

REPORT ON



# Living LAB on Mobile Geolocated App

Deliverable 4.4



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#### About DCbox

DCbox “Digital Curator Training & Tool Box” works to create a new generation of European professionals working in the cultural heritage sector, equipped with a recognised, cross-cutting and high-level digital skillset. The project is funded by the Erasmus+ programme of the European Union during the period November 2021 - May 2024.

DCbox is implemented by:

- Università Politecnica delle Marche (Italy) - coordinator
- Sinergia Consulenze Srl (Italy)
- University of Cordoba (Spain)
- The Cyprus Institute (Cyprus)
- Universidade Lusófona/COFAC – Training and Cultural Animation Cooperative (Portugal)
- UNIMED – Mediterranean Universities Union (Italy)
- University of NIS (Serbia)

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## Executive Summary

This document represents a textual synthesis of the Del 4.4, Mobile Geolocated App.

Prototypes of virtual experiences were collaboratively designed, created, and tested in the Virtual Open TOOLBOX and in presence through specific living LABs, each experimenting with digital tools to access, understand, and share cultural content related to various heritage features. The primary goal is to familiarize students with digital cultural heritage (DCH) tools, providing them with a cross-disciplinary confrontation experience and a DCH toolkit for their future careers. The key outputs of this result are the prototypes, which functioning is explained in the videos that were prepared by the teachers and students by each academic partner. The present document serves to summarize the steps and learning experiences for both students and teachers.

The present document is complemented by a playlist in Youtube DcBox channel, in which is possible to see the Prototypes in action:  
[https://www.youtube.com/watch?v=pYAH4ri72LQ&list=PLqd6hOCBhPvgafeiTPj\\_FMzBZpFGbrpZ0](https://www.youtube.com/watch?v=pYAH4ri72LQ&list=PLqd6hOCBhPvgafeiTPj_FMzBZpFGbrpZ0)

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## Result 4 - Virtual experiences Prototypes

The Leader of the PR4 Virtual Prototypes is UNIVPM. According to the application a minimum of 4 and a maximum of 8 students will have access to each living LAB.

The Living Lab on Mobile Geolocated App was led by The Cyprus Institute and reached the results of 4 students working actively on their app and producing their prototypes, with an important involvement of associated partners both in the case of hosting a trainee and in the case of supporting the implementation of the project work. The technology of a geolocated app, will be above all for outdoor heritage and landscape, as these aspects are very diffused in Cultural Heritage projects mainly for touristic purposes. From the skills point of view, it will enable the students to set up a database, to organise information in order to reach the interest of visitors for planning heritage/archaeological tour (virtual or in presence), to customise searching with filters and elaborating customised routes.

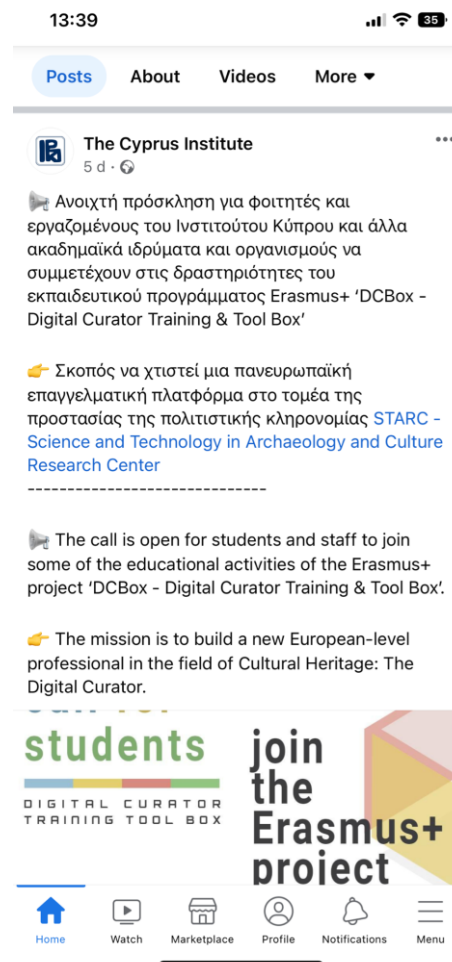
The Living LAB on Mobile Geolocated App managed by CYI lasted a comparable timing in order to ensure the possibility to develop the prototypes to their best possible levels. The real conclusion of the Living Lab was the Multiplier Event by CYI that was held on 18<sup>th</sup> May 2024. By the content point of view, teachers and students collaborating in the Living Lab have based the prototypes on the creation of immersive, innovative routes around the city of Nicosia and surrounding area.

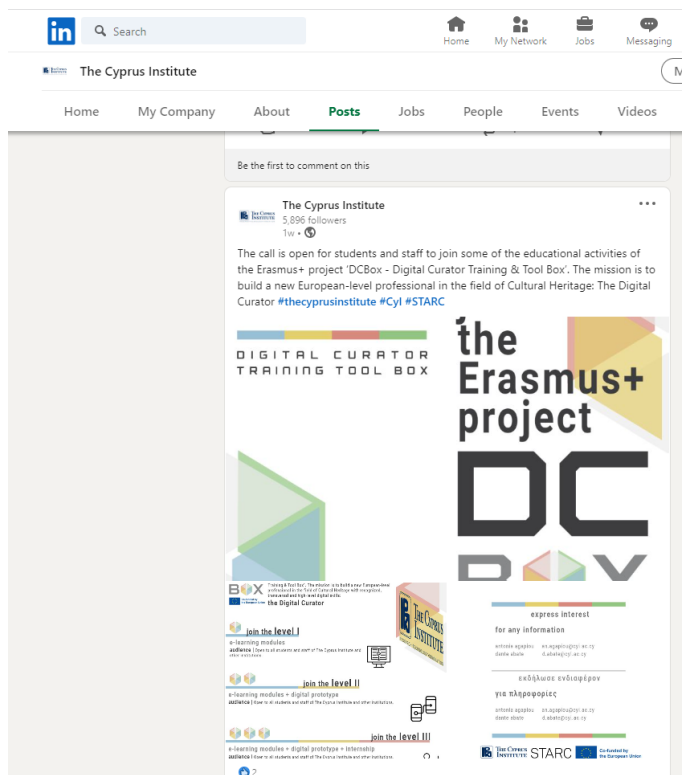
### The bootcamp

On **9<sup>th</sup> of December 2022**, third day of the Learning Training Activity in Lisbon, a Boot Camp and international conference took place. Participants included DCbox partners, students, cultural heritage professionals, and Portuguese museum representatives. Discussions focused on the DCbox approach, expected outcomes, activities, and the digital skills needed for future professionals in the creative and cultural sectors. Prof. Ramona Quattrini introduced the project, followed by presentations from The Cyprus Institute, Università Politecnica delle Marche, University of Cordoba, and University of Nis, showcasing their work in digital cultural heritage. Stakeholders from Lourinhã, including a local museum and NGO, also presented. The event marked the start of the DCBox Result 4 activities with an online Bootcamp and a design thinking phase for Digital Cultural Heritage experiences. The hybrid workshop had 20 in-person attendees and 31 online participants.

## The implementation of the prototypes inside the unit

With the aim of engaging an adequate number of sufficiently motivated students to the learning path on digital curator, a call was launched within The Cyprus Institute and the Cyprus Institute Graduate School. The call was communicated through posters inside the faculty premises, posts on social networks (Facebook, Instagram), LinkedIn.







By this dissemination activity, it was possible to involve different student profiles participating in the Living Lab: 4 PhD students and 1 MSc student. Our students bring to the DCBox Living Lab different educational and professional background - an art historian, a conservator, a bioarchaeologist and an archaeologist.

The implementation of the tutoring and review activities for the Living Lab have been carried out with a mixed approach and they were organised in the following way:

- Theoretical and practical workshops at CYI's STARC facilities regarding the data acquisition for the mobile geolocated app.
- Tutoring in the using and navigation of Actionbound for the creation of 'bounds' and storytelling routes through Nicosia and Troodos mountains.
- Periodic online meetings for progress tracking.

For the details on the single students experience in the Living Lab, see the D5.1 Training & report Each university.

## The hackathon

Since the application form, at the end of the VLab activities an Open Hackathon (M21) was foreseen in order to give visibility to students' activities and also to test the prototypes with final users of DCH experiences. During the implementation of the project, the Hackathon took place in a blended mode. Since it was synchronised with a project meeting held in July 2023 in Ancona, Italian students took part in the Hackathon while the others joined virtually via videoconferences tools such as MS Teams. See agenda below:

### Thursday 20th of July 2023 – OPEN HACKATON for STUDENTS' PROTOTYPES

Facoltà di Ingegneria - C-LAB, ROOM C-Class q 155

Hours	Title	Partner	Contents
9.00 - 9.30	Registration of participants and welcome	UNIVPM	
9.30 - 9.40	Opening Remarks	UNIVPM	Francesco Fatone –Delegate for Research Engineering Area and international ranking Enrico Quagliarini - DICEA Director Ramona Quattrini – DCBox LP scientific responsible
9:40	Rita Santos	LUSO	<i>Museum Bordalo Pinheiro</i>

9:50	Edson Lourenço	<b>LUSO</b>	<i>Lourinhã Museum</i>
10:00	Theo Shaheen-McConnell (also on behalf Benjamin Adoba Ayida)	<b>CYI</b>	<i>Historical Forests of Troodos</i>
10:10	Natalie Milanese Branca	<b>CYI</b>	<i>Leventis Gallery</i>
10:20	Nicolette Vollero Levy (also on behalf of Biyang Wang)	<b>CYI</b>	<i>Ottoman balconies of Old Nicosia</i>
10:30	Soodabeh Sajadi	<b>CYI</b>	<i>Cultural landmarks of Nicosia</i>
10:35	<b>Q&amp;A</b>		
10:40	Martina Manfroni	<b>UNIVPM</b>	<i>Civic Gallery - Ascoli Museum system</i>
10:50	Luca Bondi	<b>UNIVPM</b>	<i>Auditorium Pedrotti - Pesaro</i>
11:00	Sofia Diomedi (pres. By Mirco D'Alessio)	<b>UNIVPM</b>	<i>Numana Antiquarium</i>
11:10	Ludovica Leonardi (pres. By Renato Angeloni)	<b>UNIVPM</b>	<i>Civic Gallery Ancona</i>
11:20	<b>Q&amp;A</b>		
11.30 – 12.00	<b>Coffee Break</b>		
12:00	Marina Marín Expósito + Álvaro Arteché (pres. by Massimo Gasparini)	<b>UCO</b>	<i>Sculpture collection of Roman town of Mellaria</i>
12:10	José Manuel Ordoñez Sojo (pres. by Massimo Gasparini)	<b>UCO</b>	<i>Epigraphic collection of Roman town of Mellaria</i>

12:20	Aleksandra Stojkovic	<b>NIS</b>	<i>Museum of Ponisavlje</i>
12.30 – 12.45	VR Tool Presentation and Prototypes Final Delivery definition	<b>UNIVPM</b>	Presentation of the VR Tool integrated in LMS. Final delivery requirements and time scheduling
12.45 – 13.00	<b>Q&amp;A</b>		
13.00 – 13.15	Concluding Remarks	<b>UNIVPM</b>	

As it is clear in the agenda, the hackathon was conceived to engage students in a collaborative and interdisciplinary environment where they design and develop virtual experiences for cultural heritage sites using digital tools. The hackathon aims to foster creativity, problem-solving skills, and practical application of digital cultural heritage (DCH) technologies.

The students were invited to highlight in their speech open Points and challenges: each student or team documented ongoing challenges, such as technical limitations, user experience design, and content accuracy.

A Demo Session for testing and feedback the more robust and advanced prototypes was held, in which some teams presented their mock-up to peers, mentors, and a panel of judges, some live demonstrations to showcase functionality and user interaction.

A feedback loop with constructive critique from judges focusing on usability, innovation, and cultural relevance was also provided.

The Q& A session was intended as a discussion and wrap-up, it included summary of key takeaways from the hackathon and networking session to foster future collaborations and a discussion on the possible exploitation of the VR module in the LMS.

Not all the students participating in the Living Labs were able to connect or be present in the hackathon, especially because some students were involved later than the initial schedule. However, the leader of R4, UNIVPM, decided to keep the conduct of the living labs open, so as to ensure as many participants as possible and to retrieve some prototypes that, for individual students' career reasons, had not been completed before the hackathon. Summarising the number of the students enrolled in the DCbox learning path, as reported in the D 5.1 Training & report Each university, is higher than the students participating in the hackathon.

In order to receive the students' feedback, some interviews were collected, see:

<https://www.youtube.com/watch?v=c3ajdjGBnw0>

## Appendix - The prototypes presentation



# Living LAB on Mobile Geolocated App



## Nicosia: Evolution of a City

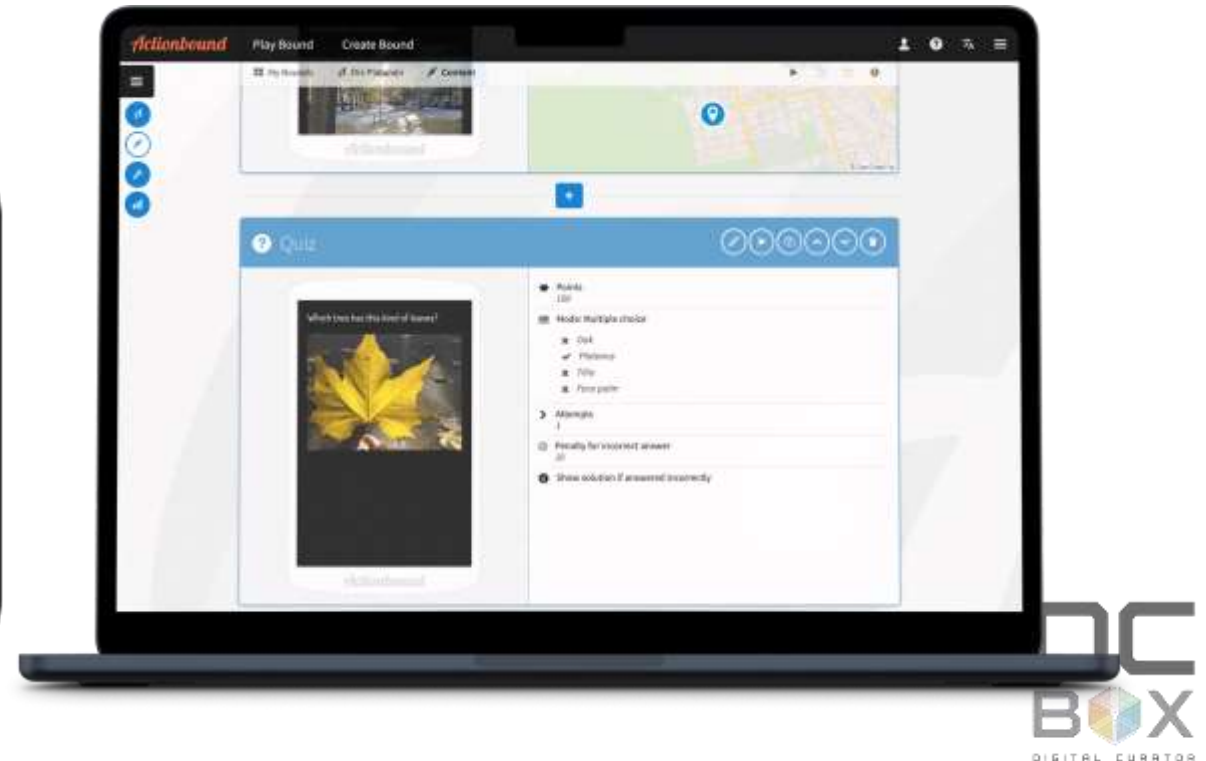
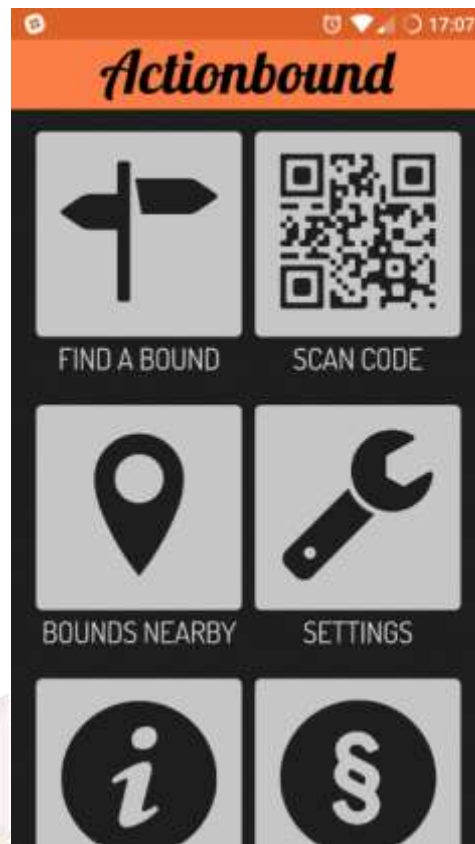
Natalie M. Branca

The Cyprus Institute



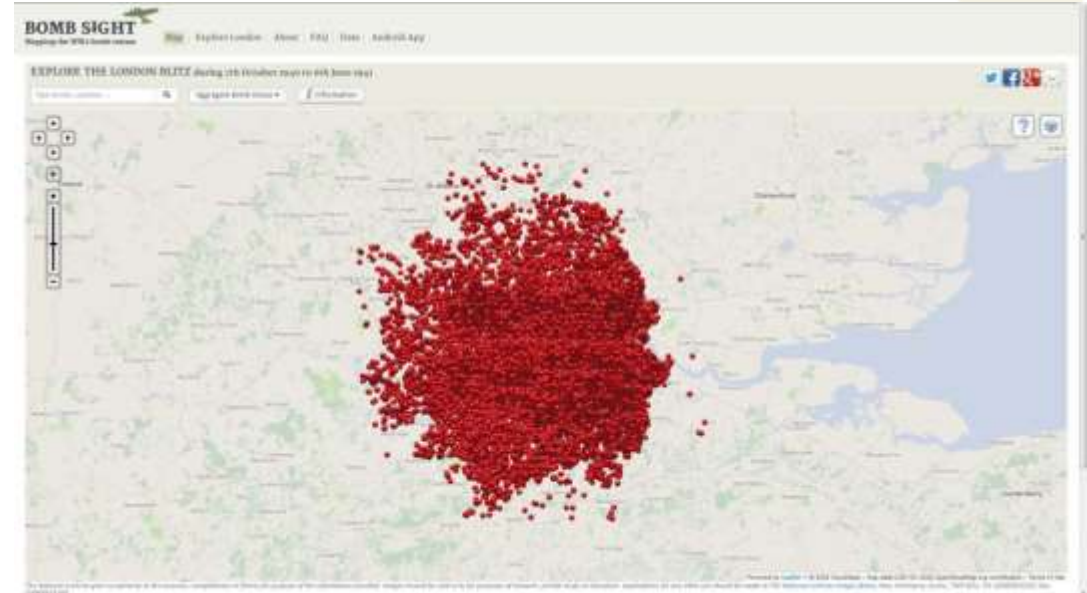
# ActionBound - The platform

Actionbound is an app for playing digitally interactive 'scavenger hunts' to lead the learner on a path of discovery. This app has been used to develop the prototypes for the DCBox project. The app can be used for education purposes and as a tool to explore the hidden history, the untold stories of Nicosia, and visit the Troodos mountains in our cases. The program quite literally augments our reality by enhancing peoples' real-life interaction whilst using their smartphones and tablets. The creator is able to take full advantage of the huge potential of gamification with the extensive game elements and tools like GPS locations, directions, maps, compass, pictures, videos, quizzes, missions, tournaments, QR codes and much more.



# Inspiration and Concept

- Inspired by Bomb Sight. An application that gives the user a glimpse of London post WW2 Blitz bombings.
- Focus on the historical centre of Nicosia.
- Explore **hidden locations** that are no longer visible in the landscape.
- Gamers are offered insights to the evolution of Nicosia through time



Source: Mail online

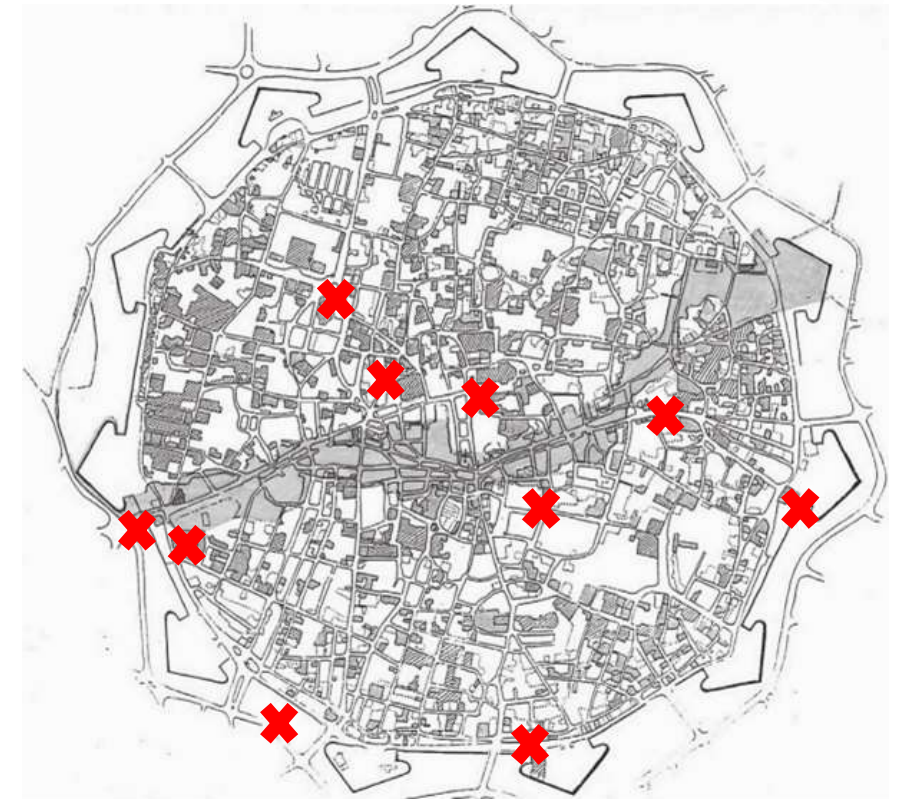


Source: Nicosia Master Plan



## Research phase

- Research was conducted using historical and archaeological sources, both primary and secondary, including:
  - Archaeological reports
  - Journal publications
  - Online resources
  - Ethnographic accounts (traveller's accounts)
- The tour had to be walkable, follow a clear path and a chronological order.
- **9** points of interest were identified.



Source: Nicosia Master Plan



# Story development

The gamer is a time-traveler who became stuck in the past and will have to find the portals hidden through time to return to the present.

The journey begins at Eleftheria Square located at the border of the Venetian walls. Its modern design provides a glimpse into the vision for the future of Nicosia, against the backdrop of the historic buildings that speak to its past.



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AI  
generated  
image

# Characters

- Two obscure figures from the Cypriot past were selected to be the guides.
- The gamer is given a choice of who will be their guide.

**Samuel Brown**



- British who came to Cyprus in 1878 to work as a government engineer.
- Invested in several archaeological expeditions during his stay in Cyprus.
- Was appointed keeper of the Cyprus museum.
- His wife is buried in Nicosia.

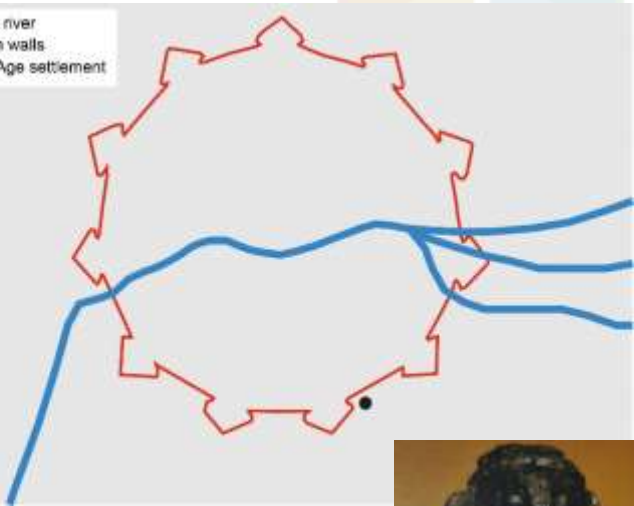
**Magda Ohnefalsch-Richter**



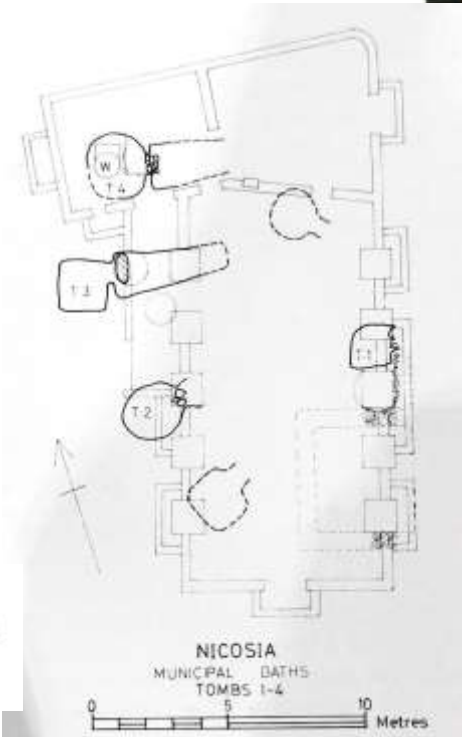
- Wife of German archaeologist Max Ohnefalsch-Richter.
- Cultural anthropologist who wrote a famous ethnography about Cyprus.
- Joined her husband in many of his archaeological expeditions in Cyprus in the 1900s.

# Stops 1 and 2 - The Bronze and Iron Ages

Stop no.	Modern location	Hidden location
1	Bairaktar Mosque area	Bronze Age settlement
2	Old Municipality building	Iron Age necropolis



(top) Illustration by Natalie M. Branca; (right) Michaelides and Pilides 2012: figure 29); (left) Photograph by Menelaos Lambis, 2017



(top) Photograph by Carsten 2023; (bottom) Michaelides and Pilides 2012: figure 32; (left) Flourentzos 1981: figure 2





# Stops 3 and 4 and 5 - The Early Christian and Byzantine periods

Stop no.	Modern location	Hidden location
3	Castegliotissa hall	Byzantine castle
4	Paphos gate	Dog burial site
5	Bedestan	Orthodox cathedral



(left) Photograph by Tommy Christanto, 2023; (right) Illustration by Natalie M. Branca



(left) Chris06, CC BY-SA 4.0  
<<https://creativecommons.org/licenses/by-sa/4.0/>>, via Wikimedia Commons; (right) Michaelides and Pilides 2012: figure 97

(left) Photograph by Jens Bauer, 2023; (right) Sketch by Robert Knight, 1955-1957 © Costas & Rita Severis Foundation

## Stop 6 - The Lusignan period

Stop no.	Modern location	Hidden location
6	Sarayönü Square	Lusignan palace



(left) A.Savin, FAL, via Wikimedia Commons; (middle) sketch by Tessa Henderson, 1985-1988 © Costas & Rita Severis Foundation (right) Photograph of painting by Titian © Costas & Rita Severis Foundation



# Stop 7 and 8 - The British Colonial period

Stop no.	Modern location	Hidden location
7	Beuyuk khan area	Women's bazaar
8	Farmagusta gate	Camel station



(top) Fry72, Karel Frydrýšek, CC BY-SA 4.0  
<<https://creativecommons.org/licenses/by-sa/4.0/>>, via Wikimedia Commons;  
(bottom) Painting by Telemachos Kanthos, 1910-1993 © A.G Leventis Gallery



(left) A.Savin, FAL, via Wikimedia Commons; (middle) postcard by J.P. Foscolo, 1918 © Costas & Rita Severis Foundation; (right) Drawing by Gladys Emma Peto, 1926© Costas & Rita Severis Foundation

## Stop 9 - The 1974 Turkish invasion to the present

Stop no.	Modern location	Hidden location
9	Ermou street	Pedieos riverbed/ Green line



(left) Onasagorou street151, via Wikimedia Commons; (right) Photograph by unknown author c. 20<sup>th</sup> century © Costas & Rita Severis Foundation



# The Prototype



You are standing at Eleftheria Square, a captivating intersection between the timeless essence of old Nicosia and the vibrant pulse of its modern incarnation. As you immerse yourself in the surroundings, a strange sensation ripples through the ground beneath your feet.

Suddenly, a brilliant flash of light momentarily blinds you, casting a surreal glow over you. Standing when your



What happened? Where am I?

You see a figure up ahead and carefully approach them.

'Excuse me, where am I? What happened to the city?' you ask

The figure turns, you see that it is a:

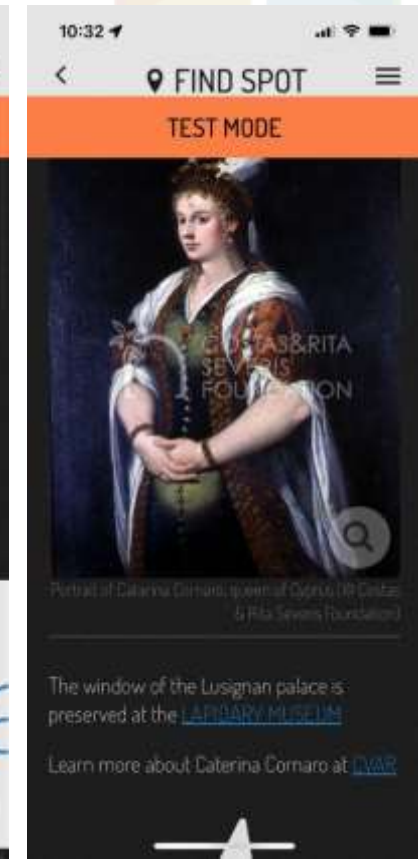
- ☐ Male
- ☐ Female

Vote



## THE BRONZE AGE

In modern times, archaeologists know very little about the ancient history of Nicosia. They believe that a settlement dating to the Neolithic period existed near the banks of the Pedieos river. In the year 2024 the river is no longer visible, but in ancient times it coursed through the center what you know as the old city. The place where the Neolithic settlement once stood was used continually as a habitation area up to the Bronze Age. This settlement is where we must head to first.

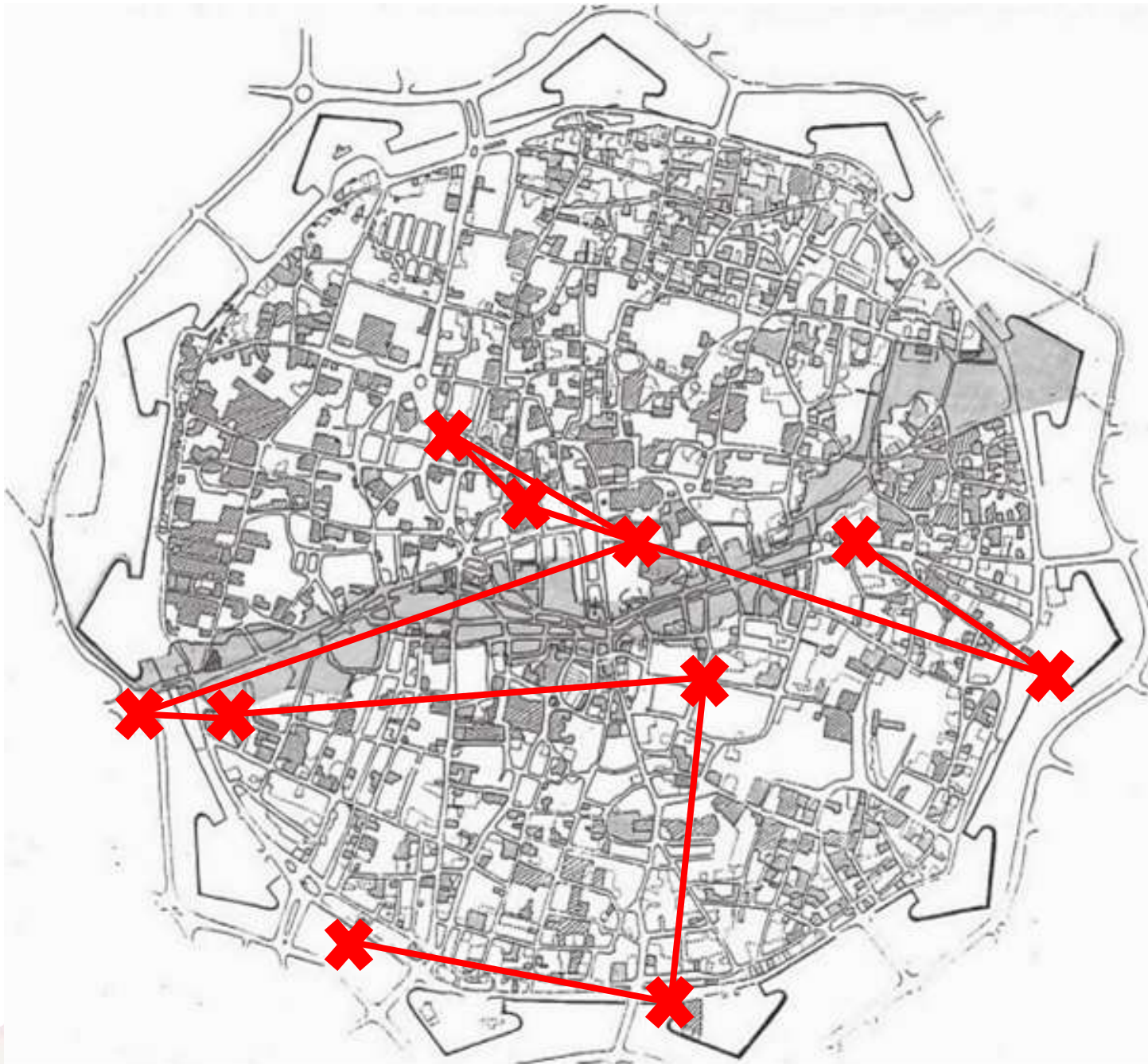


The window of the Lusignan palace is preserved at the [LAPIDARY MUSEUM](#)

Learn more about Caterina Cornaro at [CVR](#)







- Each location has additional stories that could be told, related to the other time periods featured in the bound.
- These locations explore numerous themes including cultural, religious and political.
- Opportunity for further expansion following these ideas.

## Future directions

- Fill in the chronological gaps in the storyline.
- Collaboration with CVAR to transform the ActionBound prototype into something that can be used by visitors of the museum
- Conduct tests with larger groups of different age categories to further develop the story and make it more accessible.



# References

- Blois, I. F. (1930) Nicosia. *Costas & Rita Severis Foundation*. <https://cvar.severis.org/en/collections/item/paphos-gate-nicosia/5214/> [Accessed 19/04/24]
- Coldstream, N. (1992) *Nicosia - Gothic City to Venetian Fortress*. Nicosia: Anastasios G. Leventis Foundation.
- Flourentzos, P. (1981) Four early Iron Age tombs from Nicosia old municipality. *RDAC*. Nicosia: Department of Antiquities Cyprus, pp. 115-128.
- Foscolo, J. P. (1918). Farmagusta gate, Nicosia, Cyprus. *Costas & Rita Severis Foundation*. <https://cvar.severis.org/en/collections/item/famagusta-gate-2/27946/> [Accessed 19/04/24]
- Foscolo, J. P. (1935) Friday bazaar, Nicosia, Cyprus. *Costas & Rita Severis Foundation*. <https://cvar.severis.org/en/collections/item/friday-bazaar-nicosia-cyprus-2/28103/> [Accessed 19/04/24]
- Hadjikoumis A. and Christofi P. (2024) A dog's life and violent death in late Medieval Nicosia, Cyprus. *Journal of Archaeological Science: Reports*, 53, pp. 104350.
- Henderson, T. (1985-1988) Old Lusignan Palace, Nicosia (now demolished) 1985-1988. *Costas & Rita Severis Foundation*. <https://cvar.severis.org/en/collections/item/the-old-lusignan-palace-nicosia-now-demolished/8387/> [Accessed 19/04/24]
- Keshishian, K. K. (1990) *Nicosia: Capital of Cyprus Then and Now*. 2nd ed. Nicosia: The Moufflon Book and Art Centre.
- Knight, R. (1955-57) Pencil sketch of a dog, possibly in the act of scratching its ear with its hind leg. *Costas & Rita Severis Foundation*. <https://cvar.severis.org/en/collections/item/dog-2/23425/> [Accessed 19/04/24]
- Maratheftis, F. S. (1958) *Location and Development of the Town of Leucosia (Nicosia) Cyprus* (Ph.D.). University of Bristol, Nicosia.
- Michaelides, D. and Pilides, D. (2012) Nicosia from the beginnings to Roman Ledroi, in: Michaelides, D. (ed.) *Historic Nicosia*. Nicosia: Rimal, pp. 3–74.
- Olympios, M. (2014) Institutional identities in Late Medieval Cyprus: the case of Nicosia cathedral, in: Papacostas, T. and Saint-Guillain, G. (eds.) *Identity/Identities in Late Medieval Cyprus: Papers Given at the ICS Byzantine Colloquim*. Nicosia: Cyprus Cyprus Research Centre & King's College London, Centre for Hellenic Studies, pp. 195–240.
- Papacostas, T. (2012) Byzantine Nicosia 650-1191, in: Michaelides, D. (ed.) *Historic Nicosia*. Nicosia: Rimal, pp. 77–109.
- Papadakis, Y. (2006) Nicosia after 1960: a river, a bridge and a dead zone, *Global Media Journal: Mediterranean Edition*, 1 (1).
- Peto, G. E. (1926) Farmagusta gate. *Costas & Rita Severis Foundation*. <https://cvar.severis.org/en/collections/item/famagusta-gate-2/13094/> [Accessed 19/04/24]
- Severis, R. C. (2003) *Nicosia: Monuments and Memories*. Nicosia: Hellenic Bank.
- Toufexis, E. (1907) Postcard depicting the Lusignan Palace in Nicosia. *The Leventis Municipal Museum of Nicosia*.
- Willis, M. (1986) Byzantine beginnings of the Bedesten, in: *Κυπριακά Σπουδαί*. Nicosia: Society of Cypriot Studies, 50, pp. 185–192.
- Unknown (1930) The first Cyprus museum. *Costas & Rita Severis Foundation*. <https://cvar.severis.org/tr/collections/item/the-first-cyprus-museum/7526/> [Accessed 19/04/24]
- Unknown (n.d.) Ermou street in Nicosia. *Costas & Rita Severis Foundation*. <https://cvar.severis.org/en/collections/item/ermou-street-in-nicosia-2/3066/> [Accessed 19/04/24]

# DC BOX



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# Living LAB on Mobile Geolocated App

## DC BOX PROTOTYPES Showcase

DIGITAL CURATOR  
TRAINING TOOL BOX



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### **Behind the lattice-wood veil: Moving through Ottoman Nicosia from a woman's point of view**

Nicolette V. Levy

Cyprus Institute



# Inspiration and Context

## Data Collection:

Using the Actionbound platform, users navigate the historic centre of Nicosia and discover Ottoman-era landmarks, following a narrative route designed to bring awareness to the role of gender in the division of space and architecture. As the user traverses the city, they learn more about the unique experiences of women, whose access to these spaces was dictated by gender and class. Monuments on both sides of the UN Green Line are included in the route, and each stop is enriched by archival material including photographs, architectural plans, drawings, paintings, traveller accounts and contemporary literature. A focal point is the historic house museum of Hadjigeorgiakos Kornesios, where the user is guided from an exterior to interior view to experience life behind the veil of a lattice-wood balcony.

## Design/Requirements of prototype:

Use the Actionbound platform to:

- Present a guiding narrative that prompts the user to travel along the route
- Highlight specific locations along pre-determined route supplemented with additional information and archival materials

# Inspiration and Context

Main objective: return women to narratives of Nicosia's past through a key architectural element that facilitated female participation in public life while still upholding patriarchal standards of modesty

- Consider how architecture creates/reinforces/reflects patriarchy
- Prioritize women's lived experiences and emphasize their importance in the historical record
- Experience known Ottoman monuments with a new perspective
- Understand the intersectional limitations of gender and class

# Research Phase

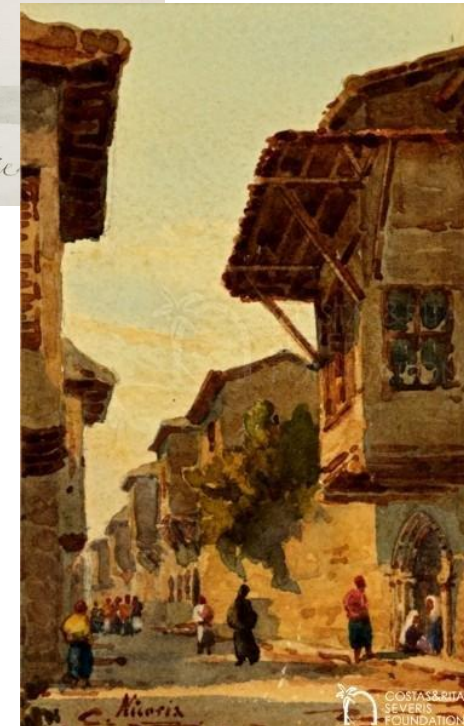
- Initial site visits
- Assessment of primary and secondary written sources
- Collection of relevant images (artworks, etc.)
- Development and curation of narrative experience through the character 'Anthoulla'



- Lusignan House
- Buyuk Han
- Arablar Mosque
- Omerye Hammam
- Kornesios House Museum

# Story Development

- Follow Anthoulla Georgiou, the daughter of a fruit seller in Ottoman Nicosia
- It's a bustling Tuesday morning in June, 1799, and Anthoulla has been asked to help her father make personal deliveries of their fruits to local clients
- Anthoulla will visit different buildings across Ottoman Nicosia and experience them for herself
- The user can play as an observer or as Anthoulla



## Location: Lusignan House

Introduce user to the Ottoman balcony as an architectural feature with this striking visual example, and meet your guide, Anthoulla



## Additional Information: What is an Ottoman Balcony?



- Architectural feature commonly found in Ottoman-era buildings, particularly in regions that were once part of the Ottoman Empire
- Typically protrudes from the facade of a building and is enclosed by a wooden or stone railing
- Often decorated with intricate carvings or ornamental details, reflecting the artistic and architectural style of the Ottoman period
- Most prolific period of construction occurring during the height of the Ottoman Empire's power and influence, particularly from the 15th to the 19th centuries
- Played a crucial role in maintaining privacy and modesty, particularly for women
- Offered solutions to climatic challenges: facilitated airflow, helping to cool the interior spaces of buildings and enhance comfort during hot summer days





## Location: Büyük Han

Enter the bustling marketplace to meet with Anthoulla's father and receive instructions for fruit deliveries



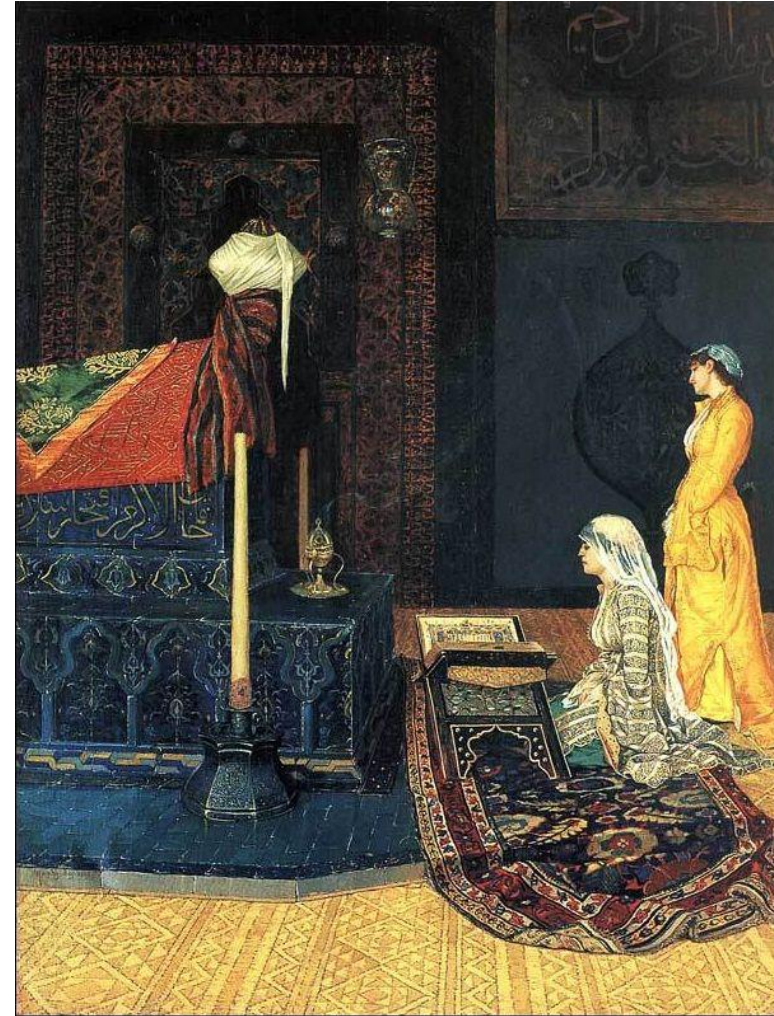
## Additional Info: Büyük Han

- Built during the Ottoman period in Cyprus, specifically in 1572, by the first Ottoman governor of Cyprus, Muzaffer Pasha
- Originally designed as a caravanserai, the Büyük Han served as a roadside inn for travelers and merchants along the trade routes
- The courtyard, with its elegant colonnades and arches, served as a communal area where travelers could socialize, exchange goods, and pray. The rooms surrounding the courtyard were used as lodgings for guests, as well as storage spaces for their merchandise
- The Büyük Han also played a significant role in the social and cultural life of Ottoman Cyprus, serving as a meeting place and fostering cultural exchange and trade relationships



## Location: Arablar Mosque/Church of Cross of Missirikos

Anthoulla makes her first delivery to a small mosque, where she experiences the space from the exterior. She notices the minaret, which was added when the space was converted from a church to a mosque following the Ottoman conquest of the island in 1571



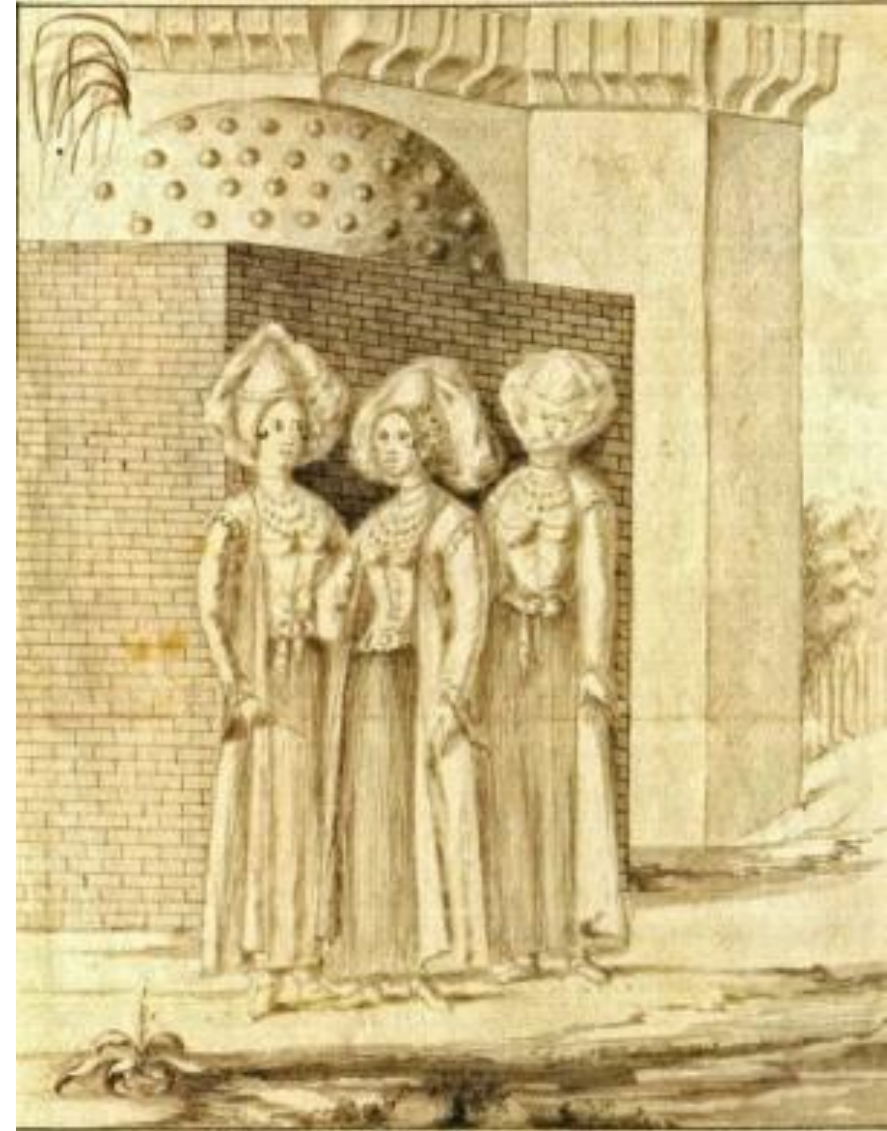
## **Additional info: Women in Mosques + Arablar Mosque/ Church of Cross of Missirikos**

- While women were generally encouraged to pray and participate in religious activities, their access to mosques was often limited compared to men
- Women would pray in a designated area that was often behind a barrier or in a separate room, ensuring their privacy and modesty
- This small church is an excellent example of the style of art and the mixture of architectural elements which seems to have prevailed in Cyprus during the Venetian Occupation
- In converting the church into a mosque the west and south doors were closed up and a singularly small minaret was built at the north-east corner



## Location: Omerye Hammam

Anthoulla's next delivery is at the Omerye Hammam, or bathhouse. It's women's day at the Hammam, so Anthoulla can wait inside and enjoy the echoes of running water, gentle splashing, and murmured conversations between the wealthy women who are there to bathe and socialize



## Additional Info: Ömeriye Hammam

- Hammams were an integral part of Ottoman culture and were designed for both men and women to cleanse themselves, socialize, and relax
- Women would typically visit the hammam during specific hours reserved for them or in segregated areas within the bathhouse
- The Ömeriye Hammam dates back to the 16<sup>th</sup> century, when it was erected next to the converted mosque next door

## Location: Kornesios Mansion



Anthoulla has arrived at her last stop: the mansion of the Dragoman. After entering and delivering her fruits to the kitchen, she brings a plate of figs up to the Dragoman's wife, Lady Maroudia, and admires the balcony from within

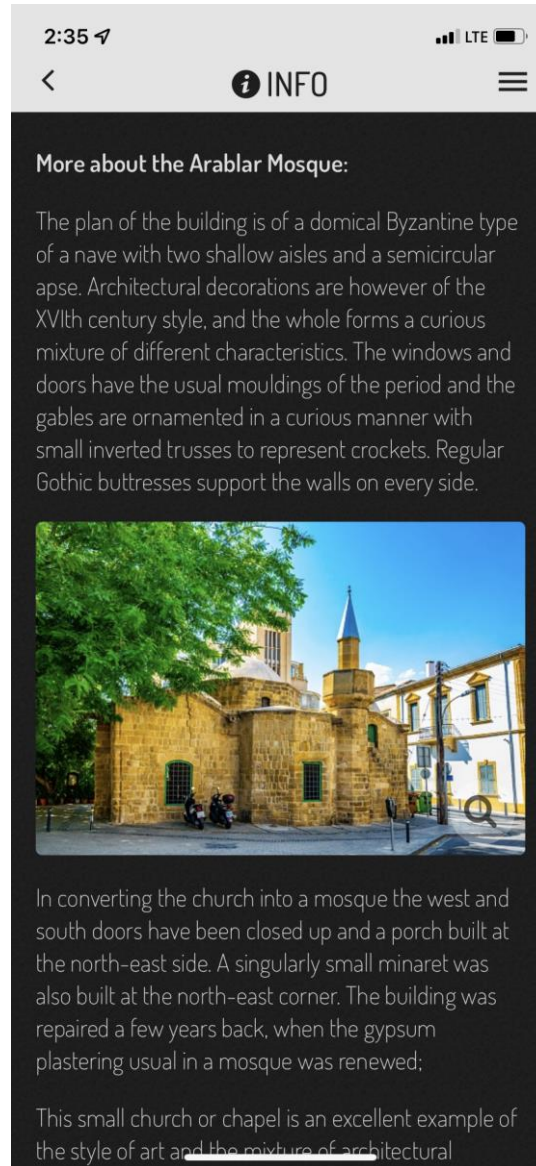




## Additional Info: The Dragoman of Cyprus

- Hadjigeorgakis Kornosios served as dragoman, a Christian from the local community appointed by the Ottomans, around 1796
- Hadjigeorgakis built his mansion in the upper class Ayios Antonios area in Nicosia, close to the Archbishop's residence. The house was built in 1793 with local bloc-cut sandstone and is a two-story building
- The architectural plan of the building in the form of a Greek "Π" surrounds a central garden with a fountain and a private bathhouse (Hammam) which has three rooms. On the ground floor, the servants' quarters and the kitchen were situated.
- Roofed wooden stairs with a stone base lead to the entrance hall on the first floor from the courtyard. The official reception room and the living areas communicated with this reception hall.
- The official reception room (the onda), at the end of the east wing, differs from the other rooms with its exceptional carved wooden, gilded, and painted decoration, which liken it to other official reception rooms in many mansions of the Ottoman Empire.

# Prototype: Actionbound



# Added Value

- Increase awareness of Ottoman architectural features
- Restore women's perspectives in the historical narrative of the Old City of Nicosia
- Shed new light on under-valued era of Nicosia's history
- Encourage user to think about worldviews beyond their own, and even consider the gendered division of space in other architectural settings

# Future Directions

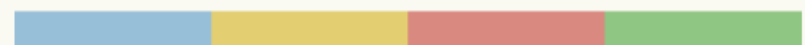
- Enhance soundscapes
- Partner with local stakeholders for integration into new and existing educational materials
- Add additional Ottoman balcony sites from across the historic Old City

# Bibliography

- Aymes, Marc. *A Provincial History of the Ottoman Empire: Cyprus and the Eastern Mediterranean in the Nineteenth Century*. Oxon: Routledge, 2013.
- Bakshi, Anita. "The legacy of Ottoman building in Nicosia: Halls as spaces of coexistence in pre-conflict Cyprus." *International Journal of Islamic Architecture* 1, no. 1 (2012): 107-128.
- Cassia, Paul Sant. "Religion, politics and ethnicity in Cyprus during the Turkokratia (1571–1878)." *European Journal of Sociology/Archives Européennes de Sociologie* 27, no. 1 (1986): 3-28.
- Charalambous, Nadia. "Spatial forms of ethnic coexistence in Ottoman Cyprus: the role of urban form in patterns of everyday life." *Journal of Urban History* 46, no. 3 (2020): 579-602.
- Demetriou, Chares. "Big structures, social boundaries, and identity in Cyprus, 1400-1700." *American Behavioral Scientist* 51, no. 10 (2008): 1477-1497.
- Given, Michael. "Global peasant, local elite: mobility and interaction in Ottoman Cyprus." *Journal of Islamic Archaeology* 4, no. 1 (2017): 1-21.
- Given, M. (2005) Architectural styles and ethnic identity in medieval to modern Cyprus. In: Clarke, J. (ed.) *Archaeological Perspectives on the Transmission and Transformation of Culture in the Eastern Mediterranean*. Series: Levant Supplementary Series 2. Oxbow Books, pp. 207-213.
- Hadjikyriacou, Antonis. "The Ottomanisation of Cyprus: Towards a spatial imagination beyond the centre-province binary." *Journal of Mediterranean Studies* 25, no. 1 (2016): 83-98.
- Hadjikyriacou, Antonis. "Local intermediaries and insular space in late-18th century Ottoman Cyprus." *Osmanlı Araştırmaları* 44, no. 44 (2014): 427-456.
- Ireland, Stanley, and William Bechhoefer. "The Ottoman House." In the *Amasya Symposium*, 24-27 September 1996. 1998.
- Jennings, R.C., 1993. Divorce in the Ottoman Sharia Court of Cyprus, 1580-1640. *Studia Islamica*, (78): 155-167.
- Özkul, Ali Efdal. "The consuls and their activities in Cyprus under the Ottoman Administration (1571-1878)." *Turkish Studies* 8, no. 2 (2013): 239-283.
- Pulhan, Hifsiye, and Ibrahim Numan. "The traditional urban house in Cyprus as material expression of cultural transformation." *Journal of Design History* 19, no. 2 (2006): 105-119.
- Sabri, Reyhan. "From an inconsequential legacy to national heritage: Revisiting the conservation approaches towards the ottoman buildings in british colonial cyprus." *Conservation and Management of Archaeological Sites* 19, no. 1 (2017): 55-81.
- Schriwer, Charlotte. "Cultural and ethnic identity in the Ottoman period architecture of Cyprus, Jordan and Lebanon." *Levant* 34, no. 1 (2002): 197-218.



# DC BOX



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Spreekwoord: *groot is samenkracht* *unity is strength*



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# Living LAB on Mobile Geolocated App



## Escape to Machairas

Theo Shaheen-McConnell  
& Soodabeh Sajadi

The Cyprus Institute



# Inspiration and Application Conceptualization

## *Four main points:*

- Exploration of trails in Troodos led to discovery that many cultural heritage sites are not recognized
- Fascination with continued contemporary movement along routes and trails established throughout history
- Engaging discussions with DCBox instructors and fellow participants
- COVID-19 Pandemic
  - Burst in outdoor activities
  - Temporal resonance of vaccines as a common savior



## Research phase

- Historical and archaeological sources were utilized for the research
  - Publications:
    - Sources for the History of Cyprus edited by Paul W Wallace and Andreas G. Orphanides
    - Barskey's Cyprus Revisited by Ian Meadows and Lonia Efthyvoulou
  - Online resources
  - Ethnographic accounts
  - Fieldwork throughout the sites





# Locations

- Phaneromeni Church
- Agios Herakleidos
- Agios Mnason
- Agios Panteleimon
- Virgin Mary of Arakas
- Machairas





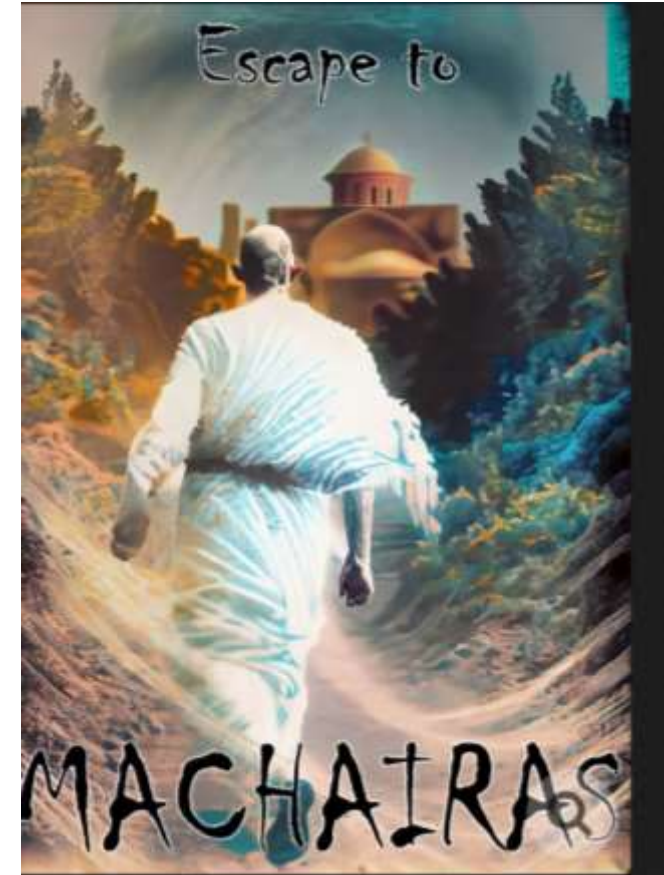
## Story development

The mountains call out for you - Your journey starts now!

It is the period between September 1734 and August 1736, you are Barsky, the Ukrainian explorer-monk, find yourself fleeing a pandemic spreading through Nicosia.

Seeking refuge, you undertake a journey from the crowded urban environment to the forested settings of six monasteries located on the Troodos Mountain range. There are whisperings of a vaccine which may combat the ravages of the plague and commit to a quest to uncover the truth.

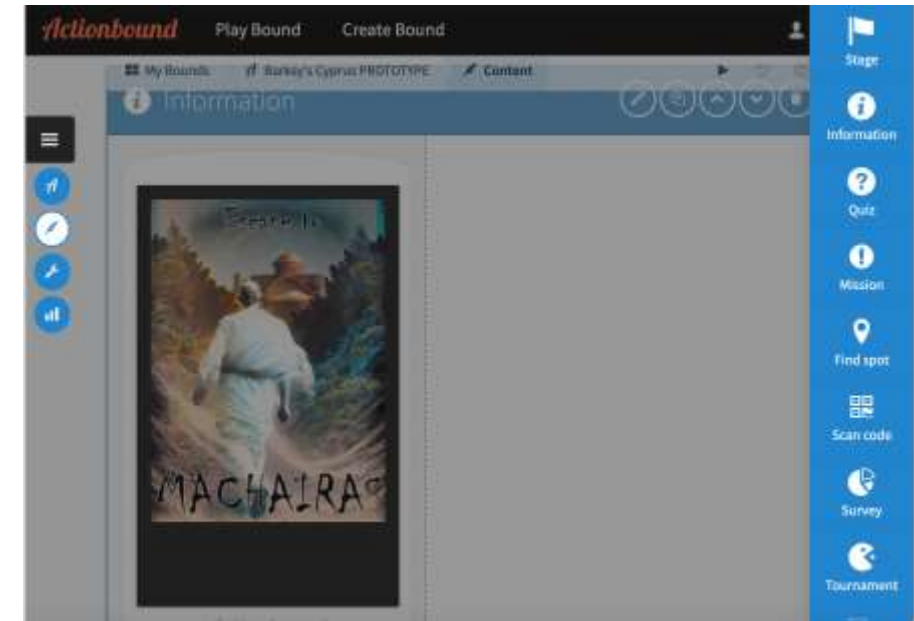
You move from monastery to monastery, gathering supplies and essential components to create the rumored vaccine. With time running short and the pandemic approaching, you must swiftly gather the vaccine's ingredients and travel to each monastery before you are overtaken by the outbreak!



AI generated image

# The Platform: Actionbound

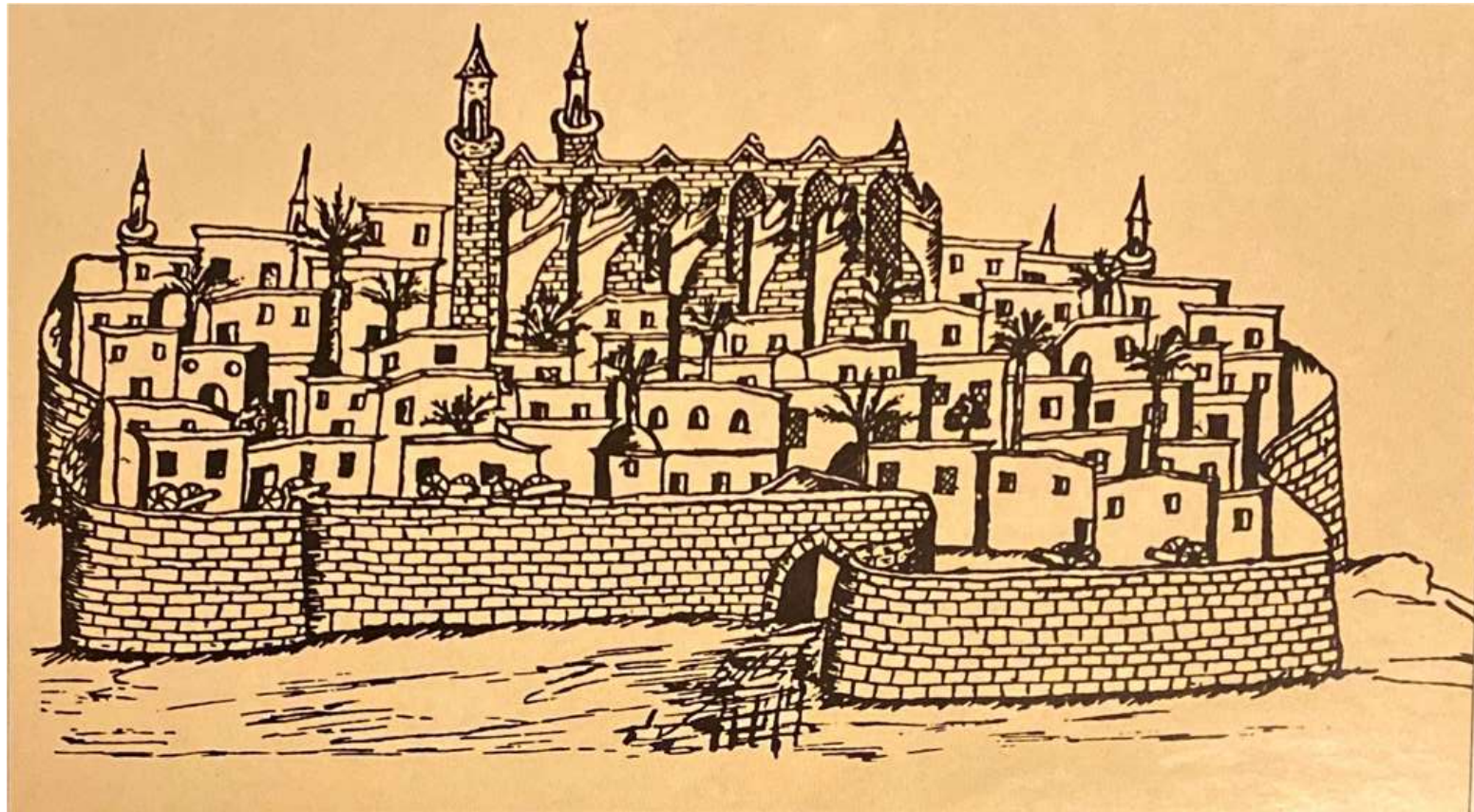
The screenshot shows the Actionbound web interface for a specific Bound titled "Barksy's Cyprus PROTOTYPE". On the left is a vertical sidebar with icons and labels: a blue circle with a white 'A' for "Barksy's Cyprus PROTOTYPE", a blue circle with a white feather for "Content", a blue circle with a white wrench for "Settings", and a blue circle with a white bar chart for "Results". The main content area is divided into three sections: "Test", "Share", and "Publish". The "Test" section contains the text "Test out your Bound before you put it online. The test Bound will contain the latest modifications." and an orange "Test" button. The "Share" section contains a link "Bound's web page" with the URL <https://actionbound.com/bound/barksys-cyprus-prototype> and a large QR code. The "Publish" section contains the text "Your Bound is offline. It cannot be played. Select the Button to put it online." and an orange "Offline" button. Below the QR code, there is explanatory text: "You can start your Bound by scanning this QR code with the Actionbound app. The code is permanently associated with this Bound and can be used to print it on flyers or in brochures, for example." At the bottom of the main area are two blue buttons: "Download start instructions" and "Download QR codes".



# Start Location

## Walled City

Just after Easter 1735, suddenly, out of a clear blue sky, disaster struck entire island. Barsky, who back then was teaching Latin in Nicosia, hang on for a while but as things went from bad to worse, considered leaving the island immediately. However, not only was there plague in the main port but violence was also rampant. That was how he left Nicosia, “dressed in an old garment”, to spend the next five months wandering around the island “waiting for God’s anger to pass”.





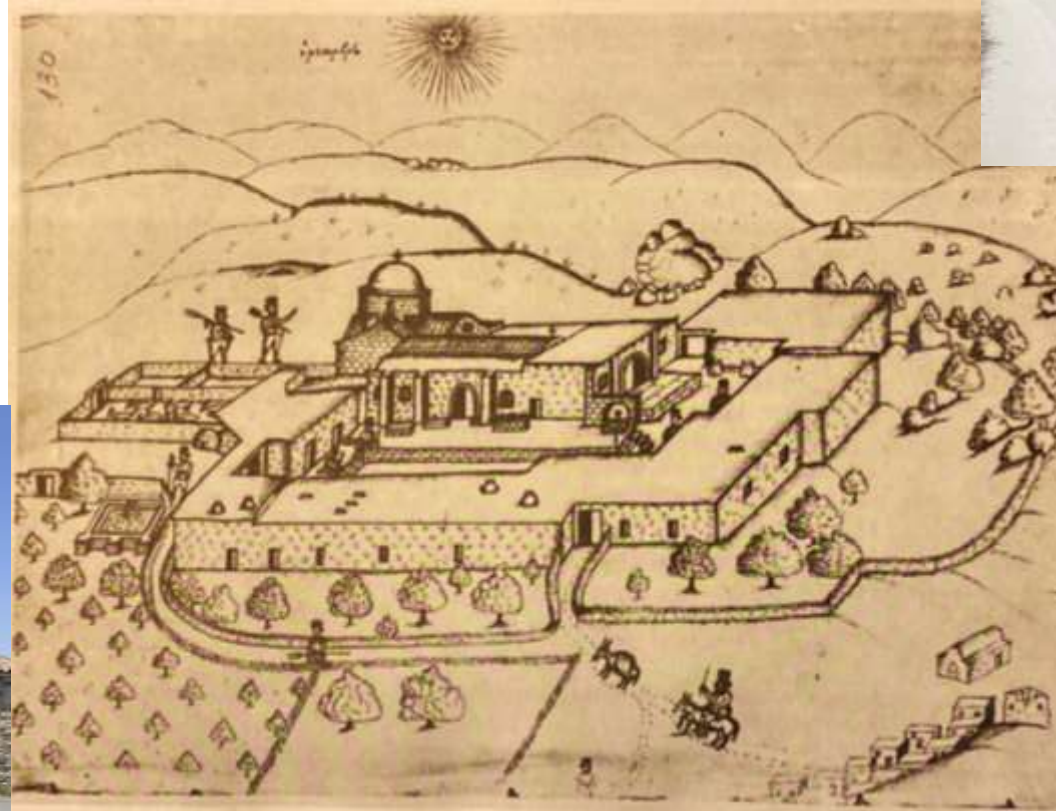
# First Stop

## Phaneromeni Church



## Second Stop Agios Herakleidos Monastery

The church is a spacious and wonderful building, with two stone barrel vaults and a lovely dome.



The monastery has three gates: to the east, north and south.



# Third Stop Agios Mnason Monastery

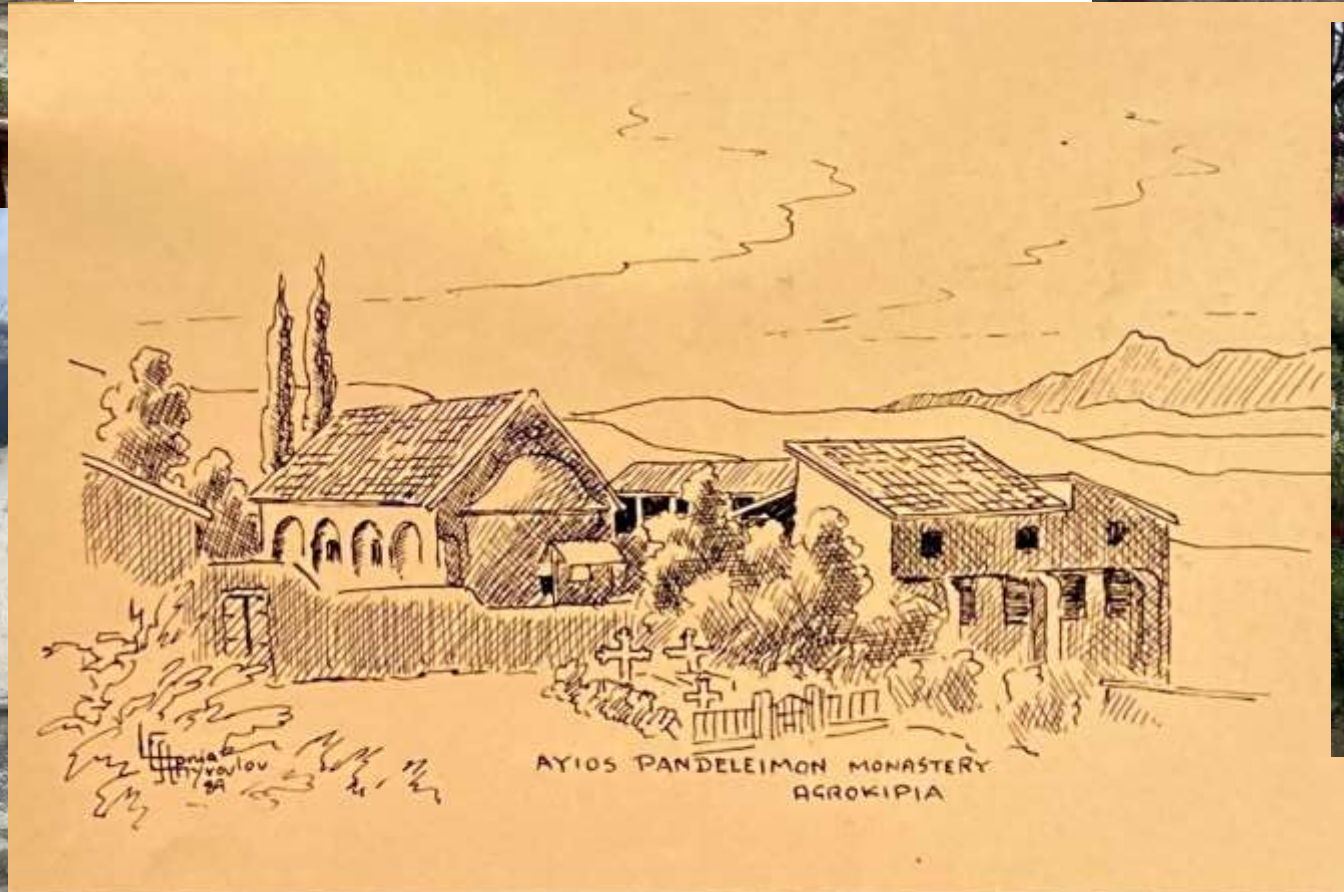




## Fourth Stop Agios Panteleimon Monastery



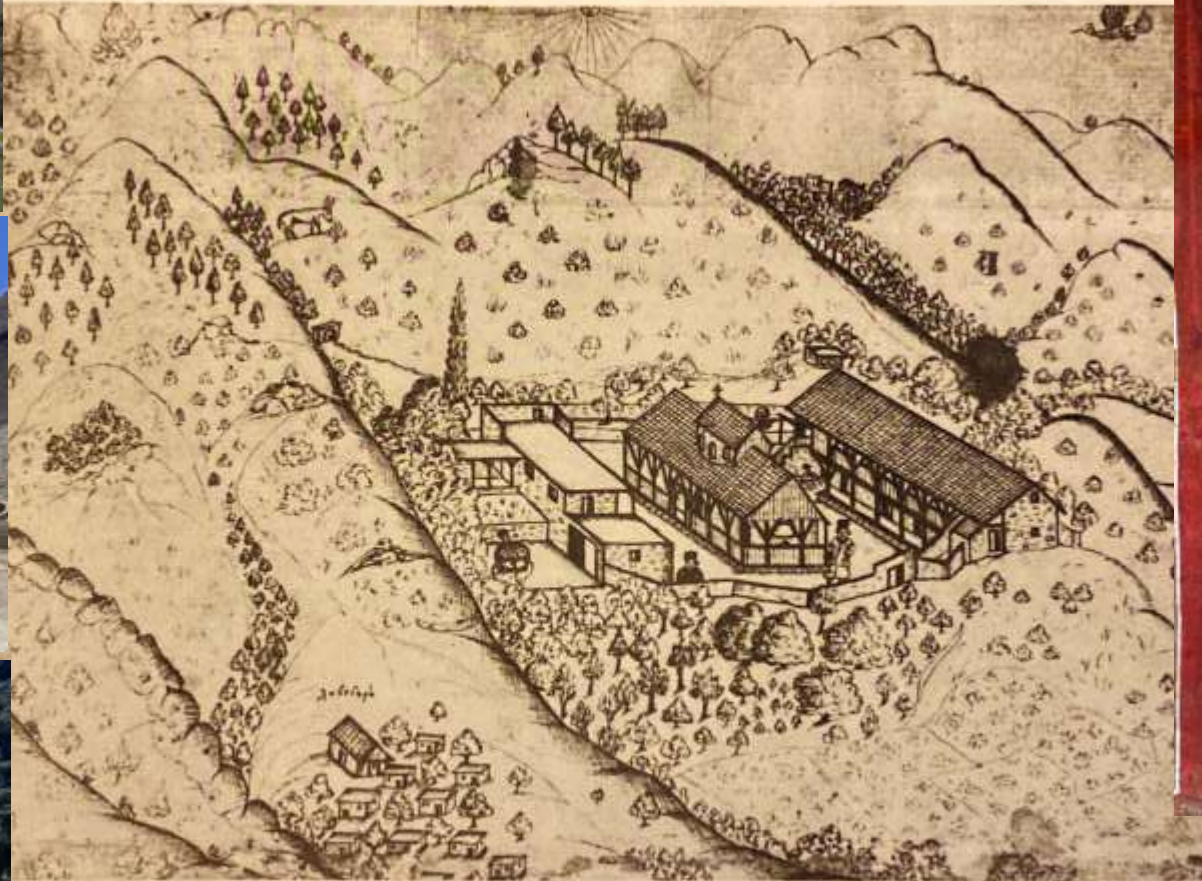
You are highly recommended to take a break here in this pleasant area and enjoy visiting the monastic cells surrounded by beautiful plants and fruit trees. You'll need the rest, as reaching the next spot will be quite challenging!



Good luck with next level!



## Fifth Stop Virgin Mary of Arakas



MONASTERY OF THE MOTHER OF GOD ARAKOU



Panagia Arakiotissa, 1192,  
church of Panagia tou Arakou,  
Source: The Painting Churches of Cyprus

PLATE 13



# Last Stop Machairas

Barsky is eager to visit the monastery of Macheras, his last and desired destination where he can make the vaccine utilising all the essential components he provided from the previous monasteries.

Why Machairas?

Is it the biggest one?

Is it the most holy one?

Is it associated with cures for some disease?

Macheras is associated with cures for plague, bites (especially viper bite), epilepsy, and tuberculosis.



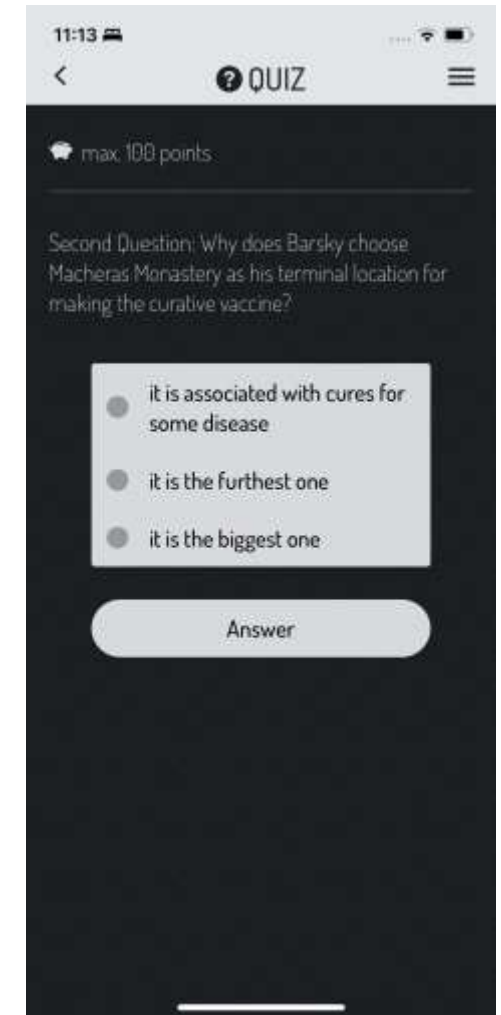
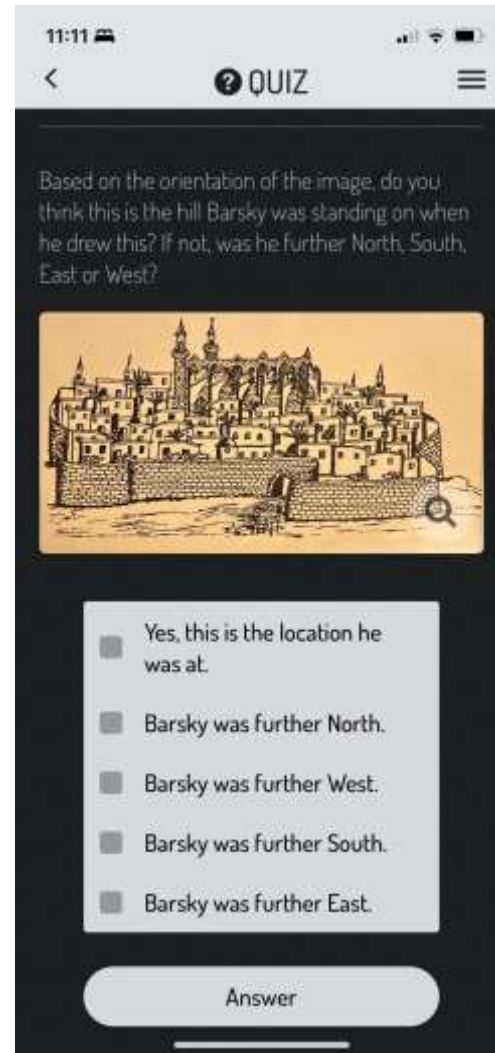
Here is a map of Barsky's routes across the island - how does your journey compare with his?







# The Prototype



What is the value of using digital tools and gamification in cultural Heritage?

- engaging people with rural & landscape history
- creating a sense of community with the past
- encouraging players to move around by walking, hiking, or driving to find answers, explore Cyprus

# Future Directions



- Apply for funding to continue research
  - Add additional stops from Barsky's travels
  - Expand on storyline
- Incorporate other ways of interacting with heritage
  - Extended Reality integrations with Actionbound application
  - Virtual tour of Barsky's travels for remote visits
- Work with stakeholders to identify improvements
  - Hiking groups
  - Biking groups
  - Tourism groups
  - Religious visitors
- Prioritize education
  - Test tours with Primary/Secondary School Students
    - Assess interest in and direction for further heritage studies aimed at youth





# References

Meadows, Ian., and Efthylvoulou, Lonia. Barskey's Cyprus Revisited 1726.1986. Ian Meadows and Awair publications limited, Nicosia, Cyprus, 1989.

Stylianou, Andreas., Stylianou, Judith A. The Painted Churches of Cyprus: Treasures of Byzantine Art, 1985

Trentin, M. G. (2020). Medieval and Early Modern graffiti: multicultural and multimodal communication in Cyprus. Cahiers du Centre d'Études Chypriotes, (50), 277-304.

Wallace, Paul W., and Andreas G. Orphanides, eds. *Sources for the History of Cyprus: A pilgrim's account of Cyprus: Bars'kyj's travels in Cyprus*. Vol. 3. Greece and Cypriot Research Center, Altamont, New York, 1996.

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