

D3.7 – Pilot Experience Prototypes

Breffni O'Malley¹, Karolina Badzmierowska¹, Niall O hOisin¹, Akrivi Katifori², Angeliki Tzouganatou³, Sophia Mirashrafi³, Maria Economou⁴, Hilary Young⁴

Reviewed by:

Sara Perry (York), Maria Roussou (ATHENA)

Abstract

This demonstration deliverable details four EMOTIVE pilot experience prototypes developed in the first year of the project: the Hunterian Museum's Antonine Wall collection onsite experience, the Çatalhöyük offsite virtual experience, the Çatalhöyük chatbot experience and the Çatalhöyük onsite experience.

Official Submission Date: 31/10/2017

Actual Submission Date: 22/12/2017

Dissemination Level: PU

Partner	Estimated Effort (in PMs)
¹ NOHO	2.5
² ATHENA	2
³ YORK	2
⁴ UGLA	3



Table of Contents

1	INTRODUCTION	5
2	HUNTERIAN ONSITE EXPERIENCE	6
2.1	BACKGROUND	6
2.2	EXPERIENCE PROTOTYPE	7
2.2.1	<i>Part 1: Introduction</i>	7
2.2.2	<i>Part 2: Selecting a story</i>	8
2.2.3	<i>Navigating the narrative</i>	10
3	ÇATALHÖYÜK OFFSITE VIRTUAL EXPERIENCE	16
3.1	BACKGROUND	16
3.2	EXPERIENCE PROTOTYPE	16
4	ÇATALHÖYÜK CHATBOT EXPERIENCE	18
4.1	BACKGROUND	18
4.2	EXPERIENCE PROTOTYPE	19
4.2.1	<i>Images</i>	22
4.2.2	<i>Quiz questions</i>	22
5	ÇATALHÖYÜK ONSITE EXPERIENCE	24
5.1	BACKGROUND	24
5.2	EXPERIENCE PROTOTYPE	24
5.2.1	<i>Pre-visit experience</i>	24
5.2.2	<i>On-site experience</i>	27
5.2.3	<i>Post-visit experience</i>	34
6	NEXT STEPS	35
7	BIBLIOGRAPHY	35

TABLE OF FIGURES

Figure 1. The Hunterian Museum – Antonine Wall Exhibition.....	7
Figure 2. Hunterian story app.....	8
Figure 3. Hunterian story app – menu of stories.....	8
Figure 4. Ebutius’ speech.....	9
Figure 5. Making a decision.....	9
Figure 6. Ebutius’ Dilemma – image.....	9
Figure 7. Ebutius’ Dilemma - text.....	9
Figure 8. Ebutius asks for help.....	10
Figure 9. The Roman Distance Slab – image.....	11
Figure 10. The Roman Distance Slab – directions.....	11
Figure 11. Ebutius' Life.....	11
Figure 12. Ebutius' Life - next steps.....	11
Figure 13. Ebutius’ hammer – image.....	12
Figure 14. Ebutius’ hammer – text.....	12
Figure 15. The Roman Distance Slab – hotspots.....	13
Figure 16. The Roman Distance Slab – hotspot text.....	13
Figure 17. Ebutius’ life story – options.....	13
Figure 18. Ebutius’ life story – strands.....	13
Figure 19. Ebutius’ decision - screen I.....	14
Figure 20. Ebutius’ decision - screen II.....	14
Figure 21. Ebutius’ decision - screen III.....	15
Figure 22. Ebutius’ decision - screen IV.....	15
Figure 23. Ebutius’ decision - final screen.....	15
Figure 24. 3D mesh of the Çatalhöyük site. White orbs represent audio embedded in the scene.	16
Figure 25. Aerial view of the Çatalhöyük virtual environment created by INRIA.....	17
Figure 26. Researchers from the ATHENA team and the University of York testing an immersive interactive VR version of the Çatalhöyük virtual environment developed for the Vive VR headset.	18
Figure 27. The Welcome Screen of the EMOTIVE Chatbot (mobile).....	19
Figure 28. The Welcome Screen of the EMOTIVE Chatbot (desktop).....	19
Figure 29. Interaction with the chatbot. Suggested responses appear at the bottom of screen.	20
Figure 30. Interaction with the chatbot. Suggested responses appear at the bottom of screen.	20
Figure 31. Suggested responses as they appear on the Messenger Web App.....	20
Figure 32. A visitor engages with the Chatbot using direct text messages.....	21
Figure 33. A visitor engages with the Chatbot using direct text messages.....	21
Figure 34. A visitor engages with the Chatbot using direct text messages.....	21
Figure 35. Cards, here shown in the Messenger Web App.....	22
Figure 36. Quiz question.....	23
Figure 37. First screen of the Çatalhöyük web application.....	25
Figure 38. Pre-visit questionnaire.....	25
Figure 39. Objects presented based on questionnaire data.....	26
Figure 40. Final screen of the pre-visit experience, where visitors receive their personalised ticket.....	27
Figure 41. Two examples of personalised artefact cards (Courtesy of S Perry, 2017).....	28
Figure 42. Screenshots of the On-site Experience application. From left to right: the home page, the first screen, and an example of an NFC prompt.	28
Figure 43. Example of a GIF which could illustrate the action of scanning the NFC tag.	29
Figure 44. Simplified footpath around the Replica Houses on-site (Courtesy of I. Kirkpatrick, 2017).....	30
Figure 45. Composite Replica House (Photo courtesy of A. Fisher, 2017).....	31

Figure 46. Interior of the second Hunting Shrine Replica House (Photo courtesy of A. Fisher, 2017) 32
Figure 47. Interior of third Vulture Shrine Replica House (Photo courtesy of A. Fisher, 2017) 33
Figure 48. Interior of the final replica house, Building 77 (Photo courtesy of A. Fisher, 2017) 34

1 Introduction

This demonstration deliverable details four EMOTIVE pilot experience prototypes developed in the first year of the project: the Hunterian Museum’s Antonine Wall collection onsite experience, the Çatalhöyük offsite virtual experience, the Çatalhöyük chatbot experience and the Çatalhöyük onsite experience. These experiences will be progressed for the EMOTIVE platform alpha release.

2 Hunterian onsite experience

2.1 Background

The Hunterian Museum onsite experience is based on the artefacts from the Antonine Wall collection. To create the experience, the team first developed a set of themes, characters and initial scenarios (Table 1).

Themes	Characters	Initial scenarios
<ul style="list-style-type: none"> – Engineering & construction – Occupation & abandonment – Roman imperialism – Roman Army life – Frontier life (Caledonian POV) – Food – Religion & death – The blending/clash of cultures – Roman warfare (strategy & tactics) – Role of propaganda 	<p><i>Named characters</i></p> <ul style="list-style-type: none"> – Verecunda, the slave girl – Januarius, the soldier – Salamanes snr., a merchant – Salamanes jnr., his son (deceased) – Ebutius, a centurion <p><i>Others</i></p> <ul style="list-style-type: none"> – stonemason, potter, cobbler, merchant, soldiers, Caledonian chief, Roman commanding officer, etc. 	<ul style="list-style-type: none"> – Death Of A Slave – The Things We Leave Behind – Escape From Bar Hill – Opus Valli – The Odd Couple – Walls Have Ears

Arising from that work, the first prototype story was developed under the theme ‘Occupation and Abandonment’. It featured the character of Ebutius, a centurion. The scenario covered the abandonment of the Antonine Wall by the Romans, and was given a working title of ‘The Things We Leave Behind’.

The title of the story is ‘Ebutius’ Dilemma’. The prototype experience was written first in MS Word, then transferred into ATHENA’s Storyboard Editor tool. From there it was published onto smartphones (for internal group testing) and to tablets for the first user evaluation.

2.2 Experience prototype

2.2.1 Part 1: Introduction

The experience begins with a short introduction from a museum guide. Standing in the Antonine Wall exhibition (Figure 1), he/she introduces the concept of 'The Things We Leave Behind' and makes a connection between modern life and the period of the Antonine Wall.



Figure 1. The Hunterian Museum – Antonine Wall Exhibition

Essentially, the message is that, today, many of us record and share every detail of our emotional and personal lives online. While that data will persist long after we're gone, in the past there was nothing similar. There were no such tools as Facebook, Instagram etc.

So, all we know about the people of the past is what we can tell from the things they left behind. And while those objects can reveal a lot, they provide little insight into the emotional and personal side of people's lives.

The museum guide then mentions several characters by name, explaining that they all have an emotional, dramatic story which can be accessed through the objects on display here in the museum...if only someone would come and find it.

(Note that in later versions of the experience, it is envisaged that this introduction could be covered with a short introductory film).

2.2.2 Part 2: Selecting a story

After the introduction, visitors are given a tablet and a set of headphones. They then access the Hunterian story app (Figure 2). From a menu of stories, they choose *Antonine Wall - Ebutius' Dilemma* (Figure 3).

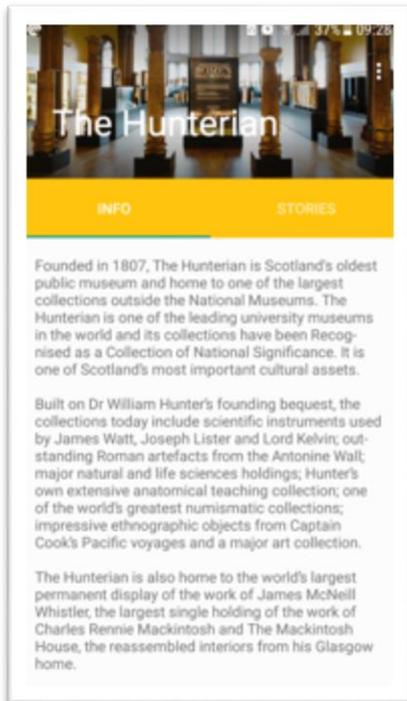


Figure 2. Hunterian story app

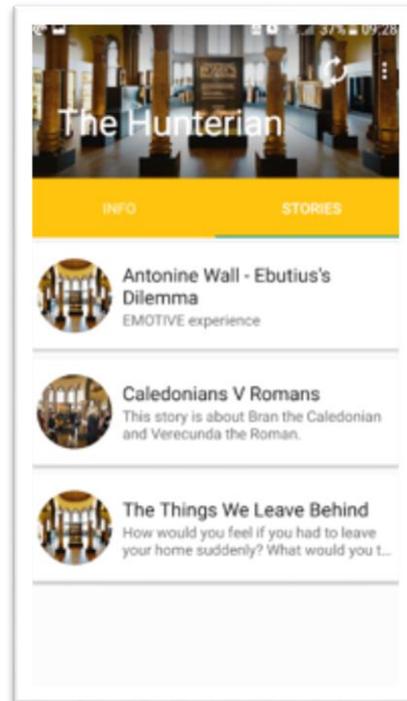


Figure 3. Hunterian story app – menu of stories

Having chosen the story of a character named Ebutius, the visitor then hears him introduce himself. In the prototype, Ebutius' speech is displayed onscreen as text (Figure 4). Having heard or read Ebutius' introduction, the visitor is then prompted to help him make an important decision (Figure 5).

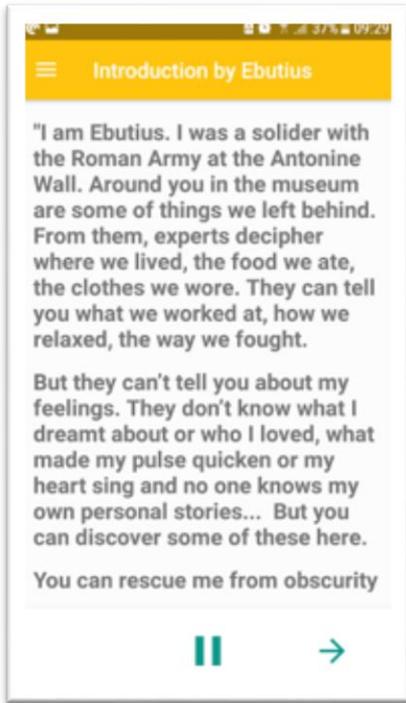


Figure 4. Ebutius' speech



Figure 5. Making a decision

When they choose to listen to Ebutius' story, visitors then see an image of him and an audio track plays of him telling his story. The visitor can flip between the image (Figure 6) and the text (Figure 7).



Figure 6. Ebutius' Dilemma – image

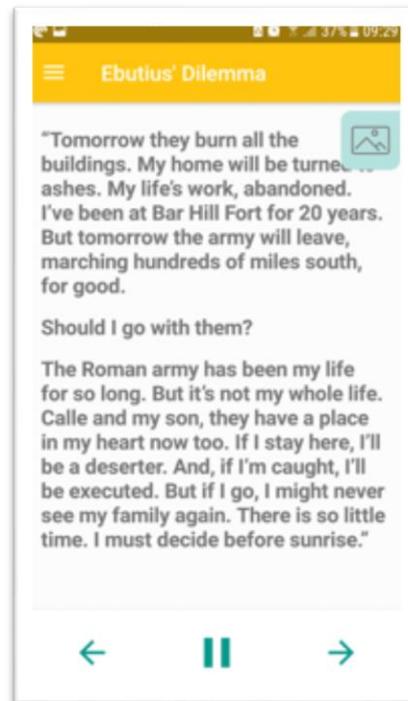


Figure 7. Ebutius' Dilemma - text

Ebutius explains that he must decide before sunrise whether to leave his home - the Roman fort at Bar Hill - with the rest of the army, or stay behind with his partner, a local woman named Calle.

He explains that he and Calle have a son together named Callum. Whether to stay in Caledonia with his family or leave with the army – this is his dilemma. (Note that in later versions, an animation or short video might be used here, instead of a static image.)

Ebutius then asks the user to help him make this decision. What should he do? To help them decide, visitors are invited to learn more about Ebutius - his life, his work, etc. There are three story strands for them to explore: one relates to Ebutius' working life, another to his personal life and a third to his sense of honour and duty (Figure 8).

It is important to note that these strands, and the individual objects that are cited within them, are all labeled according to the emotional relevance or significance they hold for Ebutius. So, for example, a Roman distance slab might be labeled as *'His life's work'* or a pair of children's shoes might be labeled as *'My dear sweet child'*. By using emotive language and labels in this way, the experience immediately fosters an emotional connection between the story and the visitor.



Figure 8. Ebutius asks for help

2.2.3 Navigating the narrative

The visitor then explores the museum space, finding objects and learning more about Ebutius. For example, if the user chooses *'His life's work'*, they are directed to the Roman Distance Slab. They are provided with an image of the object and directions on how to locate it in the museum space (Figure 9 and 10).

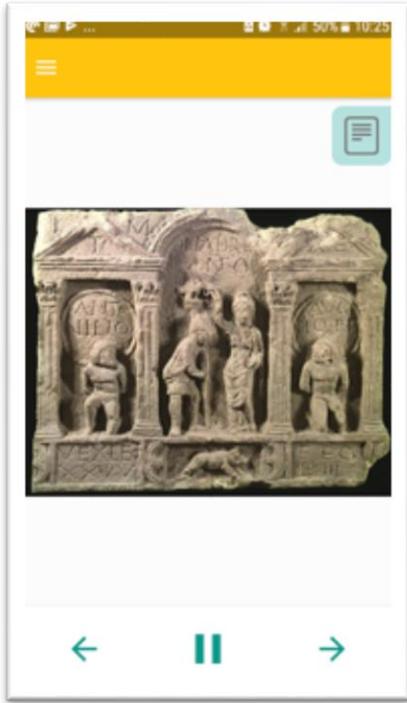


Figure 9. The Roman Distance Slab – image

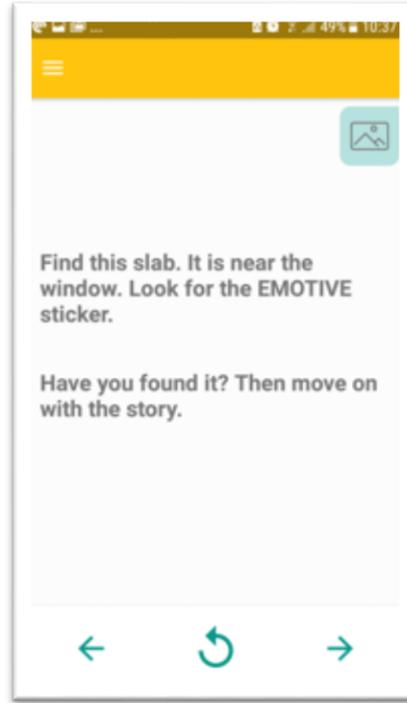


Figure 10. The Roman Distance Slab – directions

Once they have located the slab in the museum, the visitors then hear Ebutius talk about the significance of the slab for him. He explains how it inspired him to become a builder and led him to dedicate his life to building the Antonine Wall (Figure 11). In this way, visitors learn more about Ebutius' character and see his connection to the local landscape. They are then given a choice. They can continue to follow Ebutius' career as a builder or they can discover some general information about the object itself (Figure 12).

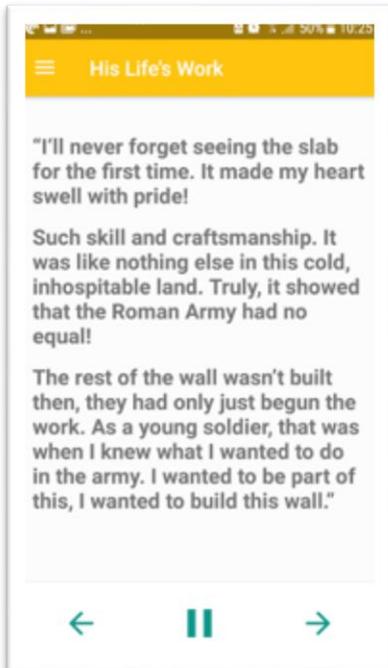


Figure 11. Ebutius' Life

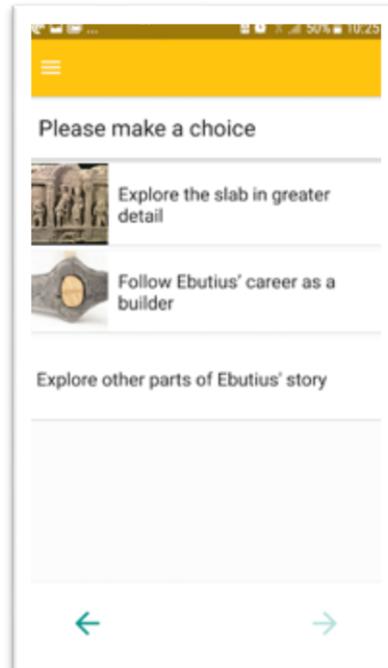


Figure 12. Ebutius' Life - next steps

If they choose to follow his career, they are led to another object – in this case, Ebutius’ hammer - and another anecdote that tells them more about his story (Figure 13 and 14).

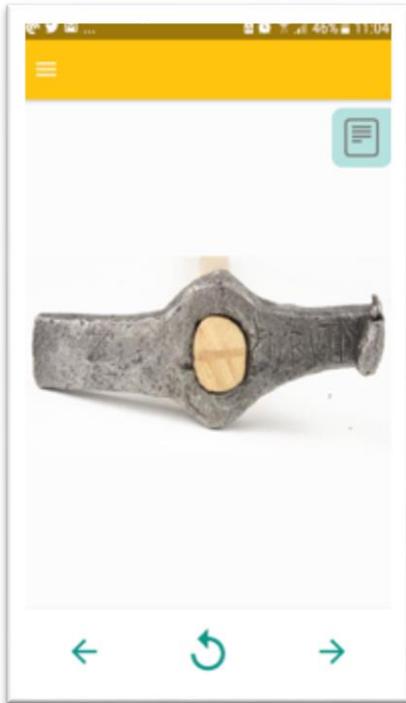


Figure 13. Ebutius’ hammer – image



Figure 14. Ebutius’ hammer – text

If they choose the object, in this case, the distance slab, they see an image of it onscreen, with touchable hotspot areas (Figure 15). When they tap one of these, further information appears (Figure 16). In this way, the experience embeds ‘conventional’ scientific information within the story narrative.

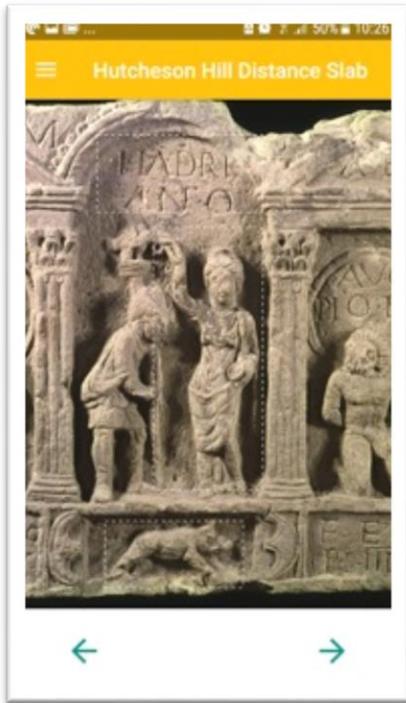


Figure 15. The Roman Distance Slab – hotspots

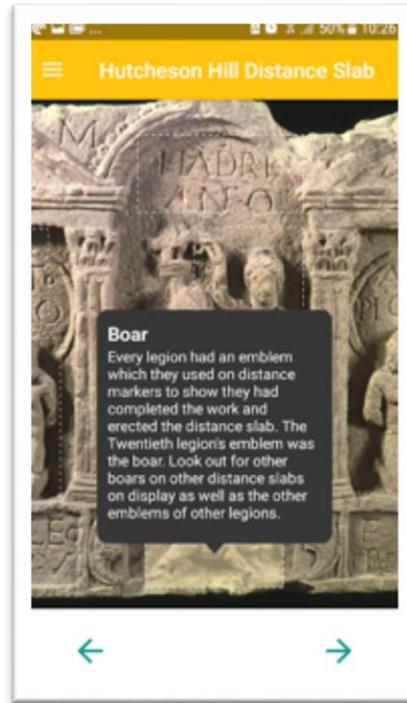


Figure 16. The Roman Distance Slab – hotspot text

If they wish, visitors can continue to explore Ebutius’ life story by going another level into this narrative strand (Figure 17). Or they can return to the main menu and explore the other strands, *The love of his life* or *The sacred oath he swore* (Figure 18). A similar structure, with similar mechanics applies in those strands.

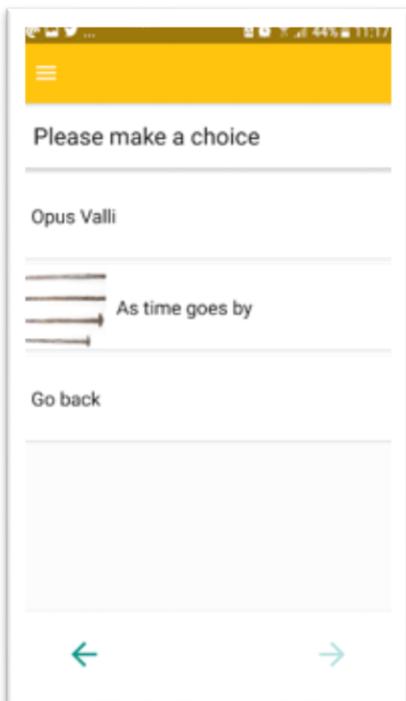


Figure 17. Ebutius’ life story – options



Figure 18. Ebutius’ life story – strands

At any time, the user can decide to stop exploring Ebutius' story and *Go directly to Ebutius' decision*. If they explore the full story, they are brought to this point directly (Figure 19 and 20).

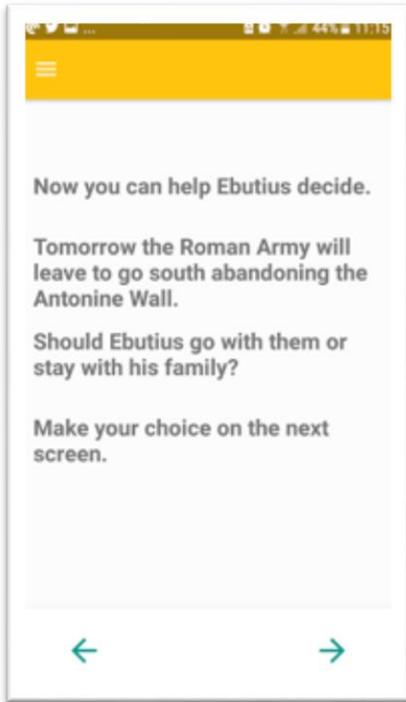


Figure 19. Ebutius' decision - screen I

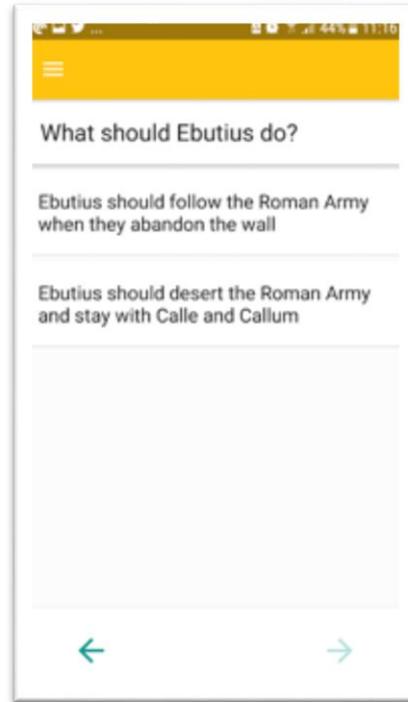


Figure 20. Ebutius' decision - screen II

After selecting an option, they hear Ebutius' reaction. He tells the visitors what he chose, and how his life was affected as a result (Figure 21 and 22).

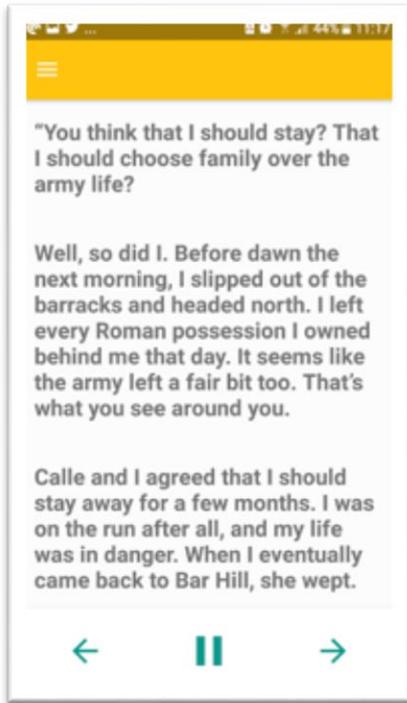


Figure 21. Ebutius' decision - screen III

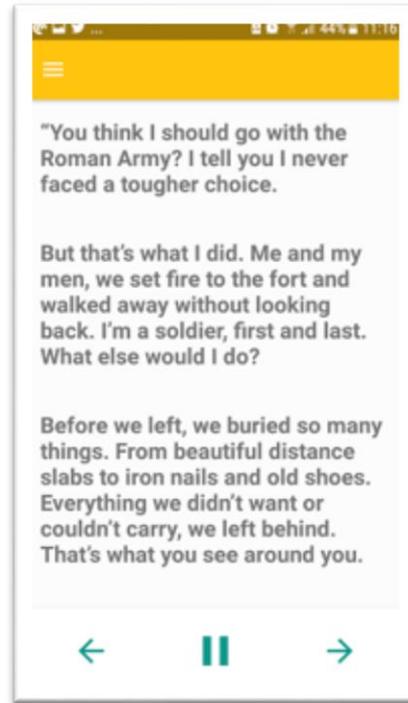


Figure 22. Ebutius' decision - screen IV

In the first version of the prototype, two endings were produced and the visitor received the version that matched their own choice for what Ebutius should do. The final screen contains a thank you message and prompts users to leave a response on comment cards. It also invites them to share their thoughts on social media (Figure 23).

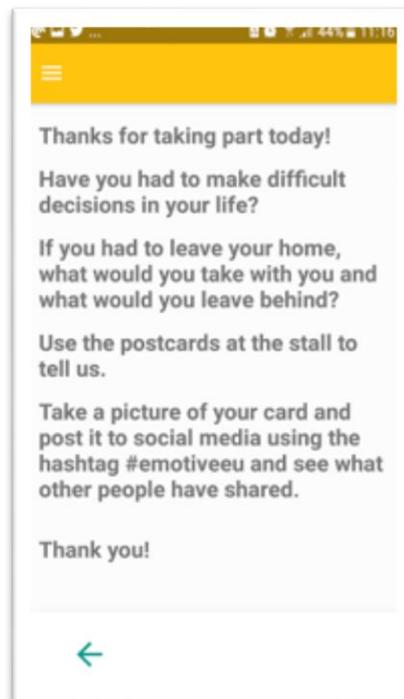


Figure 23. Ebutius' decision - final screen

3 Çatalhöyük Offsite Virtual Experience

3.1 Background

The Çatalhöyük Offsite Virtual Experience is currently in development.

It involves the following partners:

- INRIA, providing Image-Based Rendering (IBR)
- University of York, providing narrative development, scriptwriting and audio recording
- Noho, providing audiovisual, graphics and Unity programming

To create the experience, hundreds of photos were taken by EMOTIVE team members at the Çatalhöyük site during the summer of 2017. Using these, INRIA constructed an IBR version of Çatalhöyük's North Shelter. They then created and provided a simplified mesh to Noho, who have built a prototype in Unity. The outcome of this process will be a VR environment of the North Shelter.

At the same time, the University of York developed a narrative and script. The prototype experience is based on a small section of that script. The team at York have recorded audio for this purpose, which has been integrated into Noho's Unity scene at specific locations (Fig.24).



Figure 24. 3D mesh of the Çatalhöyük site. White orbs represent audio embedded in the scene.

3.2 Experience prototype

When the prototype is complete, a narrative telling the story of generations past at Çatalhöyük will unfold with the Virtual Reality (VR) environment of Çatalhöyük as backdrop (Figure 25). In the initial version

under development, the experience will feature some limited interactivity within the storyline and/or with the actual site. In parallel, various forms of interactivity are being explored (Figure 26) with the intention of integrating the most appropriate ones, depending on the available display medium, into later versions of the experience.

The story will be narrated and the auditory experience completed with audio features, including 3D spatial audio. Simple line illustrations and animations will be drawn over the VR environment to bring to life certain elements of the story.

To progress through the narrative, participants will need to scroll up along the stratigraphy of the site. They will also be able to navigate the space to view different areas, just as they would in reality.

The main goal is to trigger emotion by drawing people into the story, and site, by using a combination of illustrations, sounds and very simple animations.

The experience is conceived as a kind of ‘virtual novel’, with chapters that can be engaged with in sequence or in order of choice by the user. Within the narrative of each chapter, users variously listen to the story, interact with digital assets overlaid on the VR environment, and explore the environment itself in both structured and unstructured fashion.



Figure 25. Aerial view of the Çatalhöyük virtual environment created by INRIA



Figure 26. Researchers from the ATHENA team and the University of York testing an immersive interactive VR version of the Çatalhöyük virtual environment developed for the Vive VR headset.

4 Çatalhöyük Chatbot Experience

4.1 Background

The EMOTIVE Chatbot was developed in the context of experimenting with novel communication channels for EMOTIVE experiences. Using the chatbot, the visitor can converse with a virtual persona about an archaeological site or museum in the same way that one would chat with a friend about casual topics over Facebook Messenger.

The first prototype was designed and developed for the archaeological site of Çatalhöyük and was created on Facebook. Users engage with it either by sending a message on the Chatbot page or by using the Facebook Messenger app, via mobile or desktop (<https://messenger.com>). Note that Facebook Messenger Chatbots can also be contacted by following a short link with their name, which in this case is: <https://m.me/catalhoyukbot>. In this way, the Chatbot is a traditional information-delivery bot in its alpha version. However, the end goal for the bot is a more sophisticated ‘bot of conviction’ which aims to challenge its users, compelling critical thinking and careful consideration of the assumptions that users harbor about the past.

When developing the chatbot for Çatalhöyük, the EMOTIVE team came up with a concept called *ChatÇat*. This was chosen as it captures both the chatting experience (through ‘Chat’) and the first three letters of the archaeological site (‘Çat’).

Graphically, the *ChatÇat* resembles a leopard. This identity was inspired by the famous leopard paintings excavated at Çatalhöyük in the 1960s. Ultimately a play on words, as “chat” is the French word for cat, the ChatÇat also aimed to help the team develop a personality for the bot that might enhance the emotive side of the experience.

Note that the Çatalhöyük Chatbot experience is the primary output of a Masters dissertation for the

University of York, researched and written by Sophia Mirashrafi (Mirashrafi, Sophia, 2017. A Collaborative Experience in Çatalhöyük: Concept, Construction, and Evaluation. MSc Dissertation, University of York, York, UK).

4.2 Experience prototype

When users first contact the EMOTIVE Chatbot, they see a ‘welcome’ screen. This provides a short description of the chatbot and prompts them to ‘Get Started’ (Figure Figure 27Figure 28).

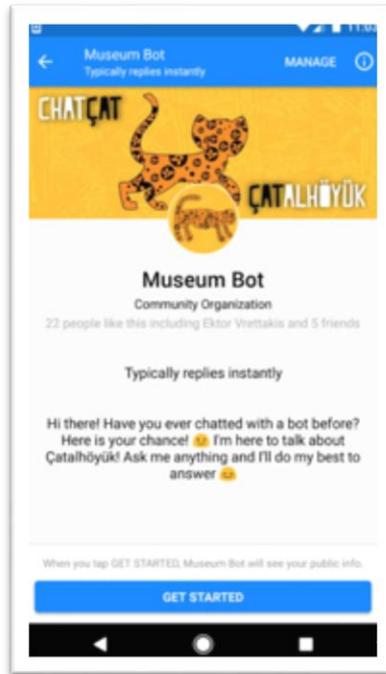


Figure 27. The Welcome Screen of the EMOTIVE Chatbot (mobile)

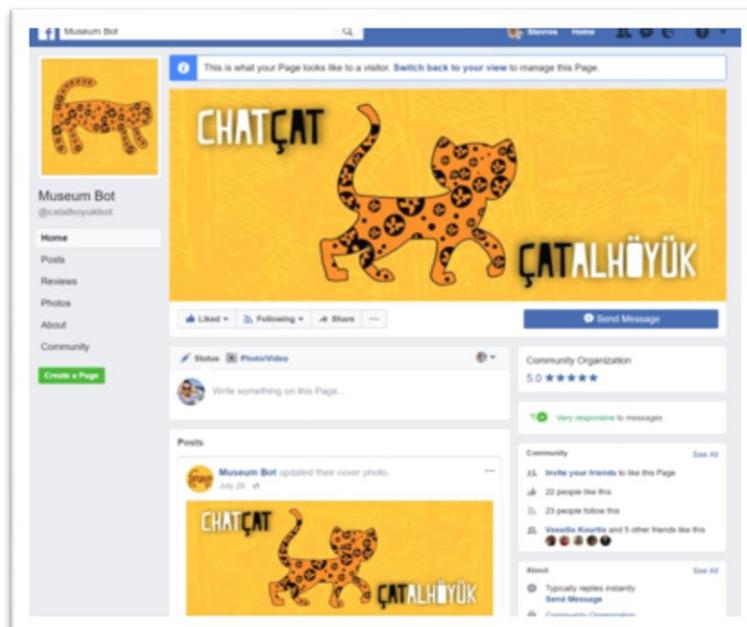


Figure 28. The Welcome Screen of the EMOTIVE Chatbot (desktop)

They are then prompted to ask a question, after which they receive an answer from ChatÇat. They also receive several suggested follow-up responses, which appear as buttons or bubbles. The user either selects one of these responses or writes their own follow-up question, and so the interaction continues. The following screenshots (Figure 29-31) illustrate this experience.

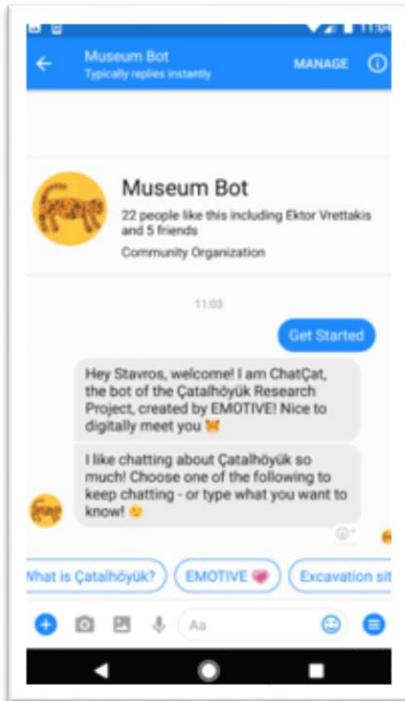


Figure 29. Interaction with the chatbot. Suggested responses appear at the bottom of screen.

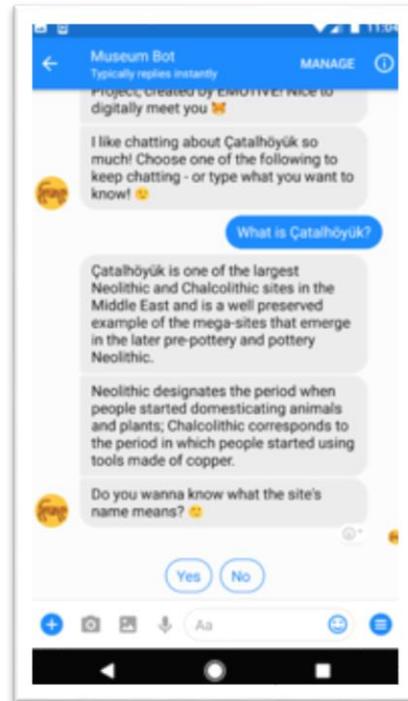


Figure 30. Interaction with the chatbot. Suggested responses appear at the bottom of screen.

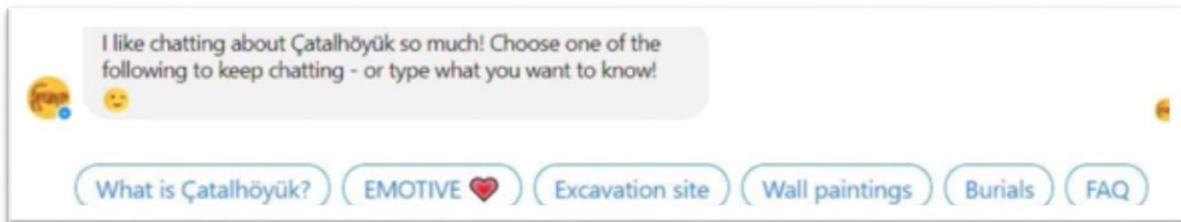


Figure 31. Suggested responses as they appear on the Messenger Web App

Suggested responses are helpful in that they guide visitors through the content. If a user does not know enough about Çatalhöyük to pose a question of their own, these options allow them to navigate the information easily.

For those who want to submit their own questions, the chatbot acts as a sort of smart search mechanism, similar to the search textbox on a webpage but presented in a friendly and conversational way. For

example, even though there is no suggested response regarding Çatalhöyük wall paintings, the visitor can ask about them and the EMOTIVE Chatbot will be able to understand the requested topic and provide relevant information (Figure 32-34).

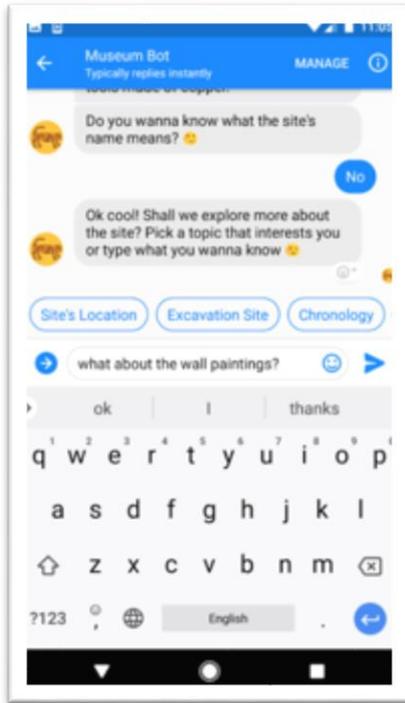


Figure 32. A visitor engages with the Chatbot using direct text messages

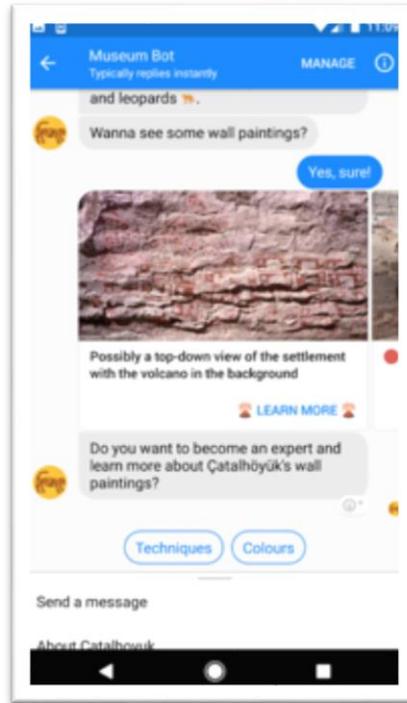


Figure 33. A visitor engages with the Chatbot using direct text messages

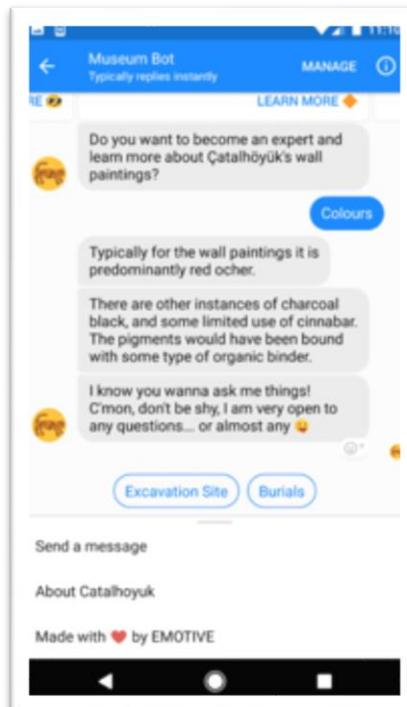


Figure 34. A visitor engages with the Chatbot using direct text messages

The chatbot includes several features that make the interaction more playful and engaging. These include the use of conversational language, images, emojis and quiz questions. The chatbot also uses a person's real name (as specified in their Facebook Messenger profile); a simple but effective way of engaging users more directly.

4.2.1 Images

The Chatbot can send users one image at a time (in the same way that two human users would send images to one another) or it can send multiple images at once, known as 'cards'. Each card shows an image, a title and subtitle, and facilitates further action through a set of buttons, e.g. 'Learn more' (Figure 35).



Figure 35. Cards, here shown in the Messenger Web App

4.2.2 Quiz questions

Quiz questions were developed to provide an alternative way of engaging users. For example, if a user is chatting with the chatbot about burials on the site, they might learn that the people at Çatalhöyük buried their dead underneath their floors (Figure 36). At that point, the visitor might receive a quiz question: 'Well, do you know what archaeologists call this type of burial? If not, can you guess then?'

They are then presented with three possible responses. If the user selects the wrong answer, the EMOTIVE chatbot explains why the selected option is incorrect and asks the visitor to try again, providing the two other options.

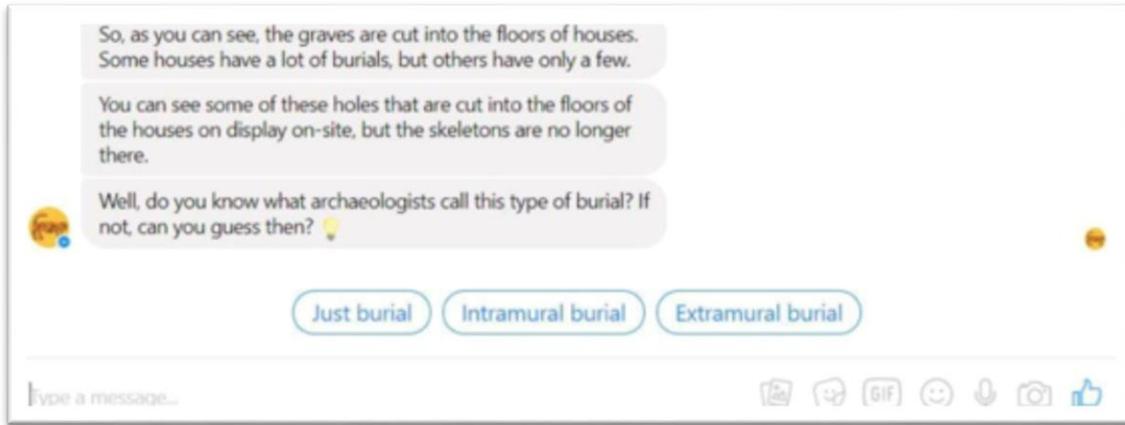


Figure 36. Quiz question

This alpha version information delivery chatbot is currently being evaluated with end-users by the ATHENA team. Two versions of the chatbot with varying thresholds are being tested: a “picky” chatbot, which only matches a response when there is high confidence on similarity, and a “non-picky” one which matches a response when there is also low confidence on similarity. We are conducting a within-groups formative study where approximately 16 participants will try both the “picky” and “non-picky” version of the bot, complete a User Experience questionnaire and then participate in a semi-structured interview. A detailed reporting of this formative evaluation will be included in deliverable D9.2: Formative Evaluation results (January 2018).

5 Çatalhöyük Onsite Experience

5.1 Background

The Çatalhöyük onsite experience focuses on fostering emotional bonds between visitors and the site by giving them the opportunity to physically handle copies of ancient objects found on site and share them, replicating the egalitarian society of ancient Çatalhöyük.

To facilitate this, EMOTIVE created a web application that enables visitors to start their experience before visiting the site and then continue after coming back (although the latter, post-visit, portion of the experience is still in the earliest phases of development). The aim of the application is not only to foster connections between the visitors and the site but also to form an online community of visitors that share the same interests.

The pre-visit part of the experience enables visitors to create their profile and be matched with an object and an identity that fits their interests. The intention is that through this process they develop an emotional attachment to the object.

During their experience onsite, visitors are then asked to reflect on the role of the ancient inhabitants of the region. As part of that process, they cannot keep their object but must share it, and may even have to leave it behind when they leave the site. This takes place within four replica Çatalhöyük houses which stand at the foot of the archaeological excavations.

After their visit, they log back in to the web application and connect to other visitors that shared the same objects during their visits. They can also trace the movements of their objects through the site (and beyond) and explore in more detail the archaeological history of the objects and the identities of Çatalhöyük's past residents.

Note that the Çatalhöyük onsite experience is the primary output of a Masters dissertation for the University of York, researched and written by Angeliki Tzouganatou (Tzouganatou, Angeliki, 2017. Chatbot Experience for Çatalhöyük. MSc Dissertation, University of York, York, UK).

5.2 Experience prototype

5.2.1 Pre-visit experience

When visitors first open the web application, they are greeted with a welcome message and a short description (Figure 37).

After signing up, visitors are automatically redirected to the pre-visit site. They are then presented with a short questionnaire (Figure 38).

Data from the questionnaire is used to determine which objects from the site might be most suitable/preferable to them.

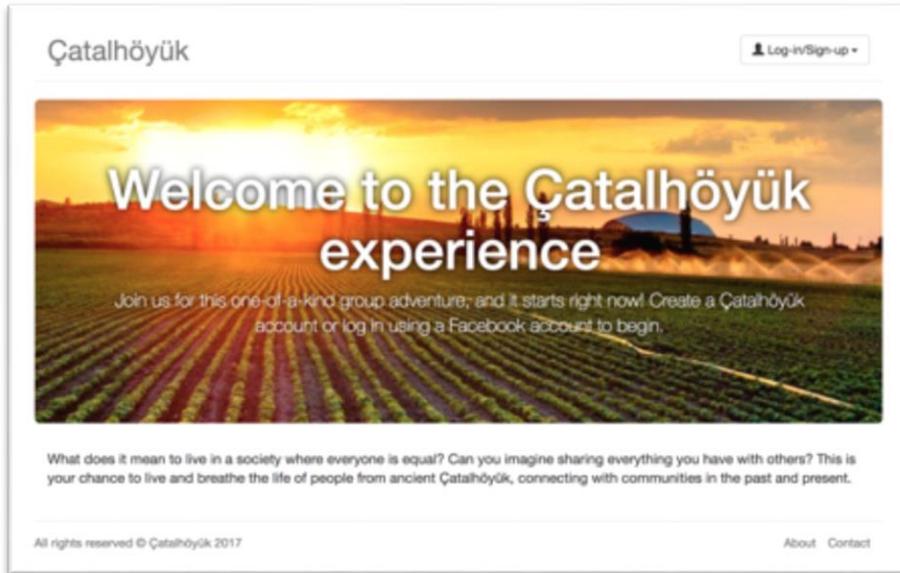


Figure 37. First screen of the Çatalhöyük web application

Figure 38. Pre-visit questionnaire

After completing the questionnaire, visitors are given a short summary of their interests and a list of ancient objects from Çatalhöyük that might appeal to them. They are prompted to choose one of these objects (Figure 39).

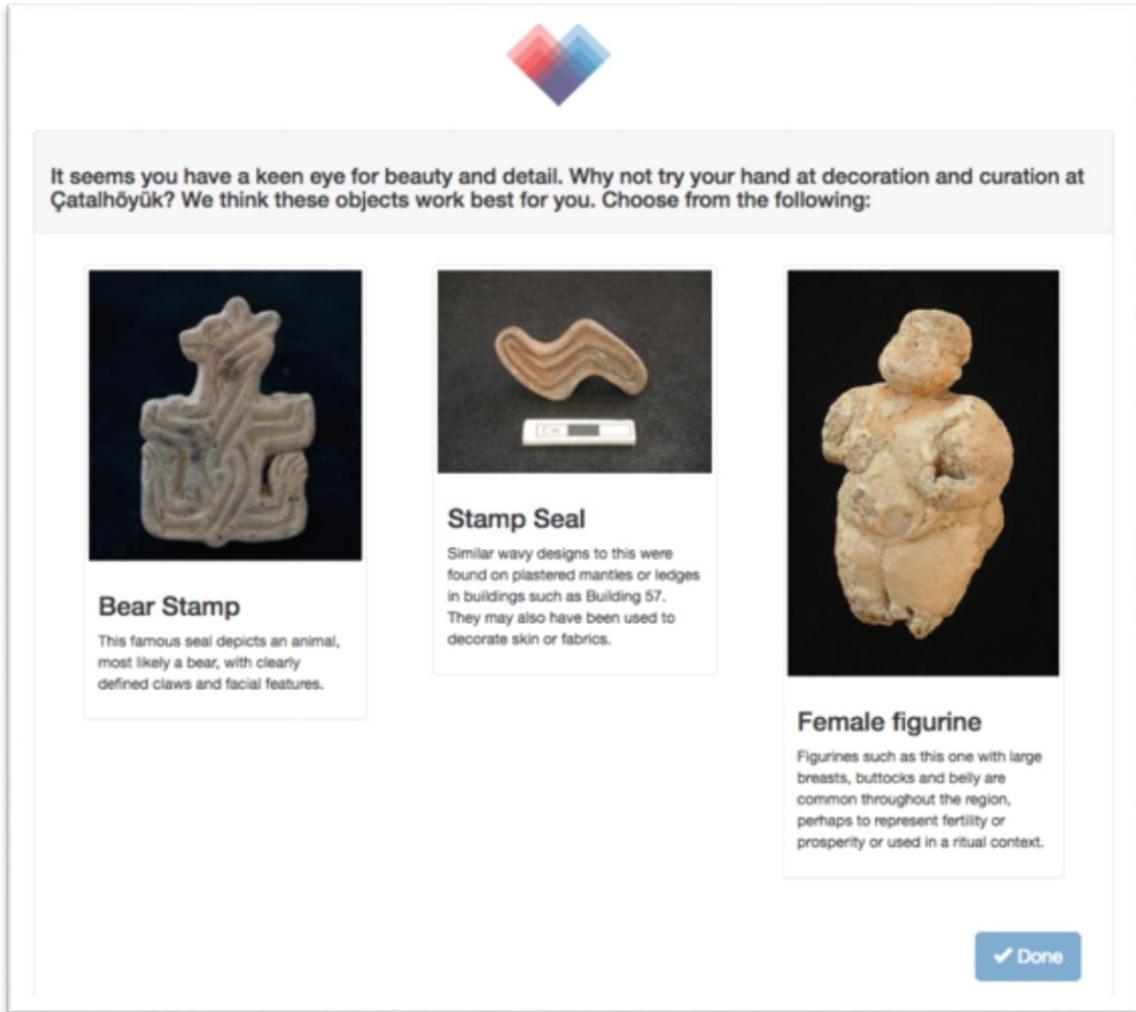


Figure 39. Objects presented based on questionnaire data

After selecting their object, a personalised ticket is created (Figure 40). Visitors are prompted to print this. When they arrive on-site, the object they have chosen will be given to them in physical form, so they can start their experience.

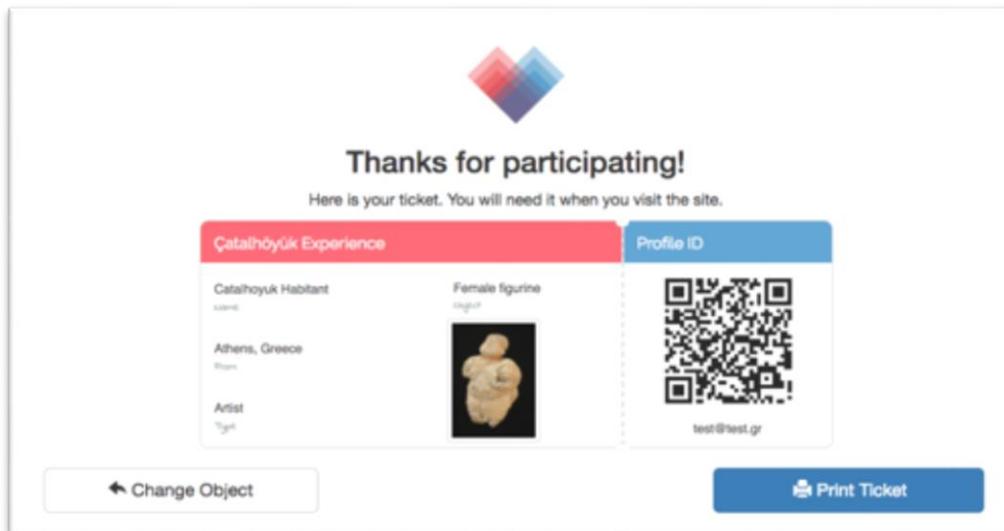


Figure 40. Final screen of the pre-visit experience, where visitors receive their personalised ticket

5.2.2 On-site experience

Part two of the experience takes place when visitors arrive at Çatalhöyük. The experience provides visitors with 3D printed objects that they personalise as their own (Figure 41 – note that in the alpha version of the experience, the objects are represented by 2D printed cards), before guiding them through replica houses, where they are prompted by a mobile application to trade and leave those objects behind (Figure 41). Through the NFC tag (Figure 42), as the object is traded, left behind, and picked up by a user, it accumulates layers of embedded personal data as it changes hands. One of the visitors takes the role of the narrator and reads the script aloud during the experience.



Figure 41. Two examples of personalised artefact cards (Courtesy of S Perry, 2017)

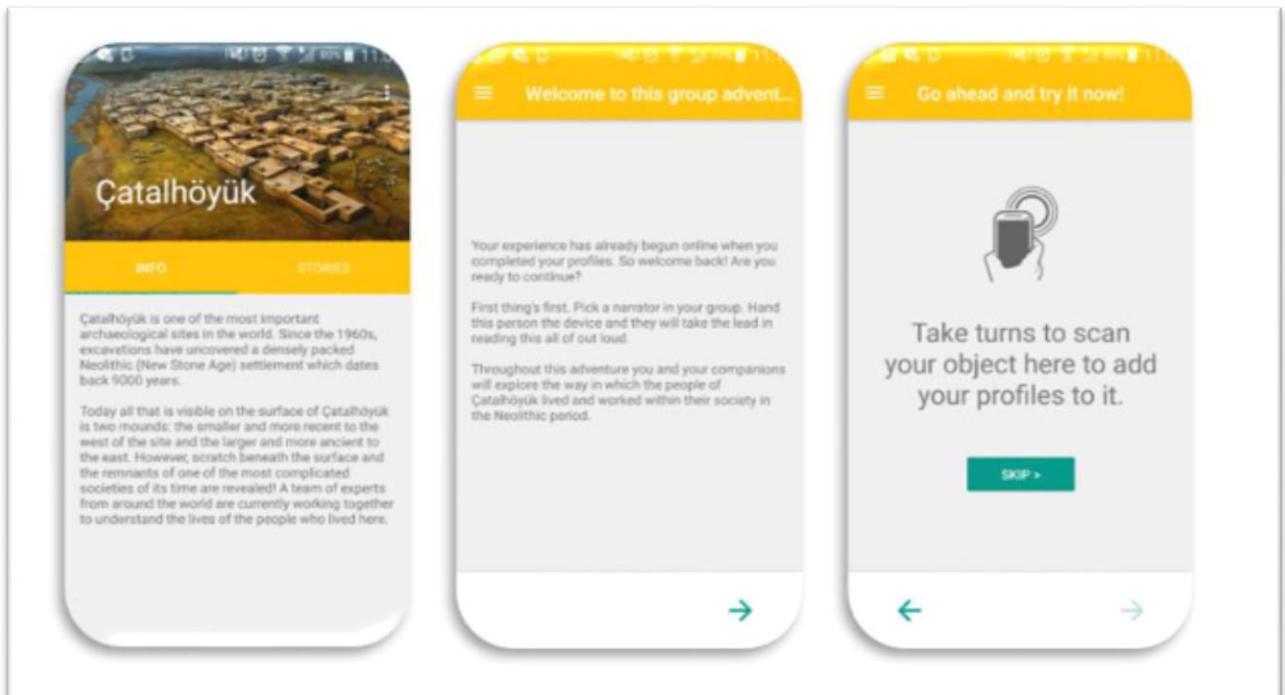


Figure 42. Screenshots of the On-site Experience application. From left to right: the home page, the first screen, and an example of an NFC prompt.

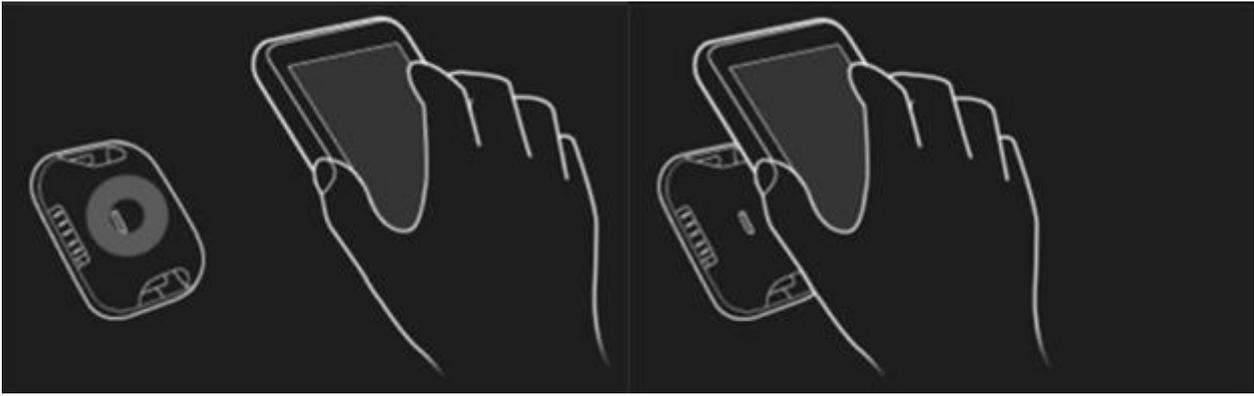


Figure 43. Example of a GIF which could illustrate the action of scanning the NFC tag.

(Courtesy of Vassilis Kourtis, 2017)

The visitors move clockwise through the replica houses, from the Composite house, through to the Hunting Shrine, Vulture Shrine, and Building 77 (Figure 44). In the first replica house (Figure 45) visitors are introduced to the meanings of ownership in Neolithic Çatalhöyük. This Composite house is where visitors are able to learn about the symbolism and social order at Çatalhöyük through traditional printed signs and displays. For the visitor who chooses to participate in the experience, they are prompted to trade their artefact with their companions. This act of trading is meant to represent a fluid meaning of ownership within households and families in the town.

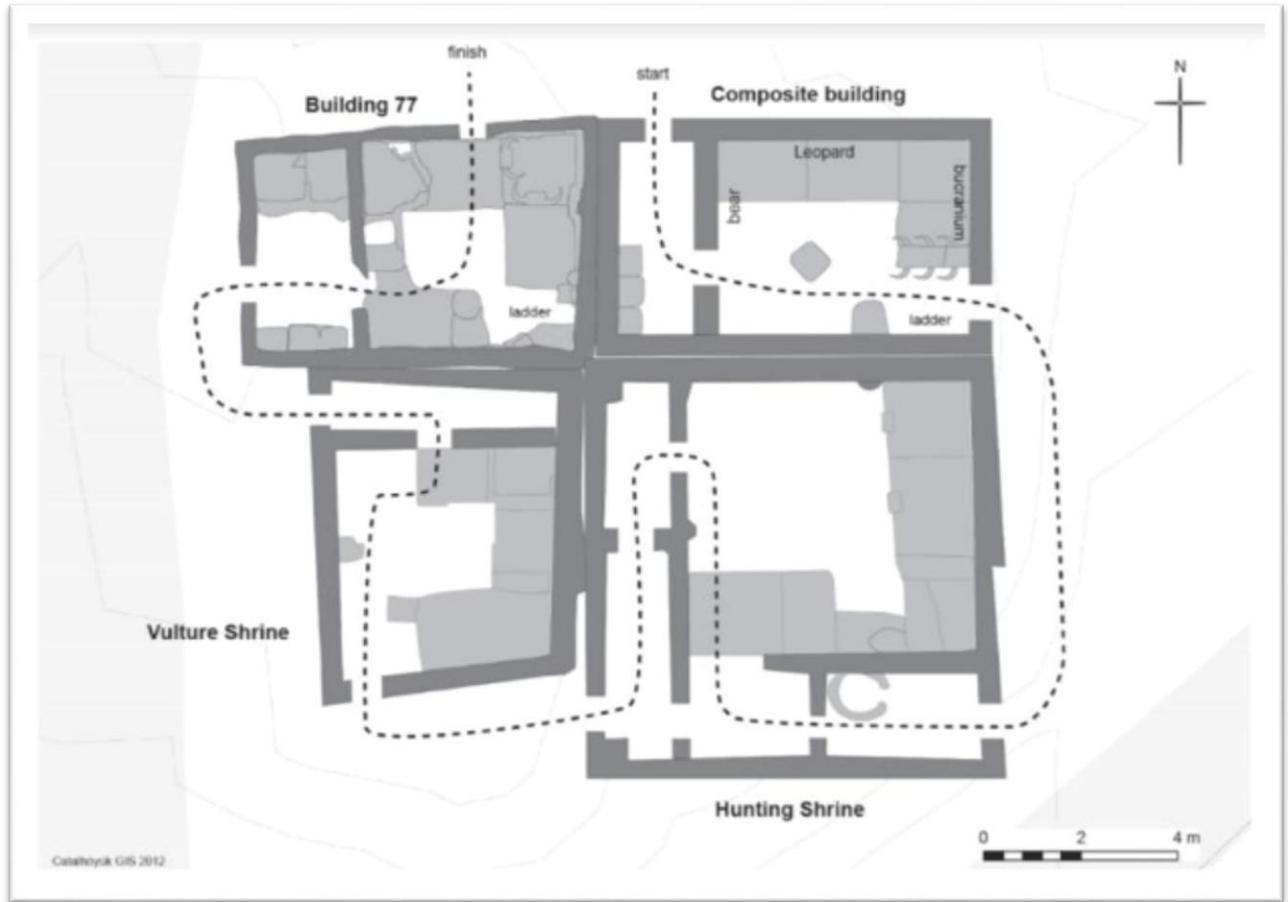


Figure 44. Simplified footpath around the Replica Houses on-site (Courtesy of I. Kirkpatrick, 2017)



Figure 45. Composite Replica House (Photo courtesy of A. Fisher, 2017)

Visitors are then asked to move on to the second replica house entitled the Hunting Shrine. The theme within this house is the role of egalitarianism in artwork and beautification, showcasing the so-called Hunting Shrine excavated by James Mellaart in the 1960s. Here there are wall paintings displaying the connection of landscape and wildlife for visitors to view (Figure 46). Artistic motifs found throughout the site suggest the sharing and dissemination of artistic style. In order to echo this sharing, visitors are tasked with choosing one of their party to trade one of their objects with one of the artefacts already set up on a platform in the home. After scanning their profile onto their new object, the group then collectively curates the remaining artefacts, arranging them on the platform to their satisfaction.



Figure 46. Interior of the second Hunting Shrine Replica House (Photo courtesy of A. Fisher, 2017)

Visitors then move onto the penultimate house, which explores the themes of death and burial, as well as the application of those themes in the interpretation of egalitarianism at the site. This house showcases the so-called Vulture Shrine, also excavated by Mellaart's team, and a pit representing a grave (Figure 47). Visitors are told how, in the Neolithic town, graves were often dug up and bones and grave goods were taken out and moved around the site. In order to enact these behaviours, visitors are prompted to actually reach into the grave, and take out an object. Next, they are asked to choose an item in their group to place back into the grave. Unlike arranging items on the platform in the previous house, here they move in a way that may seem either unfamiliar or uncomfortable to the user, perhaps triggering sadness or recollection of memories of their own losses.



Figure 47. Interior of third Vulture Shrine Replica House (Photo courtesy of A. Fisher, 2017)

Finally, visitors move on to the last replica house, which explores the theme of rebirth and is a reconstruction of Building 77, named after a building excavated during the archaeologist Ian Hodder's era (Figure 48). Here the visitors are asked to decide among themselves which object to leave behind for good. This means that one of the party will part from their experience with nothing at all. The group will, however, take home with them a final object which they may keep as a physical souvenir. This tangible souvenir is meant to act as a representation of the 'personal journey' of the visitors, whilst also connecting them with other participants of the experience digitally in the post-visit phase. However, asking one of the participants to leave behind an object altogether reinforces the theme of fluid ownership in Çatalhöyük.



Figure 48. Interior of the final replica house, Building 77 (Photo courtesy of A. Fisher, 2017)

Throughout the experience, users are prompted to reflect on their decisions and how they are feeling throughout. This reflection allows an opportunity for emotional engagement within the experience itself. The script aims to encourage discussion in the course of the experience, provoking learning through movement and conversation. In this way, visitors not only connect with the past people of Çatalhöyük by going through the motions of their life, but with people participating in the present-day experience as well.

5.2.3 Post-visit experience

After their visit, visitors log back in into the web application. Here they encounter a community of visitors who have all handled the same objects they did on-site. In this way, the app creates a community of visitors to Çatalhöyük, all with a common connection.

We are in the process of conceptualising and designing the post-visit experience based on detailed evaluation of the on-site testing at Çatalhöyük in August 2017, which will be reported in detail in deliverable D9.2: Formative Evaluation results (January 2018).

6 Next steps

The pilot experience prototypes outlined in this document represent work-in-progress with both partner sites, the Hunterian Museum and Çatalhöyük.

Early testing has shown that these experiences have considerable capacity for emotional engagement with visitors and each will continue to be developed throughout the lifecycle of the project.

It is intended that all four experiences will form part of the EMOTIVE platform alpha release.

7 Bibliography

Mirashrafi, Sophia, 2017. A Collaborative Experience in Çatalhöyük: Concept, Construction, and Evaluation. MSc Dissertation, University of York, York, UK.

Tzouganatou, Angeliki, 2017. Chatbot Experience for Çatalhöyük. MSc Dissertation, University of York, York, UK.

D3.7: QUALITY CHECKLIST

Sara Perry
YORK

Document Review Date: 19/12/2017

Document version reviewed: 0.3

CONFIDENTIAL DOCUMENT

Criteria	Verified (Y/N)
1) Conformity to Standards and Project templates	
Use of EMOTIVE Deliverable template	Y
Cover page information completed (Number, title, authors, organizations, dates, version number, dissemination level, abstract)	Y
Table of contents updated	Y
List of Abbreviations updated	n/a
Executive summary completed	N
Deliverable file title properly structured (EMOTIVE_ID-DocumentName.Version.ext, e.g. EMOTIVE_D3.1-User_Requirements_Scenarios-A.V0.1.docx)	Y
Template fonts and styles followed	Y
Deliverable title in Footer completed	Y
Comments	There is no executive summary.
2) Language review (typing mistakes, grammar, etc.)	
Revised document with language corrections sent to Del. Leader?	Y
Comments	Minor corrections noted in track changes.
3) Coherence with document / task objectives as declared in the DoA	
Comments	
4) Reliability of data	
Information and sources well identified	N
Bibliography section properly structured (if applicable)	n/a

Comments	<p>As the Chatbot and the onsite Çatalhöyük experience are the primary outputs of two Masters dissertations for the University of York, I think we need to acknowledge both of the authors of the dissertations, and provide formal citation of the dissertations. Could this could be added to the 'background' sections of the respective parts of the document? Here are the citation details:</p> <p>Mirashrafi, Sophia, 2017. A Collaborative Experience in Çatalhöyük: Concept, Construction, and Evaluation. MSc Dissertation, University of York, York, UK.</p> <p>Tzouganatou, Angeliki, 2017. Chatbot Experience for Çatalhöyük. MSc Dissertation, University of York, York, UK.</p>
-----------------	--

5) Validity of content	
In your opinion,	
are there any sections missing?	Y
does the document cover the topic successfully?	Y
is information presented in a structured and clear way?	Y
are conclusions presented sufficiently?	Y

Comments / Suggestions for revision	As above, please acknowledge the authors and dissertations of Angeliki and Sophia.
--	--

6) Deliverable Accepted? (provided that suggested changes are implemented)	Y
--	---

If no, please state reasons:

The following section should be filled in by the Deliverable Leader

7) Implementation of revisions/modifications suggested	Y
---	---

Explanation for eventual rejections	
--	--

i Please send the filled checklist to the Deliverable Leader and to the Project Coordinator.





EMOTIVE

D3.7: QUALITY CHECKLIST

Maria Roussou
ATHENA

Document Review Date: 21/12/2017
Document version reviewed: 0.3

CONFIDENTIAL DOCUMENT

Criteria	Verified (Y/N)
1) Conformity to Standards and Project templates	
Use of EMOTIVE Deliverable template	Y
Cover page information completed (Number, title, authors, organizations, dates, version number, dissemination level, abstract)	Y
Table of contents updated	Y
List of Abbreviations updated	N/A
Executive summary completed	N/A
Deliverable file title properly structured (EMOTIVE_ID-DocumentName.Version.ext, e.g. EMOTIVE_D3.1-User_Requirements_Scenarios-A.V0.1.docx)	Y
Template fonts and styles followed	Y
Deliverable title in Footer completed	Y
Comments	As this is a demonstration deliverable, the contents are brief and no executive summary is considered necessary.
2) Language review (typing mistakes, grammar, etc.)	
Revised document with language corrections sent to Del. Leader?	Y
Comments	No language corrections were needed; just some additions to content, and updates.
3) Coherence with document / task objectives as declared in the DoA	
Comments	
4) Reliability of data	
Information and sources well identified	Y
Bibliography section properly structured (if applicable)	Y

Comments	Added a Bibliography section with reference to the MSc theses completed at the University of York with EMOTIVE funding and related to two of the case studies presented in this deliverable.
-----------------	--

5) Validity of content	
In your opinion,	
are there any sections missing?	N
does the document cover the topic successfully?	Y
is information presented in a structured and clear way?	Y
are conclusions presented sufficiently?	Y

Comments / Suggestions for revision	Conclusions take the form of a Next Steps section in this deliverable.
--	--

6) Deliverable Accepted? (provided that suggested changes are implemented)	Y
--	---

If no, please state reasons:	Added content regarding two use cases, the offsite Çatalhöyük VR experience and the offsite Çatalhöyük chatbot experience, including a photo; updated the figures, formatted text to be fully justified; added bibliography section.
------------------------------	--

The following section should be filled in by the Deliverable Leader

7) Implementation of revisions/modifications suggested	Y
---	---

Explanation for eventual rejections	
--	--

i Please send the filled checklist to the Deliverable Leader and to the Project Coordinator.