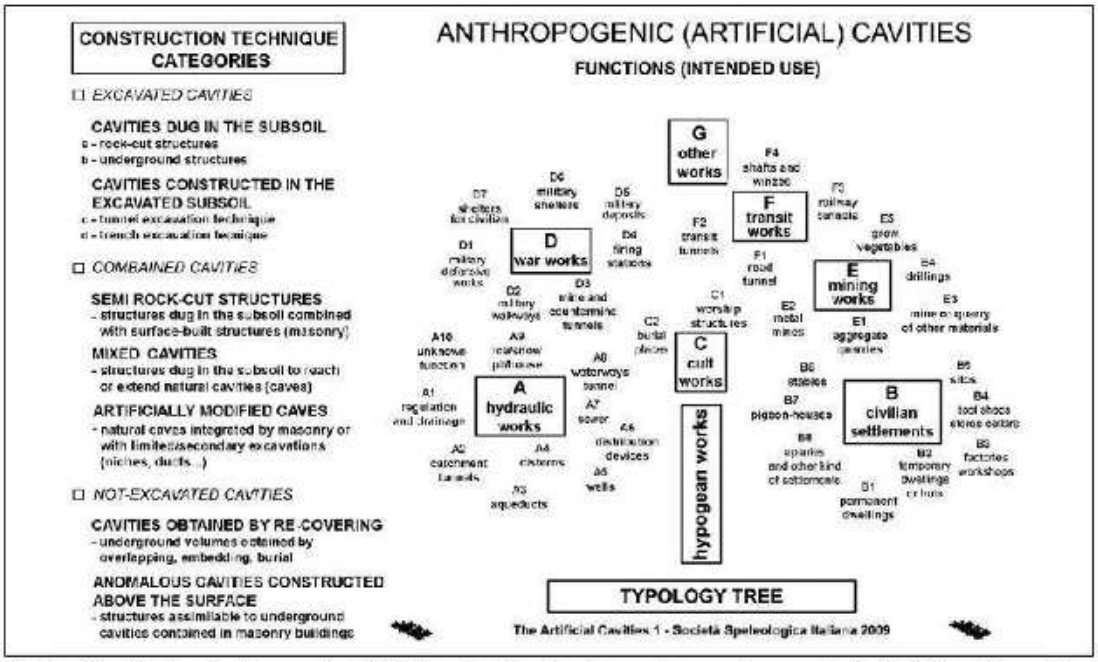


Fig. 5 – Classification of anthropogenic (artificial) cavities into categories and types: scheme created by the National Commission of Artificial Cavities of the Italian Speleological Society (drawing R. Bixio).

Fig. 5 – Classificazione delle cavità antropogeniche (artificiali) in categorie e tipologie: schema realizzato dalla Commissione Nazionale delle Cavità Artificiali della Società Speleologica Italiana (grafica R. Bixio)

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Fig. 6 – Şahmelik Valley. East Cliff Settlement, with underground shelter: Id mark Ka51 (photo A.E. Keskin).
Fig. 6 – Şahmelik Valley. Insediamento in Falesia Est, con rifugio sotterraneo: sigla identificativa Ka51 (foto A.E. Keskin).



Fig. 7 – The Valley of Soğanlı, Id mark Ka12. Settlement consisting of several small rock-cut monasteries, with tomb and rooms defended by millstone-doors. In the picture, the church Kubbeli (photo R. Bixio).
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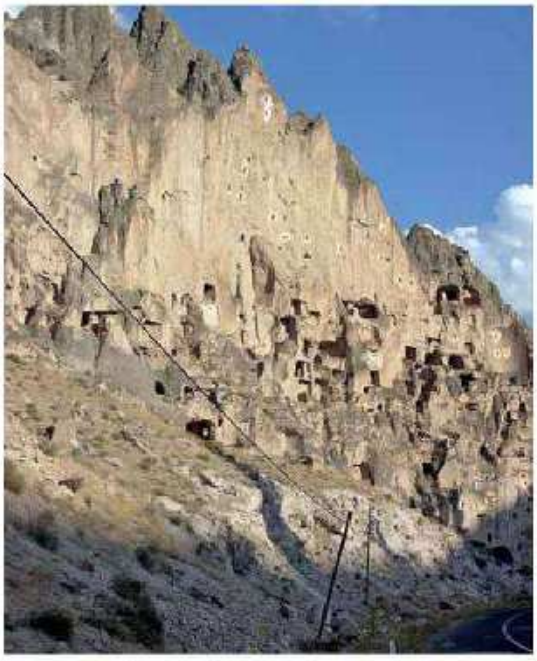


Fig. 8 – Rock-cut settlement Id mark Ka12 located at the entrance of the Valley of Soğanlı, with dwellings, churches, and characterized by dozens of dovecotes carved in the highest level of the cliff (photo R. Bixio).
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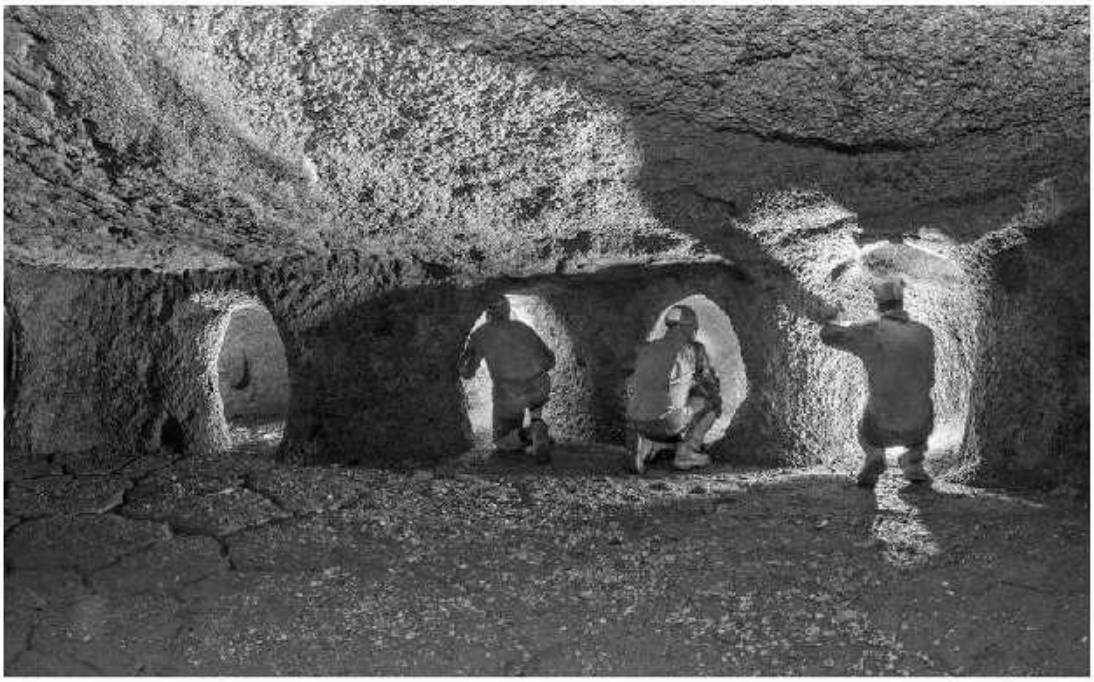


Fig. 9 – Büyük Bürüngüz, Id mark Ka09, one of the underground shelters along the Koramaz Valley (photo A.E. Keskin).
Fig. 9 – Büyük Bürüngüz, identificativo Ka09, uno dei rifugi sotterranei lungo la Valle di Koramaz (foto A.E. Keskin).



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Fig. 10 – Distretto di Tomarza. Rifugio sotterraneo di Kuşcağız, identificativo Ka61 (foto A.E. Keskin).

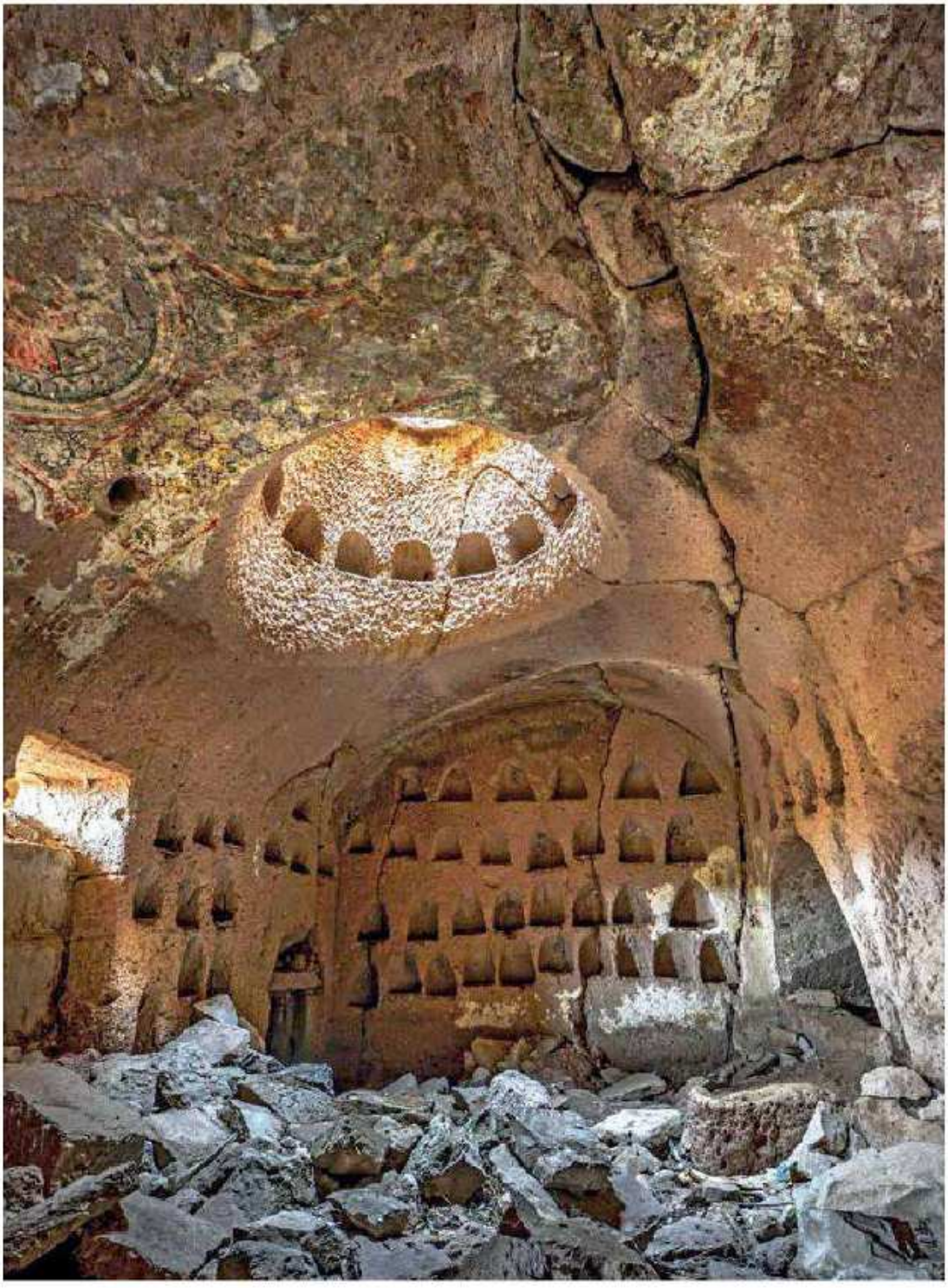


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Underground structures inventory project of Kayseri (Turkey): a short summary

Ali Yamaç[1]

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 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.



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

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 several 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:



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

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

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 – Ispıdın 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 Ispıdın 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; Ispıdın 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
Ispıdın	14
Değirmendere	3
Develi	1
Derevenk	1 (monastery)
TOTAL	**47**

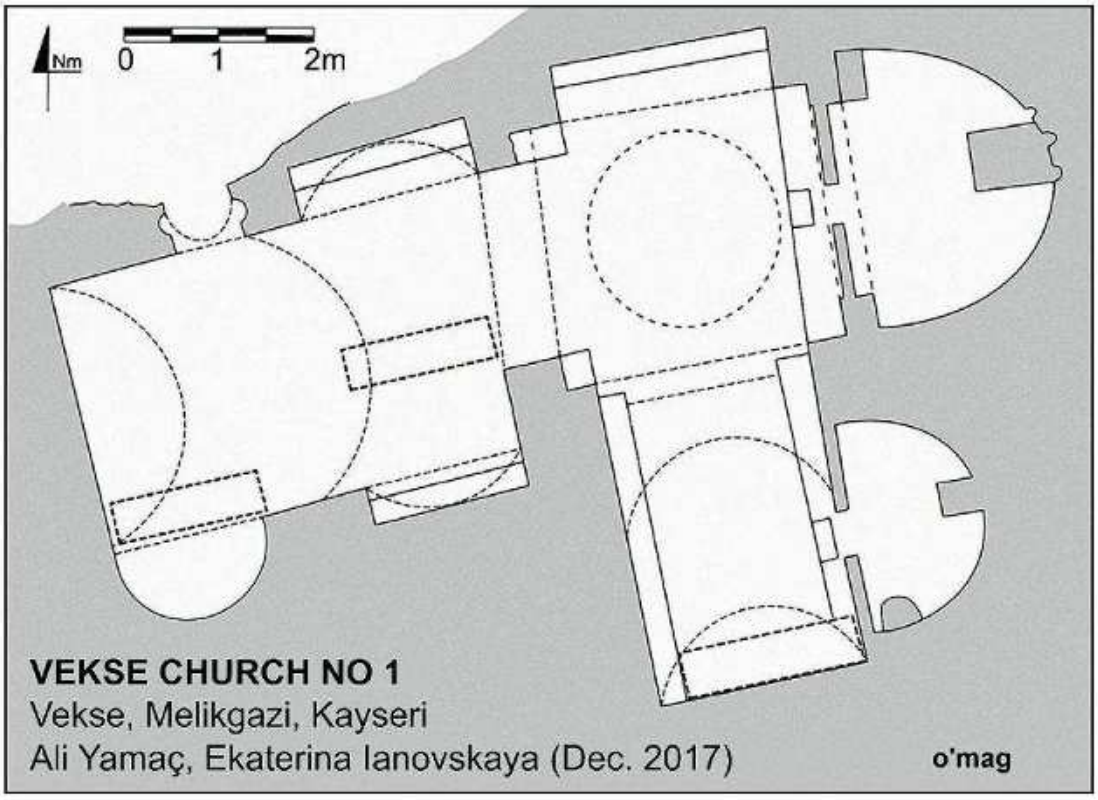


Fig. 5 – Plan of Vekse Church No. 1 (drawing A. Yamaç, E. Ianovskaya).



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

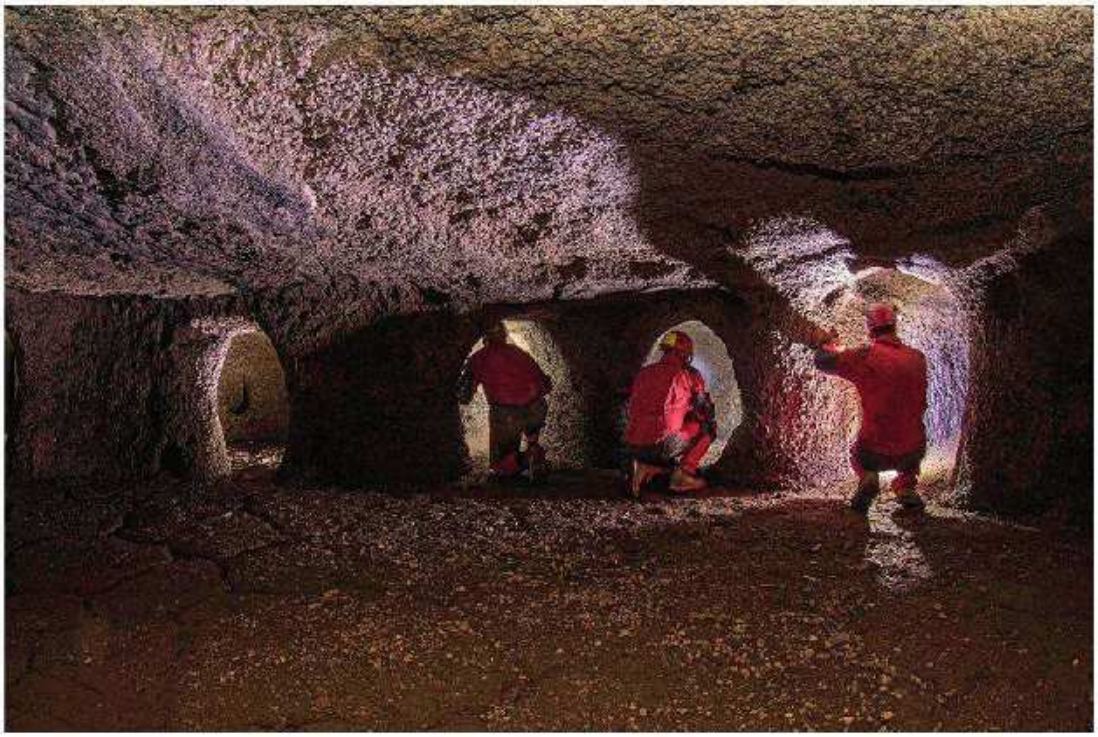


Fig. 7 – Büyük Bürüngüz Underground City (photo A. E. Keskin).

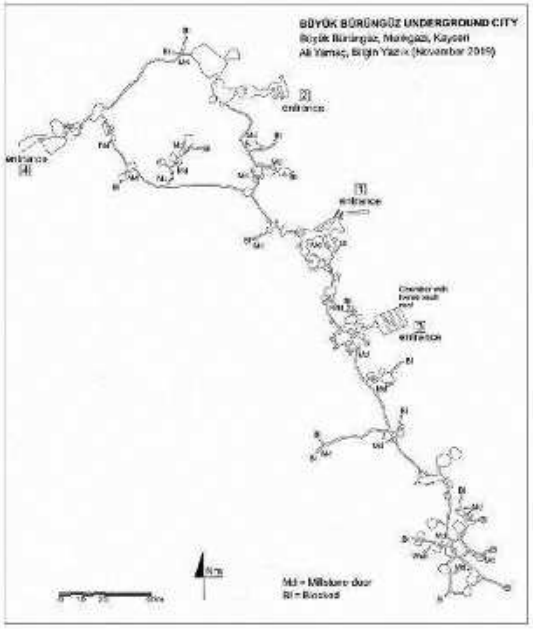


Fig. 8 – Plan of Büyük Bürüngüz Underground City (drawing A. Yamaç and B. Yazlık).

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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Underground Shelters in Cappadocia (Turkey)

Roberto Bixio[1,*], *Ali Yamaç*[2]

Abstract

Structures carved in the rock for purposes of war or refuge are known all over the world and in every age. Cappadocia, in the middle of Turkey, is one of the places where such structures are most widespread and articulated, facilitated by very favourable geological and morphological conditions. The historical events that may have pushed the populations resident in this territory to dig this type of structures are numerous and distributed over a very large period of time. However, in view of a compelling set of clues listed here, the period that most justifies the expansion of a system of underground shelters is that of the Arab raids that afflicted the Byzantine territory between the middle of the 7th and early 11th centuries AD. The organization of all the shelters in Cappadocia seems to comply with a common design, then varied according to local needs. Each project includes a basic unit consisting of a residential or utilitarian part, and a composite set of devices for the defence of a more internal area in which are preponderant heavy stone doors in the shape of a millstone. The set of units can form well organized systems, which sometimes extend even for kilometres, corresponding to surface villages, or integrated in ancient rock-cut dwellings. Currently, these structures are locally called "underground cities", regardless of their size and their actual function, but it would be appropriate to identify them as "underground shelters", or more generically as "underground settlements".

Keywords: Cappadocia, underground shelter, underground settlement, underground city, yeraltı şehri.

Introduction

It is well known that people have used, and still use underground spaces everywhere, for thousands of years, not only as dwellings where to take cover from the adverse weather conditions, or worship reasons, but also to hide and defend themselves from hostile actions. The entrances to these shelters, dug into the rocky outcrops and underground, are almost always not easy to locate. Rooms of various sizes, connected by tunnels usually equipped with traps and doors, almost impossible to open from the outside, have turned these structures into defence centres, indispensable against all kinds of hostile events throughout history. Therefore, in many geographical areas, from Vietnam to France, there are today evidence of countless underground structures of this type (Triolet and Triolet, 1996; 2013).

However, the first place that comes to mind is, in all likelihood, Cappadocia, located in the core of Anatolia (figs. 1, 2), consisting mainly of soft volcanic rocks, cliffs, canyons, badlands and eroded pinnacles. The two main reasons for this appeal are the huge number and density of underground settlements on this territory and the remarkable size and complex organization of some of them. Small or large, almost every village in Cappadocia has rock-cut or underground artificial structures of several types, including one or more equipped also for defence (shelters) (fig. 3). They are particularly concentrated in the provinces of Nevşehir, Kayseri and Aksaray, but are also present in the other neighbouring provinces (figs. 2, 4).

We can note that on the rock-cut churches there is a very vast literature. Instead, investigations on man-made structures in the rock formations of the region that specifically concern the so-called "underground cities" or, better, "underground shelters", begins only in the 1970s. The first study on this subject belongs to Martin Urban (1973a-b-c), followed by works of Yörükoğlu *et al.* (1989), the Triolet brothers (1993), and two officials of the Nevşehir Archaeological Museum (Gülyaz and Yenipınar, 1995).

In 1991 a multi-year project started to systematically explore and map as many underground settlements as possible. The program was developed by researchers from Centro Studi Sotterranei (CSS) of Genoa (Italy), partner of National Artificial Cavity Commission, which is an organisation of the Italian Speleological Society. The investigations were carried out with the authorization of the Turkish Ministry of Culture (Bertucci, Bixio, and Traverso, 1995; Bixio, Castellani and Succhiarelli, 2002; Bixio, 2012). More recently, a systematic research project promoted by Kayseri Province and led by Obruk Mağara Araştırma Grubu (O'MAG) of Istanbul has started.

At the same time a data collection and a cataloguing was carried out both on the sites explored and on those whose sources could be found. The two most complete inventories achieved so far are: "Cappadocia: Records of the Underground Sites" (Bixio, 2012), and "The Archaeological Settlements of Turkey" (Akyürek *et al.*, 2015). Although more than 120 rock-cut and underground settlements are recorded in these two inventories, documentation and maps of only a small part of

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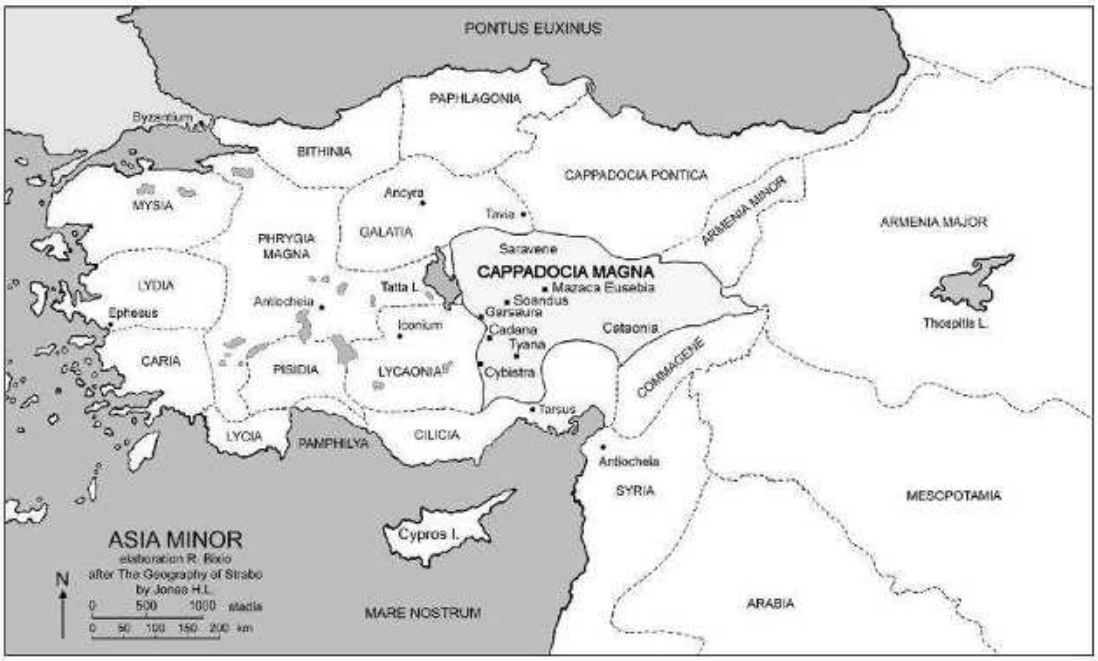


Fig. 1 – Cappadocia at the time of Strabo, about AD 14 (drawing modified by R. Bixio, after Jones, 1954).

these structures are available. However, thanks to the O'MAG and CSS teams, new and wider investigations are currently underway, with the result, among others, of having already updated the inventory, which will be soon published, geo-locating in total 364 sites with artificial cavities (fig. 4). Of these, at least 200 are structured with defence devices that allow us to identify them as real shelters.

Historical background

Cappadocia, from the second millennium BC, after being the centre of the Hittite Empire, with its capital Hattusa to the north (fig. 2), and then of the Neo-Hittite kingdom of Tabal (9th-8th centuries BC), later fell under the control of the Phrygian kingdom (8th-7th centuries BC). There were several Assyrian attacks in Cappadocia, in 718 BC and in the following years. Following the destruction of the Assyrian kingdom by the combined powers of Babylonians, Scythians, and Medes (612 BC), the latter and the kingdom of Lydia, in 590-585 BC, began another conflict in Cappadocia (Sevin, 1998). Later the region became a Persian satrapy: the name *Katpat.uk-a* first appears in 520 BC in an inscription by Darius reported by Herodotus (Kent, 1953: 107), but probably already mentioned as *Katta-peda* (Lower Land) in Hittite sources (Yakubovich, 2014).

Later the region became Hellenized during the conquests of Alexander the Great (322 BC), and then in

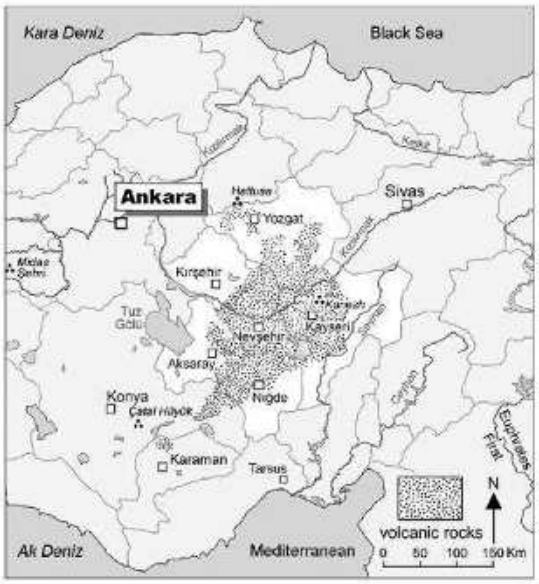


Fig. 2 – Central Anatolian Plateau. The current six provinces that we consider largely corresponding to historical Cappadocia. The dotted area corresponds roughly to the extent of the volcanic rock deposits, of about 20,000 square kilometres, where the investigations of underground settlements are still in progress (drawing R. Bixio).



Fig. 3 – Bürüngüz underground settlement (Kayseri Province).The network of tunnels and rooms is carved into the rock below the masonry village of surface. The part explored so far extends for 1286 m, defended by 27 millstone-doors. It is thought that the structure is much larger, extending under the whole masonry village, with more entrances and defence devices (photo A.E. Keskin).

the sphere of influence of Rome (about 190 BC); finally, in AD 17, it becomes a Roman province (fig.1) (Thierry, 2002: 25). The early rooting of Christianity occurs here immediately in the following period. In the second century Caesarea (before Mazaca Eusebia and now Kayseri), is already stabilized as a bishopric, despite the subsequent persecution of Valerian and Diocletian in the third century (Thierry, 2002: 62). At the beginning of the 4th century, the Emperor Constantine officially recognized the new religion, which expanded quickly, as witnessed by the construction of masonry churches and the excavation of countless churches in the rock, especially from the late 5th until the 13th century (Ousterhout, 2017: 5/13). In AD 314 Cappadocia was the largest province of the Roman Empire (Ramsay,1890). This territory corresponds to almost six provinces of today (fig. 2), with a total area of at least 58,000 sq km, which includes over 20,000 sq km of volcanic deposits (dotted area) where nearly all the rock-cut and underground sites are located (fig. 4). From the beginning of the 7th century, Cappadocia was a frontier land of the Byzantine Empire threatened by the armies of the Sassanid Persian Empire. During the occupation of Caesarea by the Persians in AD 611, the residents fled and the city was destroyed. Afterward, in 622 and 627, the Byzantine Emperor Herakleios, campaigned against the Persians in Anatolia, winning a string of battles. Between 628 and 632, a civil war greatly weakened the Sassanid Empire. The Arab armies took advantage of this situation and began to attack Anatolia. Rather than an invasion of the region, the Arab attacks consisted of a sort of "looting" that was repeated almost every summer and these raids continued for about 350 years (Mc Geer, 1991: 132-133).

A century after the end of the Arab attacks, the region was faced with the Seljuk Turks' raids. Their armies destroyed Melitene (today Malatya) in AD 1057 and Sebasteia (today Sivas) in 1059. In 1067 they conquered Caesarea (Runciman 1997: 54), burned it and massacred all the people. Four years later, in 1071, the Byzantine emperor Romanos IV arrived in the region with a large army to regain control of Cappadocia. After his defeat at the Battle of Manzikert, the entire region was completely occupied by the Seljuk (Ash, 2006; Hild and Restle, 1981).

Dating the Cappadocian underground shelters

Generally, it is considered that all these underground shelters located in Cappadocia were dug by the local

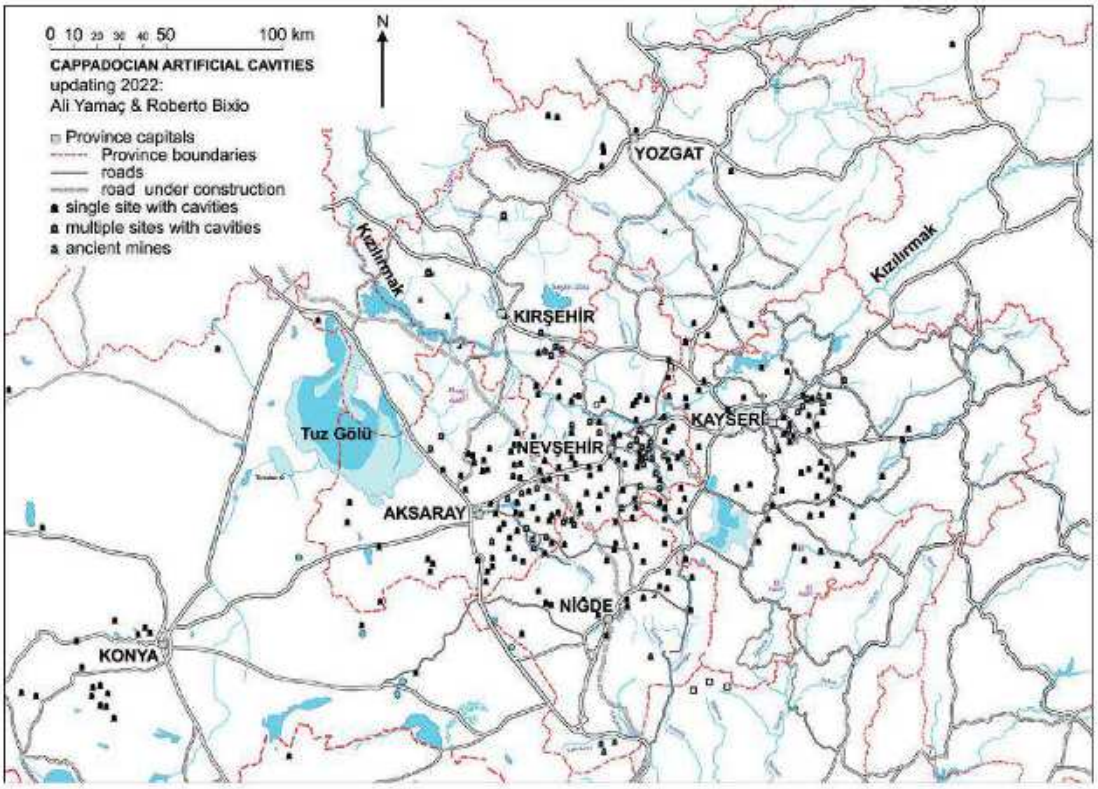


Fig. 4 – Updated 2022 map of all anthropogenic sites identified in the current six provinces of historical Cappadocia (drawing A. Yamaç and R. Bixio).

Christian population to defend themselves and survive in this troubled environment, between middle 7th and early 11th centuries, coinciding with the Arab raids. This opinion is supported by various researchers (Jerphanion, 1925; Kempe, 1988; Triolet and Triolet, 1993, 2002; Ousterhout, 2017).

Indeed, we note that on the rocky walls of many underground settlements there are often engraved crosses and in several cases they are associated with churches. Moreover, we know that during the archaeological excavations of the underground shelters at Aydıntepe (Kayseri province), Kavlaktepe (Niğde province) and Oymalı (Konya province), exclusively fragments of Byzantine pottery were found (Faydalı, 1992, 1993; Özkorucuklu, 1992; Şahin, 1993; Erkmen, 1999; Bilici, 2003). In some cases, such as in the sites we investigated in Ağırnas and St. Mercurius (Kayseri province), the churches were carved right at the entrance of the underground settlements and the tunnels that extend from there are protected by millstone-doors. Therefore, the churches, used in normal times for religious functions, during the raids allowed people to hide and defend themselves in the inner part (Yamaç, Tok, and Filikci, 2014; Yamaç, 2017). However, other clues suggest the possibility of their use both in previous centuries and in later times, but without invalidate this hypothesis.

Martin Urban proposes the hypothesis that Cappadocia, in the 8th and 7th centuries BC, could be considered a "buffer-zone" between the Phrygian and Assyrian kingdoms, thousand years before the Arab attacks (Urban, 1973c: 180-181). On this topic we point out that, although Urbans' arguments seem to be plausible and may be worthy of further consideration, actually definitive archaeological and textual evidence has not yet be found.

The fact then that, in at least three cases, in the close vicinity of some underground shelters (Topada, Karaburna and Sivasa) there are rock hieroglyphics inscriptions attributable to the Neo-Hittite kingdom of Tabal, and near the underground shelter of Filiktepe the remains of a walled city are being excavated, leads not to discarded the possibility, originally, of some sort of very ancient relationship. However, even in this case, no direct link has so far been established between them (Mora *et al.*, 2017; 2020).

Structural features of underground shelters

Let's see, in summary, what are the elements that define the underground shelters of Cappadocia. In figure 5 we have schematically represented the basic unit (module) that can be considered a structure intended for defence. It consists of a cavity [a] excavated in a rocky outcrop in the part closest to the surface, and used as storage, stable or even dwelling, or to serve a contiguous masonry house built outside. From the cavity [a] a corridor, protected by millstones (figs. 3, 9), leads to an internal compartment [d] ("redoubt": term borrowed from military architecture). Almost always there is a small tunnel [c], also protected, used as an escape route or to surprise enemies behind. Stone doors [Md] were then normally supplemented by other passive and active defence devices (Bixio and De Pascale, 2015).

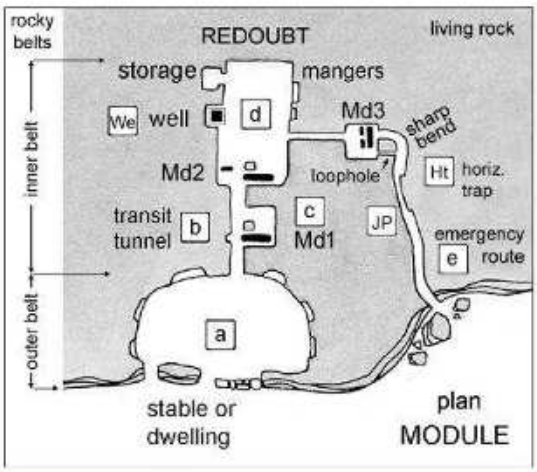


Fig. 5 – Schematic module of an underground horizontal unit consisting of dwelling and redoubt (drawing R. Bixio).

The modules could be replicated and interconnected to form networks (systems - fig. 6), with even kilometrical extensions, with mutual defence. More in-depth investigation of some of them revealed, that their configuration followed a predetermined design that provided for the establishment of "isolating rooms" that could block the aggressors from whatever direction they came, and of "isolated rooms", or "redoubts", in which the defenders could retreat, reorganising the defence, and receive or give help to other sectors.

The location of the underground shelters, their extension and their relationship with the ancient settlements are very varied according to the needs and dimensions of each local community and the morphology of the places. Recall that in Cappadocia highland

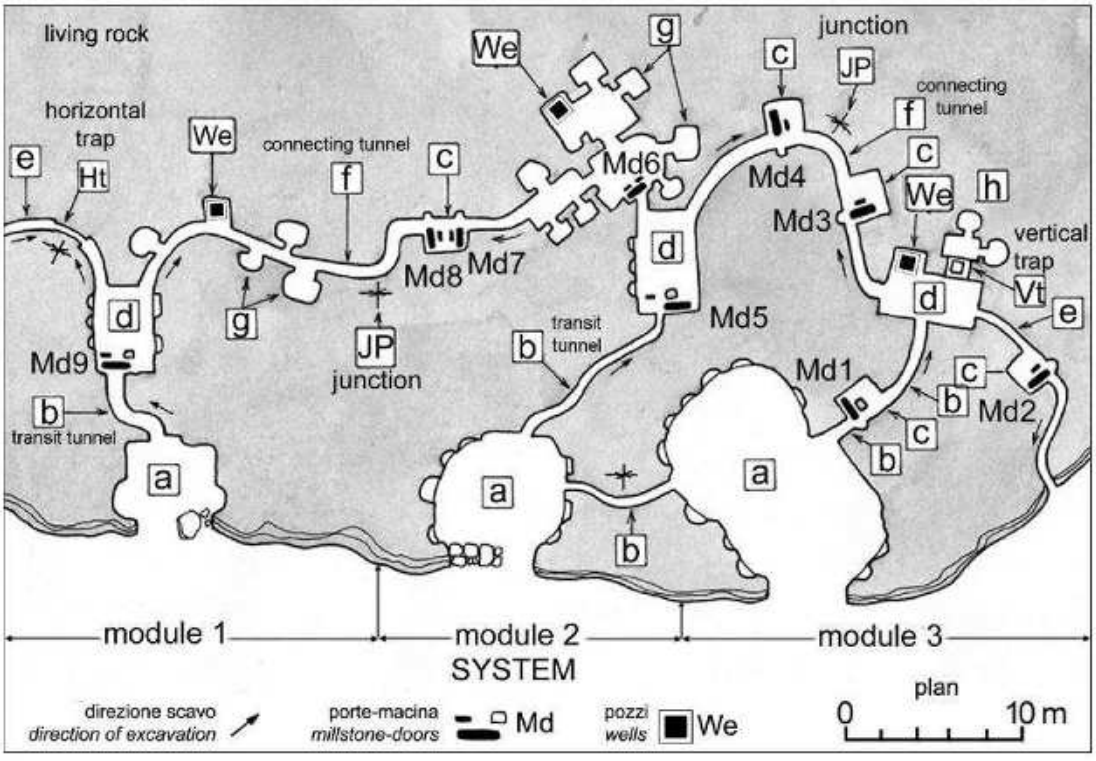


Fig. 6 – Schematic plan of a horizontal underground shelter. The system consists of several interconnected modules. For example, the Filiktepe system, consisting of about 20 modules, is 1673 m long, defended by 55 millstone-doors (drawing R. Bixio).

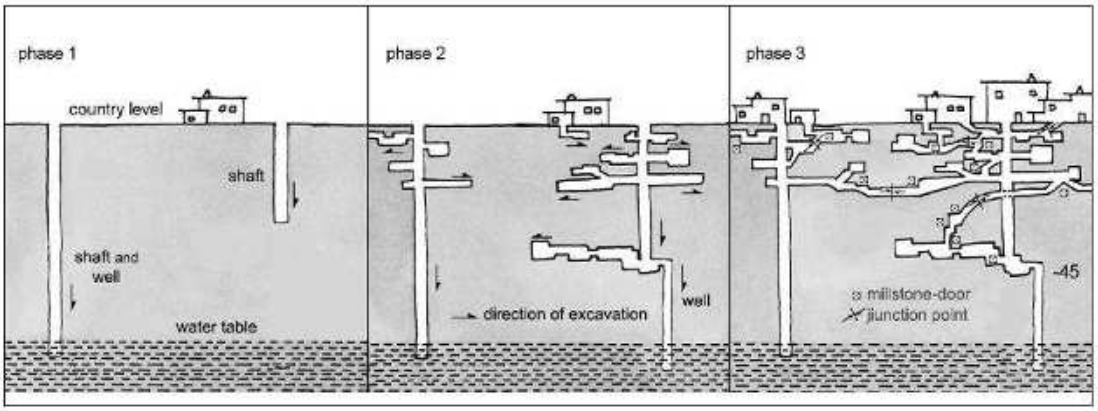


Fig. 7 – Diagram of the probable phases of radial excavation for the underground city and shelter of Derinkuyu: 1) excavation of shafts to extract the resulting material and for ventilation; 2) independent radial excavations conducted by each shaft to obtain rooms and tunnels on overlapping levels and wells to reach the aquifer; 3) connecting the rooms of different sectors and positioning of defensive devices (drawing R. Bixio).

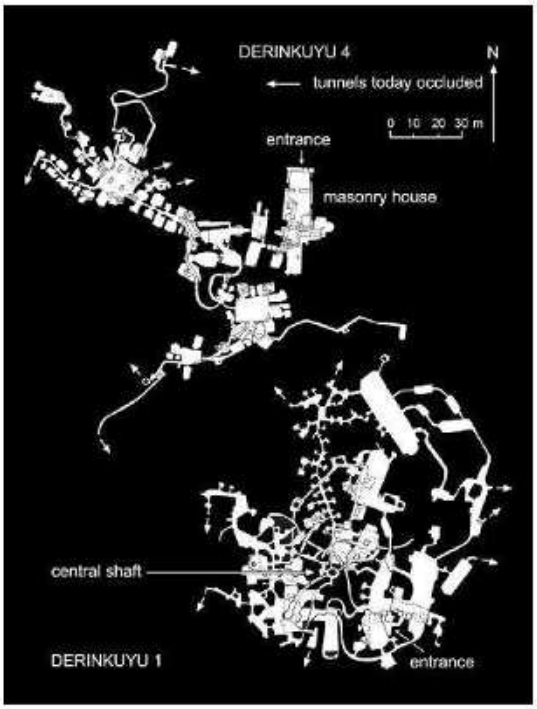


Fig. 8 – Schematic plans of two of the sectors, contiguous but not currently connected, of the underground city and shelter of Derinkuyu (elaboration R. Bixio).

areas scattered with flat free-standing hills (buttes) alternate with volcanic cones, cliffs, ravines, gullies and pinnacles. Networks of tunnels dug in isolated buttes, without external dwellings, have been identified, but also complexes within rock elevations contiguous to surface villages have been documented.

The most striking case is that of Derinkuyu. The underground network develops below the modern city to at least five overlapping levels; these reach a depth of about 45 m. The settlement is divided into sectors that we can consider "blocks", with radial development (figs. 7, 8) that, today mostly inaccessible, are located under the masonry houses. All sectors are strongly defended, at various levels, by devices mainly consisting of a series of millstone-doors; these are more present in the tunnels leading to the lower floors, probably used as last defence (redoubt). The floors closest to the surface, instead, had, and in some cases still have utilitarian use to serve the dwellings above (Bixio, 2012; Yamaç and Tok, 2015).

Naming the underground shelters

Locally, the type of settlement described so far is improperly named "underground city", in any case without distinction on the intended use or size. This term, in conformity with local custom, have been widely adopted by ourselves (Bixio, Castellani and Succhiarelli, 2002) and by every person who approaches the extraordinary rock-cut manifestations of Cappadocia, also because, actually, it is particularly evocative providing an immediate and suggestive image of its peculiar settlements (see, for example: Yörükoğlu *et al.*, 1989; Triolet and Triolet, 1993; Ayhan, 2004; Gülyaz and Yenipınar, 2007). Nevertheless, Ousterhout, on the subject points out that "the so-called underground cities remain one of the great enigmas of the region, subject to wild speculation" and it is more likely to consider them a kind of "redoubt system" integrated with more extensive underground residences or "a system of underground shelters [...] combined with a village on the surface" (Ousterhout, 2017: 12/345-



Fig. 9 – Kuşcağız underground shelter (Kayseri Province). Millstone-door currently in open position. In case of attack it was rolled in the appropriate groove, visible in the opposite wall, to close and defend the tunnel (photo A.E. Keskin).

346). Even the Triolet brothers (2022; 265-266), more recently they define them "*un ensemble exceptionnel de gigantesques souterrains-refuges villageois*", that is, "rural underground-shelters" comparable to those of northern France.

Indeed, only in a limited number of cases it is possible to recognise a conformation that can be considered a real urban organisation which, however, even in the most complex and extensive sites can make you think of a quarter or, at most, a - more or less large - village, but not a city. We believe that only two of these settlements (Derinkuyu and perhaps Kaymakh) actually have the size and organization of real underground "urban" centres, although they are currently only partly explored and documented and have been reworked to make them accessible to the public. In particular, the "underground city" of Derinkuyu is crossed by an underground "road network" that, in the only two sectors for now better documented (fig. 8), has an extension of over 2.5 km, but the total development is certainly much greater.

Conclusions

In short, while respecting the local terminology of "***yeraltı şehri***", we will call "**underground shelters**" the structures that present an articulated and integrated defensive organisation (fig. 6). We will instead use the term "redoubt" in case of units, of limited size (fig. 5), having the function of **"last refuge"** within a larger defensive system, or in the case of single protected areas within predominantly residential (*konak* - fig. 10) or monastic (*manastır*) rock-cut complexes. In the event that the type of structure does not have obvious defensive characteristics, or is not clearly determinable, or present mixed elements, we propose the more generic name of "**underground settlement**" or "**rock-cut settlement**" (depending on the location) instead of "**underground city**", a denomination perhaps more evocative, but less appropriate. In addition to this basic distinction, as we have seen, the panorama of the types is quite varied in location and conformation of each underground structure as a result of the lithological and morphological characteristics of each locality and the specific needs of each community. However, the general organization of all the structures and their defensive elements seems to comply with a common and coherent design throughout Cappadocian territory.

As for the dating of shelters, most opinions seem to agree that the time of the Arab raids between the 7th century and the end of the 10th / early 11th centuries is plausible, without excluding the possibility, at least in part, of other periods, prior or subsequent.



Fig. 10 – Rock-cut settlement of Büyük Kale or Konak, close to Gülşehir (Nevşehir Province). It is a real village carved on several levels into the cliff that continues into the canyon behind. It is integrated by an underground shelter, equipped with millstone-doors, a horizontal trap and wells, that extends for 183 m in the innermost body of the rock, parallel to the face (photo R. Bixio).

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Chapter 1
Introduction



Abstract With hundreds of rock-cut buildings, the Koramaz Valley in Eastern Turkey close to Kayseri is one of the most significant natural, historical, and cultural treasures in the area. This valley was just added to the tentative list of UNESCO World Heritage Sites because of its worth. All of these rock-cut cliff settlement towns in the valley, which we have inventoried one by one after a 6-year research, are described in this book after the geological aspects of the valley are discussed. Churches, underground cities, and funeral structures—the most significant rock-cut buildings in these settlements in terms of their historical significance—are covered in separate chapters.

Keywords Koramaz Valley · Kayseri · Rock-cut villages

1.1 Introduction

This book offers an overview of the interaction between man and land during the near past within the context of the architectural components of daily practices that some of these structures represent the earliest examples of its kind in the region. While attempting to make a humble contribution to the research for a better understanding of the history of our ancestors, nothing is more than natural, considering every single human being ever walked as a member of the same lineage of the enormous family tree for life, that the lineage is referred in the text with the word "We".

Caves have always been our home and we have always lived in caves.

Hundreds of thousands of years ago, caves were our first shelters as *Homo sapiens* (Lewin, 1993). Many of our distant relatives such as *Homo erectus, Homo antecessor, Homo heidelbergensis,* and *Homo Neanderthalensis* also lived in the caves before us (Stringer, 2011). The vast majority of the oldest known fossils of us and all our relatives have been found during excavations in these caves (Cameron & Groves, 2004; Richard et al., 2020).

Tens of thousands of years have passed since we lived in caves, and we are now living in our houses built on the surface, but we still could not break away fully from

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a cave-dwelling life. A troglodyte lifestyle is so easy and comfortable that this time when we found suitable rock formations, we began to dig and settle into these rocks (Kempe, 1988). As *Homo sapiens*, it was meaningless to expect our habits, which had persisted for hundreds of thousands of years, to change in such a short time. Maybe we had built villages or even cities on the surface, but some of us just moved from natural caves to artificial caves.

Although there are artificial cavities in countless different parts of the world and in almost every part of Turkey, the Cappadocia region is very different from all these other regions.

Hundreds of rock-cut churches and other rock structures in the famous and touristic part of Cappadocia have been the subject of countless books, articles, and scholarly research. But, despite being the capital of Cappadocia during ancient times, no comprehensive scientific research has been carried out on the rock-cut architecture in Kayseri Province until now.

To fill this deficiency we, as the OBRUK Cave Research Group, started to work for the "Kayseri Underground Structures Inventory Project" in January 2014. This project includes the research, surveys, and documentation of all the underground structures located in Kayseri. So far, during the last 8 years covering the entire province, 46 Byzantine rock-cut churches, 33 underground cities, 10 Assyrian tin mines, three underground aqueducts, and six cliff settlements have been explored, researched, and inventoried for the first time. In each new study of this ongoing project, new rock-cut structures are discovered in the region.

Regarding all the rock-cut structures identified and inventoried so far, Koramaz Valley, which has been explored for about 3 years, is the most important part of this project.

Although there are valleys with rock-cut structures in many different parts of Cappadocia, Koramaz Valley is the only known example having a total of 476 dwellings, 42 rock-cut churches, and four major underground cities. Though most of these structures were houses, dovecotes, and barns, at least 18 of them have been carved as the Roman rock-cut tombs and 21 of the structures are *columbarium* (Gilli, 2017; Yazlık, 2019).

Considering its historical value, this valley was accepted to the UNESCO World Heritage Site's tentative list 1 year ago. All these rock-cut structures of Koramaz Valley are explained in detail in this book. We have divided these structures into three different chapters as churches, underground cities, and funerary structures. The rock-cut cliff settlement villages, where all these structures are located, are described in a separate chapter.

Chapter 2 begins by describing the general geology of the entire region. After explaining how this geological formation, which allowed the formation of rock-cut structures, was formed, the transition process of humanity from caves to rock-cut architecture is explained. After the summary of rock-cut structures in Turkey and especially in Cappadocia, the project we are carrying out in Kayseri and Koramaz Valley, which is the most important part of this work, is explained in general. The detailed explanation of the structures in Koramaz Valley begins with Chap. 3. This chapter describes four different cliff settlements in the valley. In Chap. 4 we describe

in detail 14 selected rock-cut churches from a total of 42 explored and found in the cliff settlements mentioned in the previous chapter. Chapter 5 explains the four major underground cities researched and surveyed in Koramaz Valley and their surveys. The final chapter, Chap. 6, discusses the establishment of the funerary architecture of Koramaz Valley with an emphasis on their development.

In the 'Discussion' sections at the end of each chapter, we both provided comprehensive information about the historical background of the structures described in that chapter and tried to shed light on the controversial issues about these structures.

Although there is a glossary at the end of the book, we find it useful to make an explanation for the terminology we use throughout the book. In the past decades, countless articles and books on artificial cavities have been published all over the world and scientific studies have gained momentum. However, there is no consensus in the academic world regarding the terminology of these structures and a common terminology has not been established. For example, although the term 'artificial cavity' is accepted as a general definition for all such structures, the words 'rock-cut' or 'rock-hewn' are used with the same meaning in different sources. Similarly, in many different sources, all structures carved from a rock cliff are referred to as a 'cliff settlement', 'rock-dwelled settlement', or 'cliff dwelling'. To avoid terminological confusion, in this book we prefer to use the term 'cliff settlement' for all structures excavated on the slopes of Koramaz Valley. On the other hand, for structures that were dug gradually on top of each other on a steep wall and can only be reached by steps dug into the bedrock, we used the term 'wall settlement'.

Similarly, there are differences in the naming of underground defensive structures in Cappadocia. These structures, which were carved out to hide during a raid and whose tunnels are protected by millstone doors, are called 'underground city' in many works. However, some experts discriminate between 'underground city' and 'underground shelter' arguing that the second term is more appropriate for singular structures. They state that the term 'underground city' can only be used for the complex structures formed as a result of the combination of 'underground shelter's. Details regarding this terminological discussion are found in Chap. 5.

We also find it useful to write a short note regarding the bibliography. In Chap. 2 we gave a comprehensive bibliography of rock-cut structures in Anatolia, and also mentioned the works where many more sources can be found, especially concerning the Cappadocia region. It can be seen that there are not many sources about the Kayseri Province in general and Koramaz Valley in particular in terms of rock-cut and underground structures. This is because this region has not been studied extensively in this respect before now.

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Chapter 2
General Information

Abstract This chapter presents a brief explanation of Cappadocia's geological and geomorphological characteristics followed by an overview of the rock-cut structures and studies on those rock-cut structures found not only in the Cappadocia region but throughout Turkey. There are thousands of these artificial cavities and most of them have not been extensively studied. An inventory that includes all of them is not yet available. Following that, a broad summary will be presented of the existing research and studies on rock-cut architecture in the Cappadocia region in general and Kayseri, in particular. In the last two sections, brief information is given regarding all previous research and surveys on the artificial cavity, including Kayseri Underground Structures Inventory Project carried out by OBRUK Cave Research Group, and then the geological, historical, and geographical features of Koramaz Valley, which is the subject of this book, are explained.

Keywords Cappadocia geology · Koramaz Valley · Kayseri · Rock-cut structures · Artificial cavity

2.1 Geology of the Region

The region, which is defined as the Central Anatolian Volcanic Province (CAVP) in the geological literature, is one of the most important volcanic areas of Turkey. It encompasses several provinces including the Kayseri Province where Koramaz Valley is located (Figs. 2.1 and 2.2).

It extends approximately in the NE-SW direction, the long axis of this area is 200 km and its width is around 100 km. The formation of CAVP began with the converging of the Arabian and Eurasian plates in the Middle Miocene period, around 16–11.6 million years ago, and developed the post clash regimes after the Upper Miocene period. Because of this, different types and origins of volcanic rocks were formed within the CAVP. The orogenic activity of the Taurides continued during the Miocene period causing deep fractures in the crystalline mountains in the north. These deeply located fractures caused a weakening of the crust followed by the

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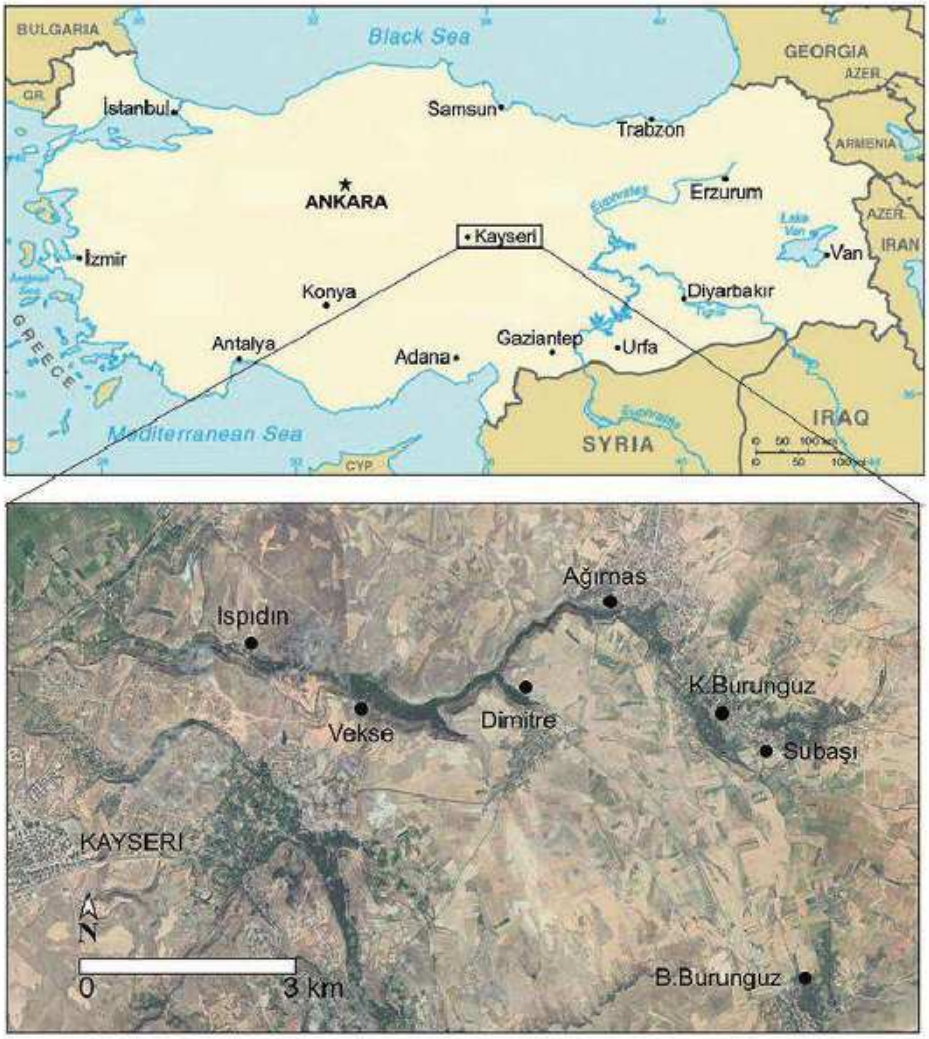


Fig. 2.1 Location map showing Kayseri and Koramaz Valley. (After Google Maps and Google Earth-elaboration A. Yamaç)

generation of a chain of volcanic mountains at the heart of central Anatolia (Andolfato & Zucchi, 1971). This continental clash brought shortening and thickening together with the north-south compression regime that is still going on today in Eastern Anatolia. The thickness of the Eastern Anatolian Crust is about 45–50 km and at the end of this clash, the Anatolian block moved to the west through the two strike-slip faults. This movement that pulled apart the basin and reverses faults, is the basic reason for the inner deformation within the Anatolian block (Alıcı et al., 2004). Wide-scale volcanism was formed in Anatolia from the Neogene to Quaternary periods as a result of the convergence of plates and continental clashes. Around the Cappadocia region, the mountains of Erciyes, Develi, Hasan, Melendiz,

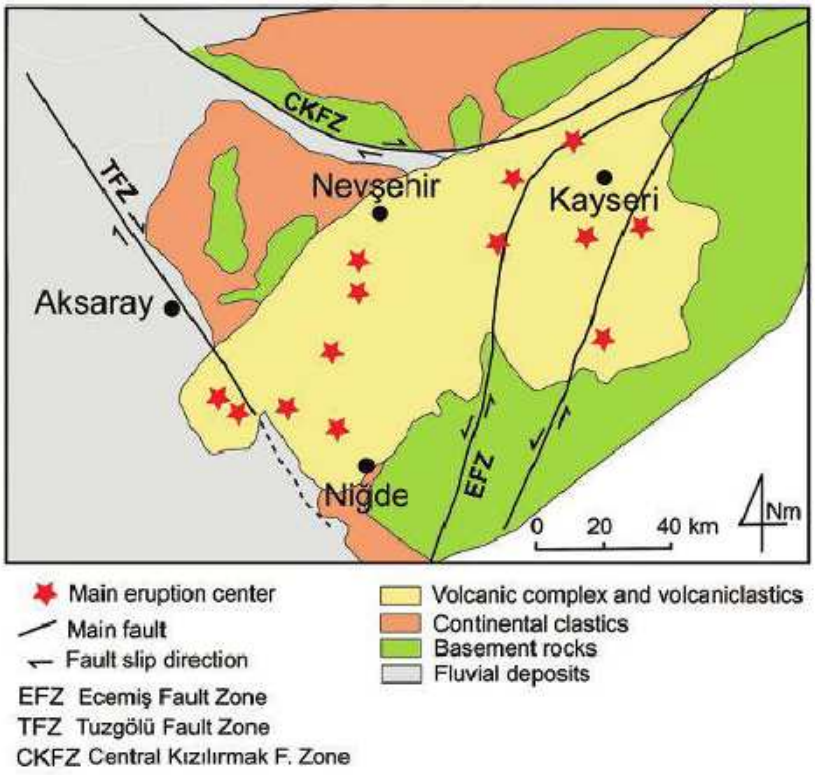


Fig. 2.2 Map of Central Anatolian Volcanic Province (CAVP). (Adapted from Toprak, 1998)

Keçiboyunduran, and Göllü continued their volcanic activities until the Early Holocene, creating numerous cones and increasing the heights of those principal volcanoes (Aydar et al., 2012; Innocenti et al., 1975; Le Pennec et al., 2005).

After extensive research in the Kayseri Region, in his article dated 1995, Prof. İhsan Ketin summarizes the geomorphological formation in the region as follows (Figs. 2.3 and 2.4):

> There are 68 volcanic cones, large and small, with or without a crater, with diameters of 600–3000 m around the 3917 m high central cone of Mount Erciyes, which is the most prominent with its size and height among the extinct volcanoes of Central Anatolia. Thus, Mount Erciyes is not a single volcano, but a group of volcanoes. Located between Kayseri-Develi-İncesu, the Erciyes Mountain volcanic group covers an area of approximately 1500 km^2 together with the Erkilet region (Ketin, 1995).

It is known that the widespread volcanism in the area between Kayseri and Nevşehir generally started in the Late Miocene period, approximately between 11–seven million years. The volcanic activity in the west of this area outside the Erciyes Mountain cone started with andesitic lavas. The Erkilet region in the north, on the other hand, is covered by tuffs and ignimbrites. These pyroclastic rocks, which form wide plateaus, constitute the most common unit in the region. The oldest volcanic rocks exposed and dated in ancient Cappadocia, which cover a large part of this region,



Fig. 2.3 Erciyes Mountain. (Photo A.E. Keskin)

are 10.1 million years old andesitic lavas, which are observed in the west of Erciyes Mountain and southeast of Ürgüp. The "Akköy ignimbrites"of the following pyroclastic activity are dated to 8.5 million years, and the overlying "Velibaba Tepe ignimbrites", which are spread over an area of approximately 2.000 km^2, are dated to 2.7–three million years (Şen et al., 2003). In addition, the following different radiometric ages were also determined in the vicinity of Mount Erciyes (Ketin, 1995):

- Andesitic lava on the western slope of Erciyes Mountain: 300,000 years
- Dacitic lava on the southern slope of Erciyes Mountain: 900,000 years
- Ignimbrite near Erkilet: 2.8 million years
- Dacitic ignimbrite near İncesu: 3.0 million years

As a result of several different age determinations, it is understood that the activity of the main caldera of Erciyes Mountain continued until 150,000 to 200,000 years ago and after this period, the caldera was blocked (Alıcı Şen et al., 2004). But, cosmogenic datings show that several smaller lava flows occurred from monogenetic vents during the Early Holocene (ca. 10,000–8000 years ago).

On the other hand, a paragraph about Erciyes Mountain in "*Geographica*", written by Strabo in the first century AD, was interpreted by some scholars as the mountain was active in this period as well. In Book 12, Chap. 2 he wrote:

> At a little distance further there are burning plains, and pits full of fire to an extent of many stadia, so that the necessaries of life are brought from a distance…. In some parts the bottom is marshy, and flames burst out from the ground by night. Those acquainted with the country collect wood with caution; but there is a danger to others, and particularly to cattle, which fall into these hidden pits of fire (Jones, 1929).

