

STORYTELLING FOR PLANNING AND ENHANCEMENT OF ARCHAEOLOGICAL
PARKS, SITES AND MUSEUMS.
APPROACHES AND STUDY CASES

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UNIVERSITÀ DI MACERATA

l'umanesimo che innova

DIPARTIMENTO DI
STUDI UMANISTICI

Lesson for the Course *Archeologia e
Territorio* LM-2 R, L, -84 (m) -
2024/2025 - prof. Roberto Perna

From Public Archaeology to Storytelling Archaeological Tales for planning, management and enhancement of Archaeological Parks (AP)

«Cultural heritage is a group of resources inherited from the past which people identify, independently of ownership, as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions. It includes all aspects of the environment resulting from the interaction between people and places through time;

A **heritage community** consists of people who value specific aspects of cultural heritage which they wish, within the framework of public action, to sustain and transmit to future generations.»

(Faro Convention (2005), article 2, a-b)

From Public Archaeology to Storytelling Archaeological Tales for planning, management and enhancement of Archaeological Parks (AP)

Faro Convention

Focus → art. 12 - Access to
cultural heritage and
democratic
participation
→ art. 13 - Cultural
heritage and knowledge
→ art. 14 - Cultural
heritage and the
information society



A shift in perspective – the need for everyday life tales
(AP)



"the future of museums begins at home. The situation is very simple: we are used to having epics but what we need is novels. In museums we are used to representation, but what we need is expression. We are used to having monuments, but what we need is houses"

The Museum of
Orhan Pamuk
Innocence

What *storytelling* is and why we need it

Storytelling as a method

- Mediation between scientific knowledge and the public
- Communication and dissemination of history, identity, characteristics, messages and opportunities related to the site

Seven Principles of Museum Storytelling

1. An effective museum story balances entertainment and factual soundness.
2. An effective museum story is compact.
3. An effective museum story is concrete, employing highly visual language.
4. An effective museum story is personally appealing.
5. An effective museum story not only describes artifacts but tells how some of them are made.
6. An effective museum story dislodges mistaken stereotypes.
7. An effective museum story invites cross-cultural comparisons.

Margaret and Raymond DiBlasio 1983

Who is the Public?

Specific target groups for collaborations

Experts

Stakeholders → institutions, enterprises...

General Public - non-experts

Children → families and schools

Young people → families and schools

Young adults

Mid-age adults

Silver age

Public with specific needs -

Accessibility and inclusion

People with disabilities

(Children, silver age, foreign people...)



Museums vs Archaeological Parks/Sites



Museum

- Objects outside their context
- Possibility to group objects by themes



Park/Site

- "Objects" in their context
- Ruins + remains of different period coexist

Before storytelling: historiography, documentation, archaeological research

...

Archaeologists are not necessarily professional storytellers ...

→ Interdisciplinary collaborations

→ *Historytellers* (Losapio 2018)

→ Teams of employees with different expertise

Risks of missing steps of a proper «storytelling chain»

→ Spectacularisation

→ Incorrect reconstructions

→ Anecdotes instead of tales



Magdeburger Einhorn

Working on the *Storytelling* Filling the gaps with plausibility



Historic context → most of the times **we don't have all the information** to build a proper tale

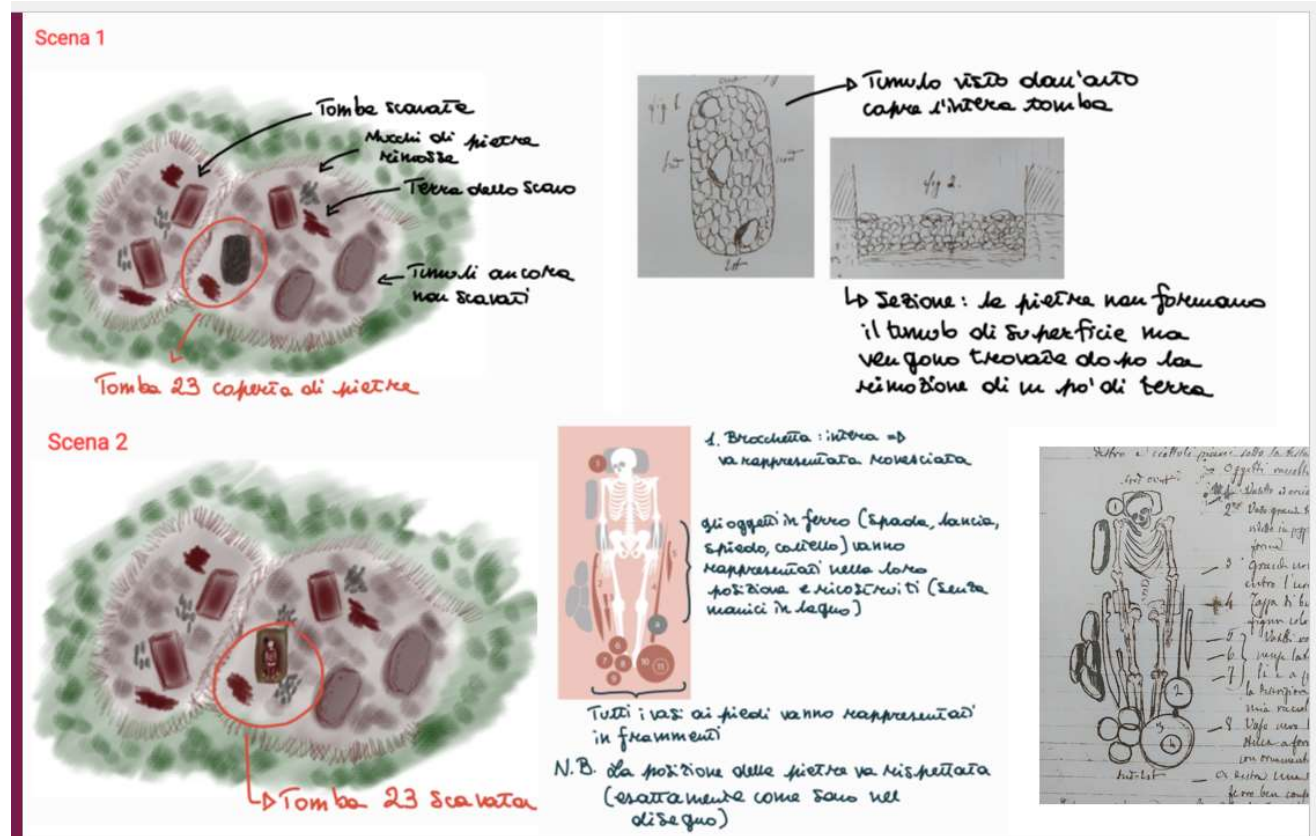
→ Knowledge of the subject of the storytelling

→ Interdisciplinarity and scientific reconstruction of the context (material and immaterial)

→ Need for considering plausible elements to add to the story

Method for a proper scientific storytelling (Ripanti 2018)

Know the object
Select the information (based on
your target)
Find the idea for the story → POV
and genre of storytelling
(monologue, letter, dialogue...)
Set the dramatic premise → define
the (possible) characters
Script/Storyboard



Storytelling and ICTs

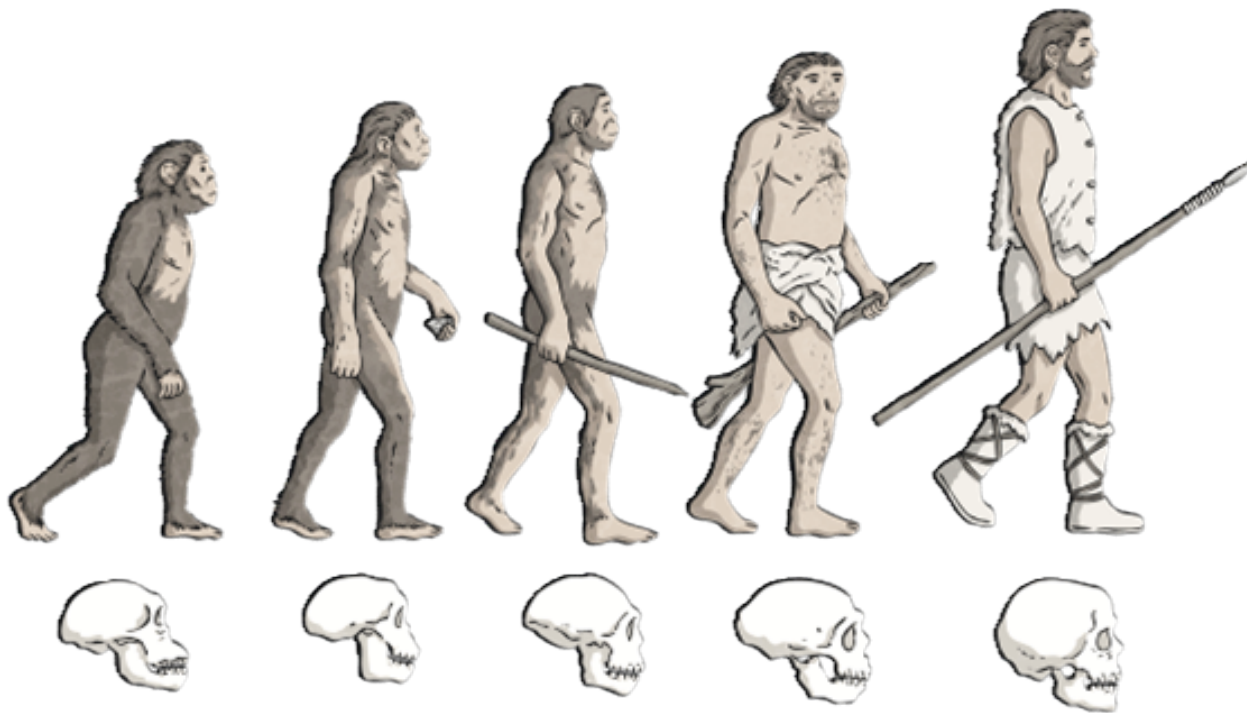
ICTs as
facilitators
Need for
storytelling
(and Management
Plan) *prior* to
the development
of the
**technological
implementation**
From tales to
experience



Degree of immersivity with technological
mediums:

- Low immersivity
- Medium Immersivity
- High immersivity

Storytelling to represent marginalised groups, identities, communities...



Traditional representations
in Museums, Parks/Sites and,
more in general,
dissemination materials tend
not to show marginalised
groups, identities,
communities...

→ It is often because of the
lack of information
(especially literary
sources) that entire groups
tend to disappear from the
historical reconstruction
E.g. 1984 *Women in History
and Museums (WHAM)* - second
wave feminism and the quest
for women representation in
Museums, history and
dissemination (Gaby Porter)
Nowadays the focus of gender
archaeology has shifted from
the quest of representation
to a more intersectional
approach that can highlight
the links between gender,
class, race, age etc...

Before the *Storytelling* ...



- Political

The political context can influence, for example, the promotion of cultural heritage projects, opportunities to participate in European calls for tenders or connections with other national and international realities.

- Economic

The economic development of the area in which the park is located and its characteristics must be taken into account. This analysis must also be carried out with respect to the tourism sector and its characteristics in the relevant country, region or city.

- Social

The social context is extremely important for the profiling of users and for the identification of relations both with the social fabric of the area, for the

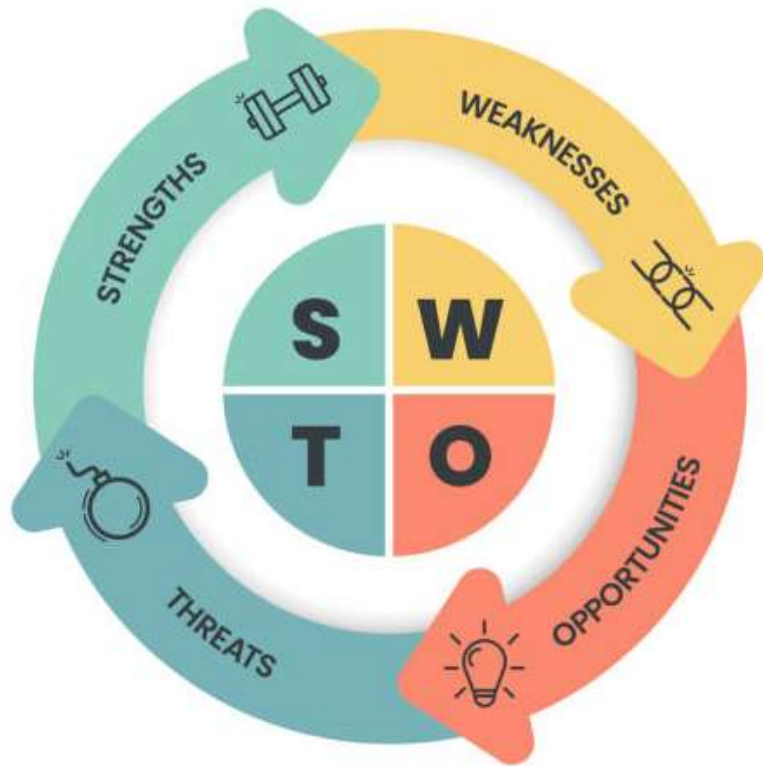
Before the *Storytelling* ...



- **Technological**
Highlight the degree of technological diffusion in the territory (e.g. network coverage and/or Wi-Fi availability). The average level of technological literacy of operators and users should also be considered.
- **Environmental**
Evaluate the environmental context and any connections with it, but also factors related to the influence of climate on heritage conservation and its security, as well as on tourist flows.
- **Legal**
Identify the legal horizon of the actions required for planning and implementation (e.g. privacy laws for monitoring systems, tender laws for awarding project works).

Before the Storytelling

...



- Strengths

Highlighting the park's strengths, special features and innovative actions already undertaken, if successful. Highlight the identity of the site.

- Weaknesses

Identify weaknesses in park management and, in this case, in the communication and dissemination of park-related content. The main shortcomings and critical points should be emphasised, both with regard to what is absent and would like to be implemented, and with regard to actions that would be difficult or impossible to undertake.

- Opportunities

To focus on those aspects in respect of which better storytelling, also with the help of new technologies, can be an opportunity to enhance the park, its heritage and the visitor route.

- Threats

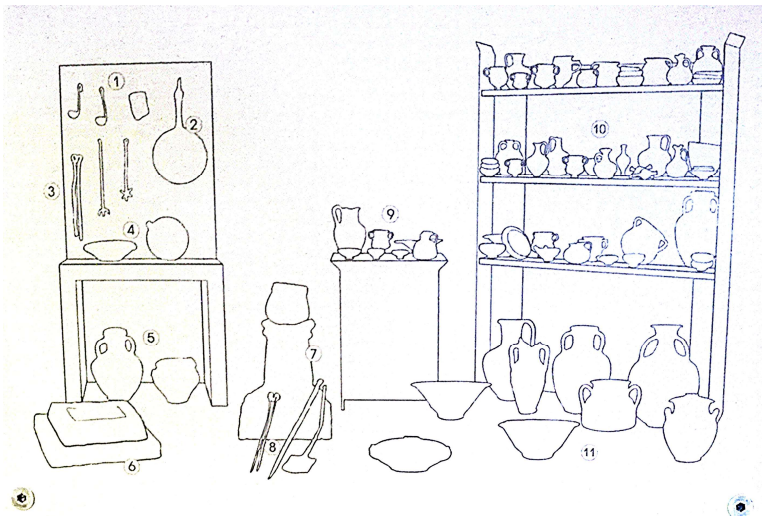
Identify possible barriers or obstacles to improving storytelling and knowledge transfer as well as the implementation or maintenance of new technologies (e.g. the degree of technological literacy of operators, the obsolescence of technologies or the

Practical examples of *Storytelling* possibilities, approaches, methods and (ICT) tools

- Exposition
- Illustrations, Graphic novels ...
- Environmental reconstruction → Soundscaping
- Podcast
- Edutainment/Gaming
- Social Media
- Public Archaeology projects
- 3D reconstruction → Videos, 3D printing, Augmented Reality, Virtual Reality experience, Videomapping ...

Exhibition settings, panels, illustrations ... The Archaeological Museum of Igoumenitsa

<https://www.youtube.com/watch?v=1TkaB8p1c4Y&t=143s>

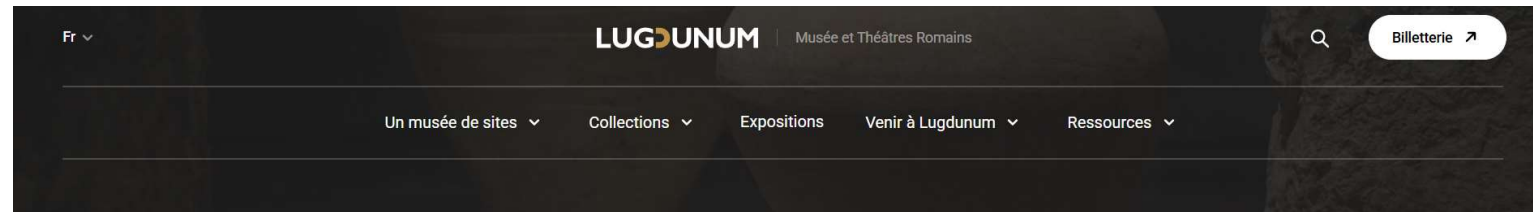


- Specific settings telling everyday life stories
- Thematic contextualisation of the objects



Exhibition settings and digital content

The Archaeological Museum of Lugdunum (Lyon)



Dans la maison

[Explorer >](#)



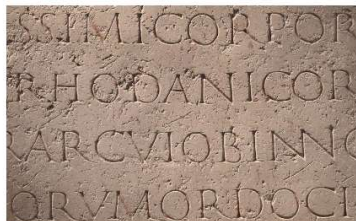
L'armée romaine

[Explorer >](#)



L'eau

[Explorer >](#)



La cité de Lugdunum

[Explorer >](#)



La religion

[Explorer >](#)



Le culte des morts

[Explorer >](#)

Combining exposition settings with digital content to connect the collection with the site and contextualise the objects by themes

Exhibition settings, panels, illustrations ...

The Archaeological Museum of Tolentino

Focus on the artisanal activities

Specific exhibition setting with:

- Dedicated panel
- Illustration
- Experimental archaeology reconstruction



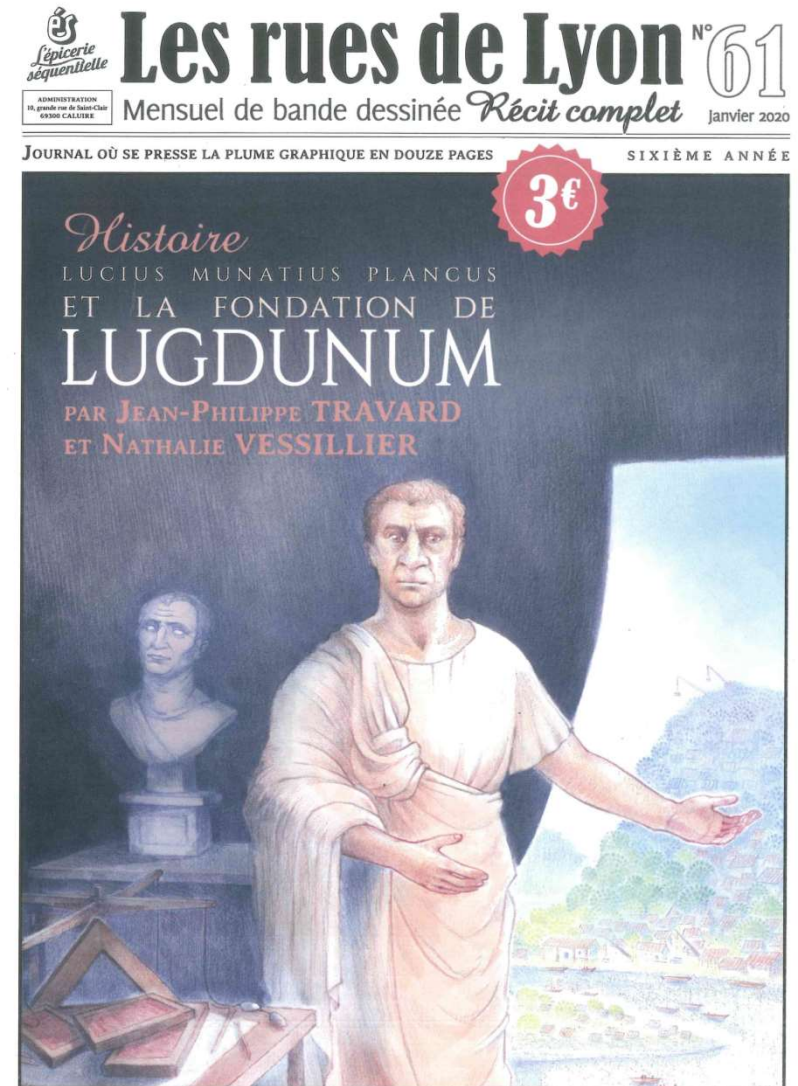
Scena illustrativa del processo di creazione di un ornamento attraverso la tecnica della fusione a cera persa.

Scene depicting the creation of an ornament with the lost-wax technique.



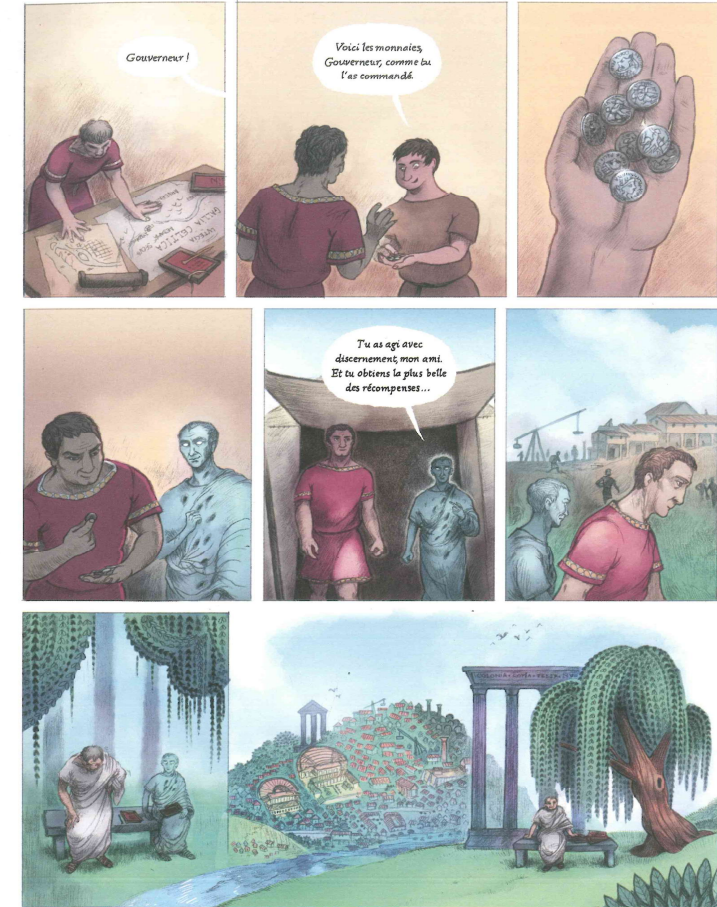
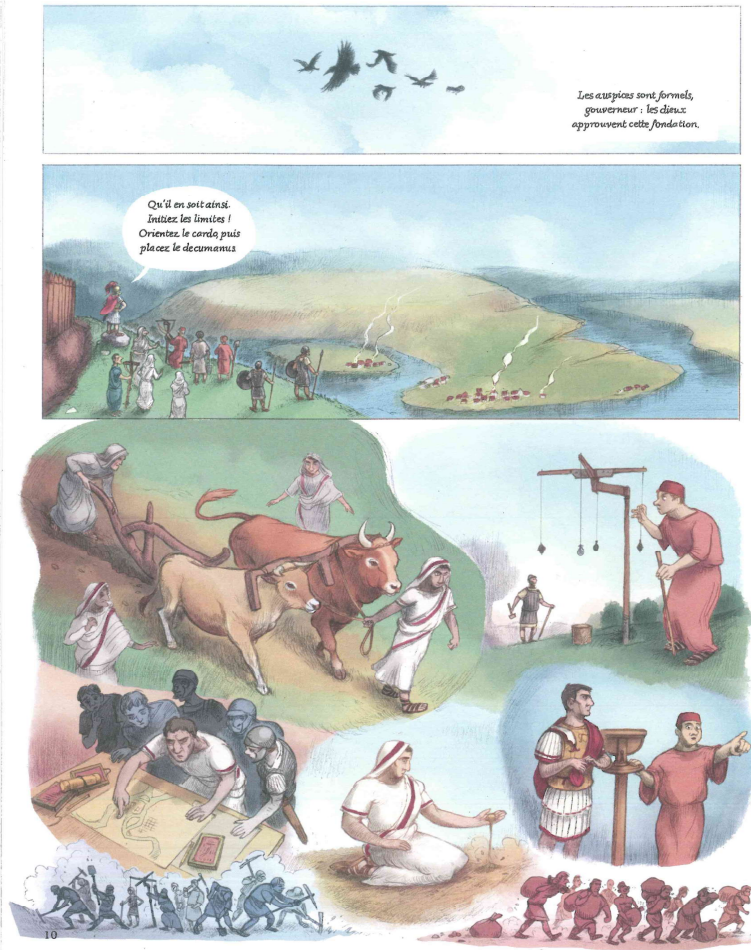
Collaboration projects and cultural networks ... The example of *Le rues de Lyon*

- Monthly issue conceived, produced and sold in Lyon
- The authors are illustrators from Lyon (Épicerie Séquentielle, l'association des auteurs de bande dessinée lyonnais)
- Every issue covers an historic event, a character of the history of Lyon ...
- It is sold in Lyon, especially in local bookshops and some issues are sold in Museums bookshops (especially those issues related to the specific themes of the Museums)



Collaboration
projects and cultural
networks ... The
example of *Le rues de
Lyon*

This issue, in particular, is about the foundation of Roma Lyon *Lugdunum* ...



Edutainment, gamification...

The DCE PlayMarche



- A game for children that includes stories about 15 municipalities of the Province of Macerata
- Stories and characters are developed based on documentation and archaeological and historical research
- Creates a network between centres of the Province
- The storytelling created a link between the stories

Edutainment, gamification...

The Archaeological Museum of Naples and its game

- A game developed for the Museum experience
- The player's choices throughout the experience influence the final outcome of the video game
- Possibility to explore different museum collections and to unlock previously unseen content when visiting the MANN thanks to geolocalisation.
- It begins as the personal experience of a boy searching for traces of his father's life but becomes a universal and timeless story.
- Three kilometres of streets in the city of Naples and the rooms of the museum are reproduced. The player encounters ten different characters and comes across stories that span the ages.



info ▾ mostre ed eventi ▾ collezioni ▾ media ▾ didattica area stampa progetti sostenici

<https://www.youtube.com/watch?v=jhhshcM5ubw>



Social Media

Telling stories through inscriptions: The Roman National Museum

- Started during the pandemic
- Every inscription is a starting point for a specific story



museonazionaleromano After getting freedom from Quintus, and thanks to the experiences gained during the years of slavery, -aelius had started the activity of "praeco" and "designer": it was about making announcements and assigning places. Quite a profitable activity because it had the undoubtedly advantage of being able to take place in theatre or at funerals; undoubtedly -aelius loved to go on stage to announce the shows after checking that everyone was seated in the right place, but funerals were definitely more frequent and give directions to the participants, to prefices and to the musicians it was, not only a good bargain, but certainly a guarantee of good proceeds. The day she met Athena, the funeral was definitely challenging. The deceased was a prominent figure and there were many who, for one reason or another, decided to participate. While handing out assignments and allocating seats, aelius' gaze fell on a woman walking at a fast pace. It was her look that struck him; she had never seen eyes of so delicate and crystal-blue. He didn't even inquire whether she was going to attend the funeral or not, he approached her and gave her the seat in the most deftly way he knew how; Athena wanted to say something, but those caressing ways, that sure but not swaggering, charmed her instantly. Kicking among those people, some sad, some bored, she realized that she would attend the funeral of a stranger in the hope that she could then exchange a few words with -aelius. In the general concert they met several times with a look and a smile. For the rest of their lives, they carried in their hearts the memory of the man who, with his death, had made them meet without them even knowing his name.

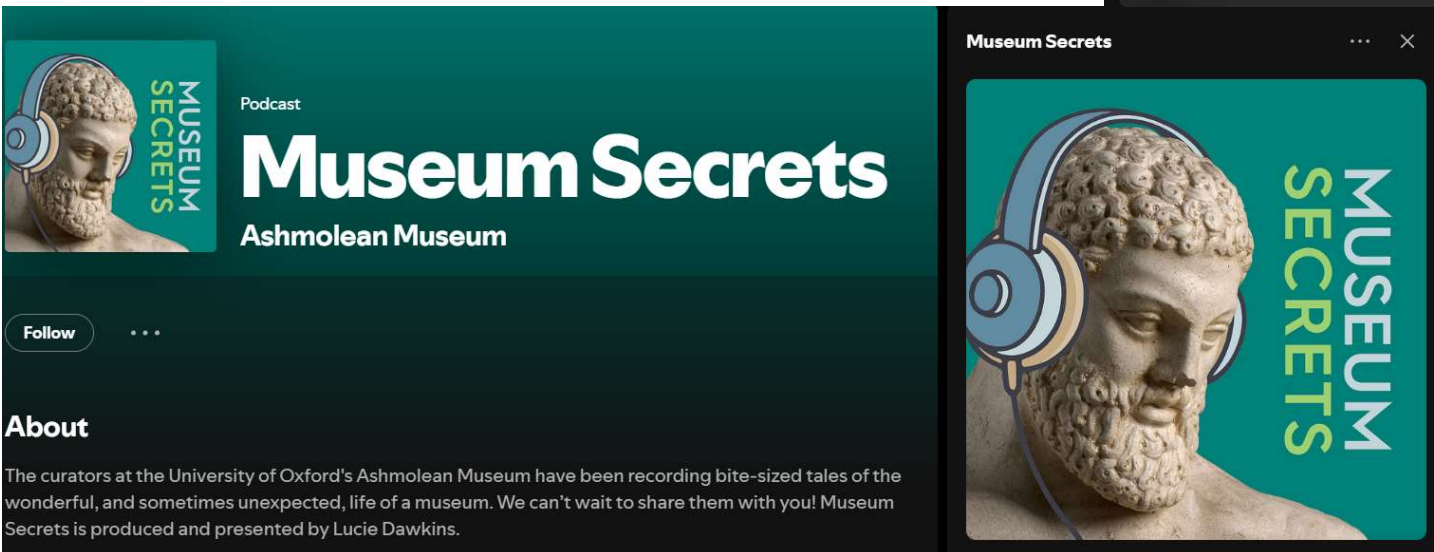
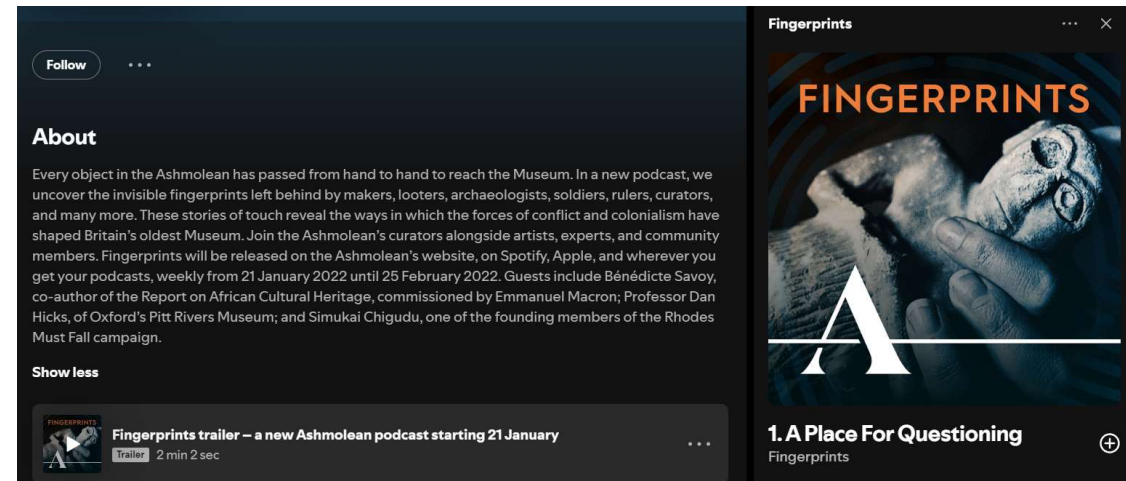
#museonazionaleromano #termediodiceziano
#museodellacomunicazione scrittadeiRomani #StoriedaMNR
#SanValentino2021

13 February 2021 · See Original



Podcasts

Museum Secrets and *Fingerprints* from the Ashmolean Museum (Oxford)



- Helps conveying more content without making the exhibition longer
- Engages the public in a relation with the Museum before or after the visit
- Gives the opportunity to focus on specific or minor aspects or to create specific storylines other than the ones chosen for the exhibition

Podcasts

Aquileia città di frontiera

"10 episodes to tell 2000 years of glories, hopes and culture. Ten emblematic dates for an unforgettable journey inside a city, through its stories from history."

Home / Visita Aquileia

La serie podcast Aquileia Città Frontiera

10 episodi per raccontare 2000 anni di glorie, speranze e cultura. Dieci date emblematiche per un viaggio indimenticabile dentro una città, attraverso le sue storie dalla storia.

Progetto finanziato a valere sui fondi

Legge 20 febbraio 2006, n.77

"Misure speciali di tutela e fruizione dei siti e degli elementi italiani di interesse culturale, paesaggistico e ambientale, inseriti nella "lista del patrimonio mondiale", posti sotto la tutela dell'UNESCO"



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Episodio 1 - Alla Conquista dell'Est - 169 a.C.

🕒 16:52

Dopo la fondazione nel 181 a.C., Aquileia è un confine difficile da difendere per Roma. Nel 169 a.C. è sotto attacco. Servono rinforzi. Motivati e fidati. Tito Annio Lusco lascia gli agi di Roma per trasformare Aquileia in una fiorente città del nord est. Soldati, commercianti, nuovi coloni tra paure, eroismi e coraggio. Poi nel 90 a.C. la città di frontiera diventa municipio romano. Inizia così una storia gloriosa lunga venti secoli.



Episodio 2 - Erode al cospetto dell'Imperatore - 10 a.C.

🕒 20:10

Erode il Grande è nervoso quando arriva ad Aquileia. Lì lo aspetta nientemeno che l'imperatore Augusto, per dirimere definitivamente il conflitto del Re di Giudea con i suoi figli. Lo accoglie una città che splende dei colori dell'ombra ed è in crescita continua. Capitale di una provincia importante, porta d'Oriente, centro multiculturale e presidio per le legioni che guardano al confine danubiano. Erode sarà umiliato, o Aquileia gli lascerà un ricordo memorabile?



Episodio 3 - Teodoro e il gregge di Dio - 313 d.C.

🕒 19:01

Con l'Editto di Milano, gli imperatori Costantino e Licinio hanno reso liberi i cittadini dell'impero di professare ogni religione. Ad Aquileia, il vescovo Teodoro vuole dimenticare le persecuzioni costruendo subito basiliche ed edifici episcopali cristiani. La città si riempie di storie e parabole narrate soprattutto con l'arte del mosaico. Ma riuscirà Aquileia, a resistere alle insistenti pressioni dei barbari?



Episodio 4 - Assedio e flagello - 452 d.C.

🕒 19:22

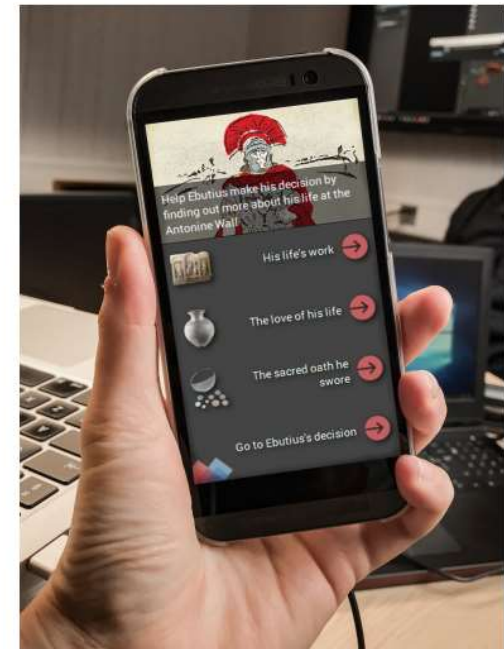
Il 18 luglio dell'anno 452 il "Flagello di Dio" si abbatte su Aquileia: dopo un lungo assedio, gli Unni di Attila espugnano la città. A nulla valgono i ricordi dolorosi degli assedi sopportati e rigettati negli anni e nei secoli passati, fin da quando l'imperatore Marco Aurelio aveva resistito all'impeto di Quadi e Marcomanni. E forse finita la gloria di Aquileia? I suoi vescovi che si autoproclamano patriarchi, riusciranno davvero a conservare prestigio e benessere?



Digital storytelling to integrate exhibitions and visit paths

Merging gamification, digital content, reconstructions. AR, VR ...

- "Ebutius's Dilemma" = an interactive character-driven exploration of **"The Antonine Wall: Rome's Final Frontier"** display developed for the **Hunterian Museum at the University of Glasgow**.
- It tells the story of a Roman centurion who left his mark on the Antonine Wall in Scotland, the Roman Empire's most northerly frontier and part of a Unesco World Heritage Site.
- While exploring this experience in pairs or on their own, users in the museum discover objects related to different strands of the story which have emotional relevance to Ebutius.



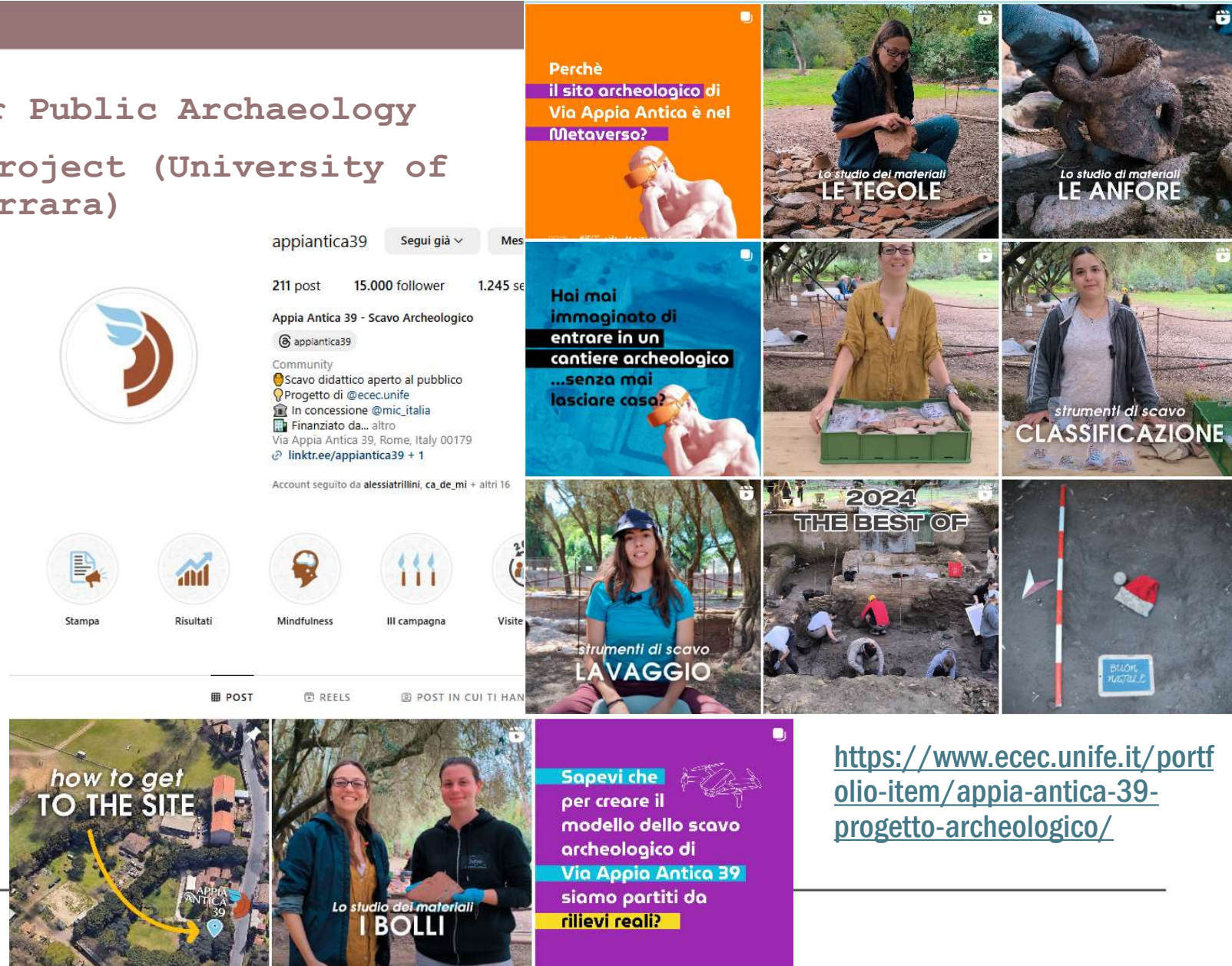
<https://www.youtube.com/watch?v=W-QZzxfJeaE&t=60s>

EMOTIVE mixed reality digital storytelling: Onsite facilitator-led experience

- The story also resonates with

Storytelling for Public Archaeology
Appia Antica 39 Project (University of
Ferrara)

- Public Archaeology project
- Using social media and events to present the excavation
- Contents about the activity of the archaeologists



The Archaeological Museum “Gentiloni Silverj” of Tolentino A case study



A Museum for everyone

Collaboration and synergy between multiple institutions and enterprises

- Long term collaboration between the University of Macerata and the Municipality of Tolentino
- Synergy between the Department of Humanities and the Department of Education, Cultural Heritage and Tourism (UNIMC) + PlayMarche srl (cultural enterprise)
- Support and collaboration of the Superintendency and the Regional Direction of Museums



The archaeological project: issues of the previous exhibitions and new approaches



- Crowded showcases
- Long texts
- No English translation
- Focus on the necropolis and the tombs without further context
- Few illustrations and pictures
- Images mostly depicting objects already in the showcases
- Difficult contextualisation of the Roman and Prehistoric parts of the exhibition



How to put the collection in context: new content

New content for contextualisation

- The *Aristide Gentiloni Silverj* Archaeological Museum and its founder
- Excavation and documentation
- Picenes
- The Banquet
- Ornaments and toiletries
- Weapons and warriors
- Spinning and weaving
- Metallurgy
- Dwellings and villages
- The Picene settlement of Tolentino
- The Roman city of *Tolentinum*
- The Roman collection and Mausoleum of San Catervo



...per meo sapienter capi. Il cui
ciottoli erano vicini alle urne forse servivano di
copercelli caduti e rivestiti col pelo di terreno.
La tomba appartiene al periodo più antico. Non
facio ora in proposito dilatazioni perché attendo
maggiori scoperte per esser sicuro nel dar
giudizi.

Tomba 22.

*

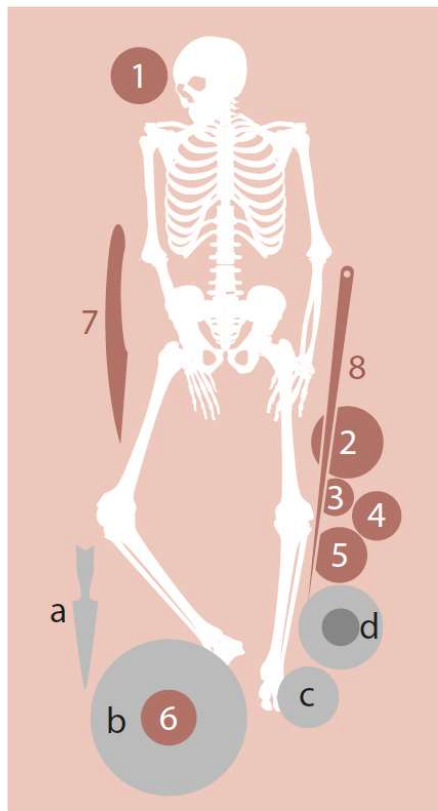
Horreum

In seguito agli scavi sopra descritti nella stessa località
si fece un largo piano in tutta la lunghezza del
terreno per esplorare in larga scala ed ebbe i
risultati seguenti.

Questa tomba incompiuta aveva il piano alla
profondità di 1 m. entro dalla superficie del terreno
coltivato e conteneva lo scheletro di una giovane
di proporzioni colossali secondo la lunghezza di 1 m. 2.5.

Nessuna pietra sepolcrale, soltanto pochi
ciottoli sparsi sotto il cranio e le braccia.
La fossa come le altre riempita di terra
non vergata brecciosa. Gli oggetti
raccolti come segue.

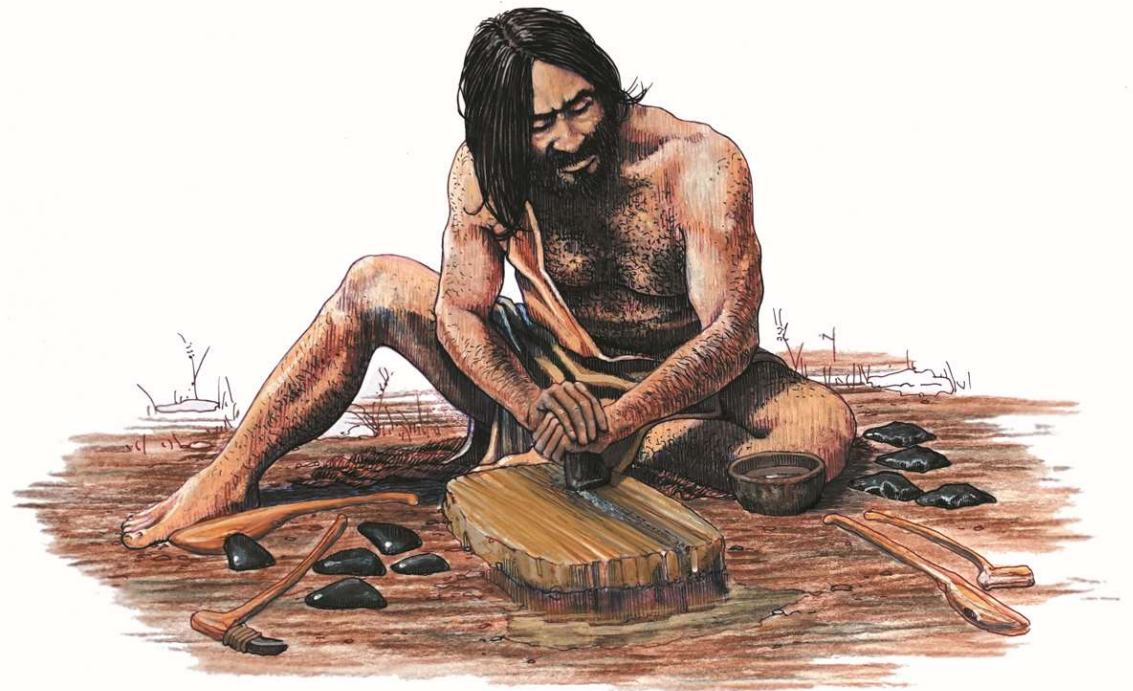
- At 1. Ouforn di terra cotta giallastra
Lato sinistro suo piede di ferro
colla punta verso i vasi del piede.
- At 2. Cratere di bucchero con fi-
gure rosse. In fondo giallastra
Si parano la descrizione trovata
doli nella mia collezione rian-
tato.
- At 3. Vasetto a forma di patina.
- At 4. altro simile più grande.
- At 5. altro vasetto della stessa forma.



T. 22 Settedolori

1. olpe
2. cratere a colonnette a figure rosse
3. piattello su piede
4. piattello su piede
5. coppetta su piede
6. kylix attica a figure rosse
7. frammento di machaira in ferro
8. spiedo in ferro
- a. punta di lancia
- b. grande urna in terracotta all'interno della
quale fu rinvenuta la kylix
- c. vaso con piccole prese
- d. grande vaso in terracotta contenente uno più
piccolo in impasto buccherioide

How to put the collection in context: illustrations - Prehistory



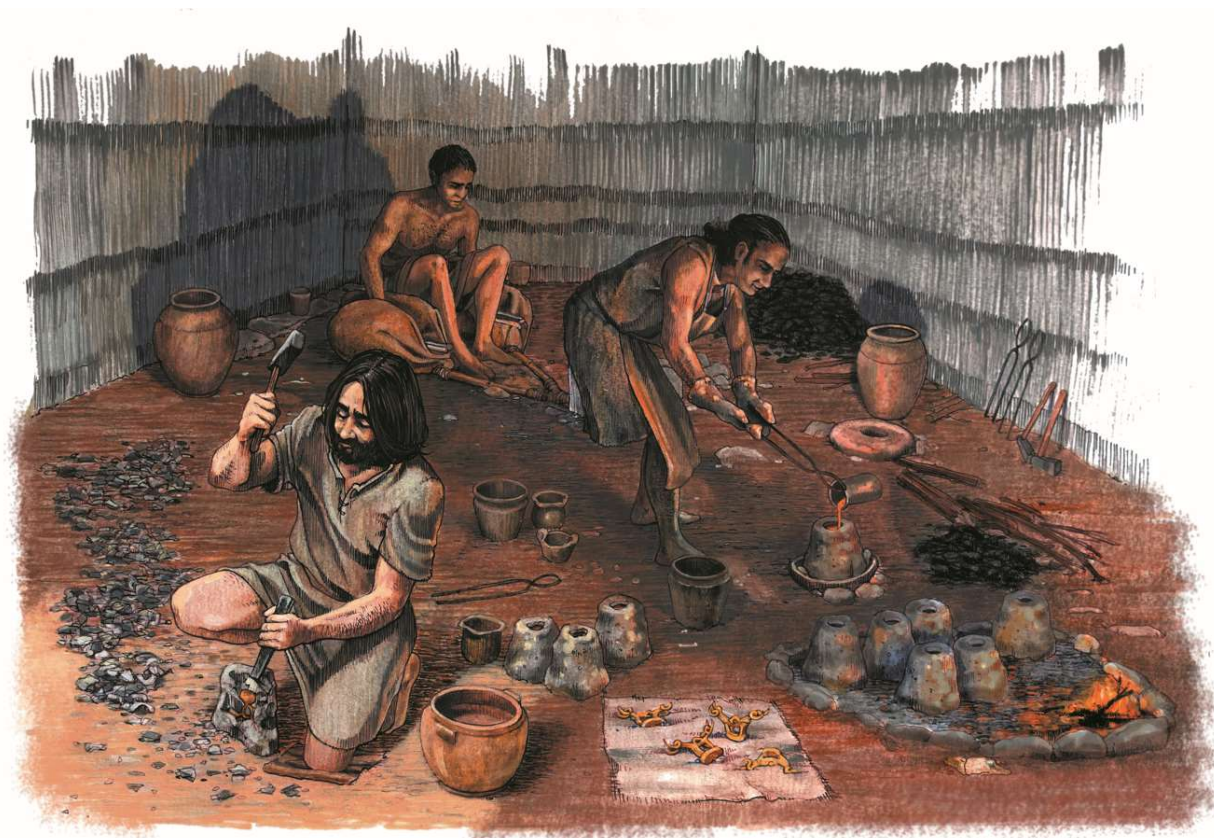


How to put the collection in context: illustrations – Ornaments and weapons





How to put the collection in
context: illustrations –
Weaving and metallurgy



How to put the collection in
context: illustrations - Picene
dwellings



How to put the collection in context: experimental archaeology



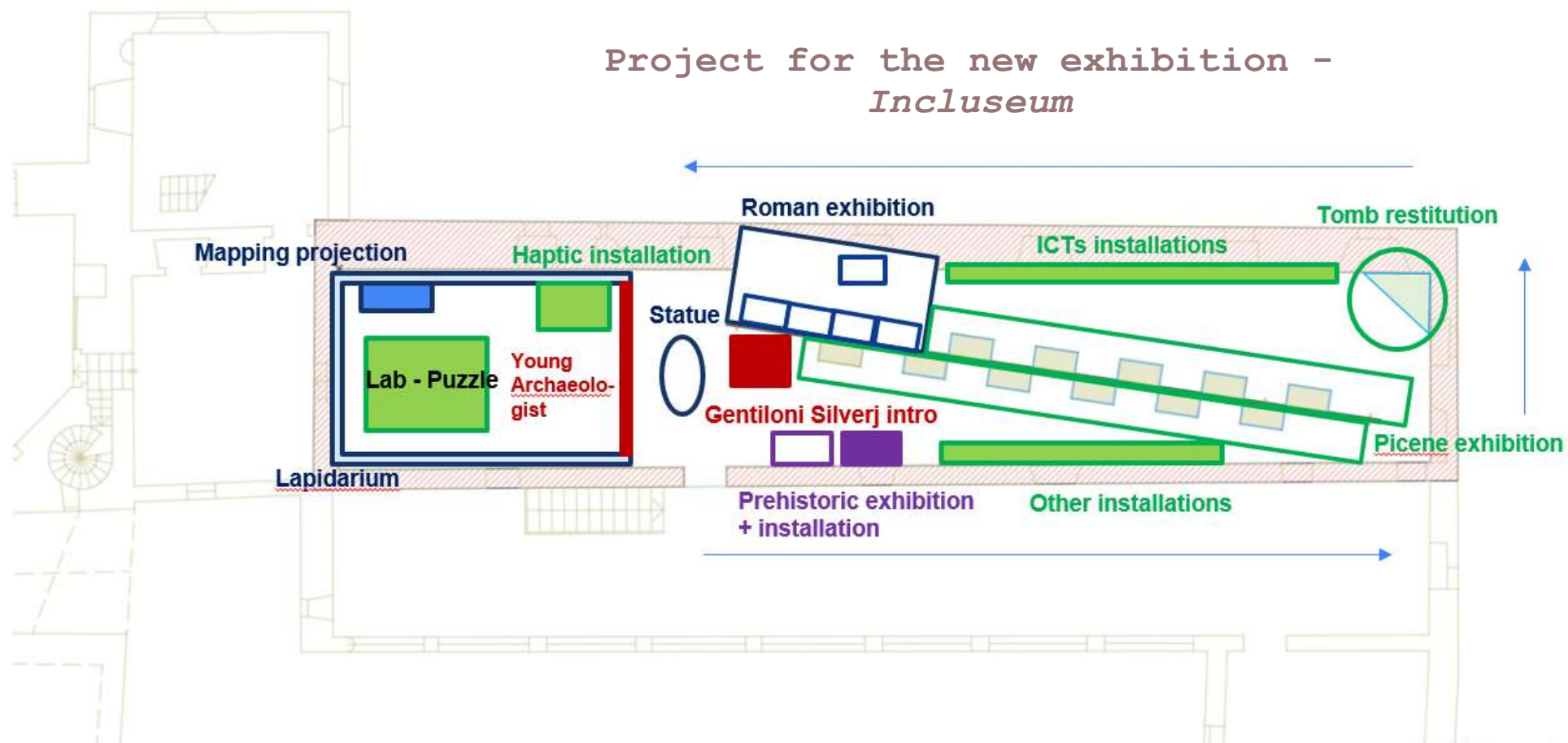
How to put the collection in context: 3D reconstruction

- One of the most important and well-known finds of the museum
- Connection with other sites of the territory
- Photo-acquisition and 3D elaboration of the *appliques* and handles
- Combination of a hypothetical vase (based on comparison) with the *appliques* and handles

David Sforzini and studio Citeroni



Project for the new exhibition - *Incluseum*



Michele Spagnuolo



Storytelling: multiple narratives for integrated paths of involvement and accessibility through new technologies and experimental archaeology

Narrative		Illustrations	ICTs or other installations
History of the Museum - the founder Gentiloni Silverj - the work of the archaeologist then and now			➤ Animation graphic ➤ VR experience of tomb 23 Necropolis Settedolori ➤ Projection of phrases from Gentiloni Silverj's journal
Prehistory of Tolentino		Yes	➤ Experimental reconstruction of arrows and axes
The Picenes and the Necropolis of Tolentino	The Picenes and their culture - burials, rituals of the death	Yes	➤ VR experience on tomb 23 Necropolis Settedolori
	The Picenes and their culture - the artisanal activities, the ornaments, the weapons	Yes	➤ Experimental representation of <i>lost wax casting</i> process and reconstruction of spears and arrows
	The Picenes and their culture - the banquet		➤ AR - 3D of some of the vases ➤ Haptic installation
	The Picene and their culture - commerce and contacts with other cultures: <i>hydria of Desportes Hippon</i> [traditional symbol of the Museum]		➤ 3D projection ➤ 3D printing ➤ Projection on puzzle
	The Picenes and their culture - villages and dwellings	Yes	➤ Sounscaping of a Picene village
Roman <i>Tolentinum</i>			➤ Mapping projection on one inscription ➤ 3D model of Mausoleum of San Catervo

A new graphic identity

LE NECROPOLI DI TOLENTINO GLI SCAVI DEL CONTE GENTILONI SILVERJ TOLENTINO NECROPOLES EXCAVATIONS OF THE COUNT GENTILONI SILVERJ

I materiali esposti provengono dalle necropoli individuate e scavate dal Conte Aristide Gentiloni Silverj negli anni compresi tra il 1879 e il 1883. Ad ovest dal centro storico attuale furono individuate le necropoli Sottodolati e Bura, ad est quelle Bonadellia e S. Egidio, mentre più distanti, sempre ad est, furono rinvenute le tombe della necropoli Salcito e Rotondo Casone. Diversamente, al rinvenimento dei materiali appartenenti alla cosiddetta "Tomba di Porta del Ponte" non fece seguito la scoperta di una necropoli.

La stessa zona indagata dal Gentiloni Silverj ad est della città, e specialmente nell'area di S. Egidio, furono successivamente oggetto di scavi più recenti, condotti dalla Soprintendenza Archeologica per le Marche, che confermarono l'ampia frequentazione di quella area. L'ispezione dei materiali si suddivise per necropoli di appartenenza e corredata da pannelli dedicati sia alla necropoli in generale che, talvolta, alla singola tomba o oggetti. Laddove la documentazione lo ha consentito, i disegni desunti dai diari di Gentiloni Silverj sono stati rielaborati e, in parte, interpretati sulla base dei testi disponibili, mettendo in evidenza la collocazione dei reperti esposti al momento del rinvenimento.

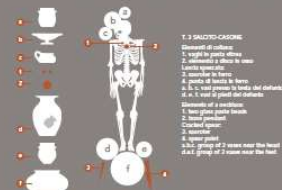
The materials displayed come from the necropolises located and excavated by the count Aristide Gentiloni Silverj between 1879 and 1883. The necropolises Sottodolati and Bura were located to the west of the modern historical centre. The necropolises Bonadellia and S. Egidio were located nearby the east of the town centre while the Salcito and Rotondo Casone ones were located further away. In contrast, the finds from the so-called "Porta del Ponte tomb" did not lead to the discovery of a necropolis.

The same area investigated by Gentiloni Silverj to the east of the town, especially the area of S. Egidio, were excavated again by the Archaeological Superintendency of the Marche Region, thus, confirming the importance of the area. Materials are displayed according to the necropolises they belong to, while some explanatory panels give overviews about each necropolis and others on single tombs or objects. Whenever possible, the drawings from Gentiloni Silverj's journal have been used as a starting point for new detailed drawings showing the arrangement of the artifacts and the deceased at the time of their discovery.



Plan of Tolentino with indication of the localisation of the necropolises of this phase.
Map of Tolentino with location of the three necropolises.

LA NECROPOLI ROTONDO CASONE E SALCITO-CASONE THE NECROPOLES ROTONDO-CASONE AND SALCITO-CASONE



A circa 4.5 km a sud del centro abitato di Tolentino e, dunque, ad una certa distanza dalle altre necropoli, Gentiloni Silverj individuò quelli che sarebbero essere due distinti complessi di tombe.

ROTONDO-CASONE (VII sec. a.C.)
Nel 1884 Gentiloni Silverj conduce un bravo scavo in area Rotondo Casone sul quale afferma di voler tornare in futuro per delle verifiche. Qui rinvenne due tombe: una prettamente indotta e l'altra manomessa dal colono del podere, la quale aveva tenuto gli oggetti più acquistati dal Conte.

In generale, le tombe appaiono a Gentiloni Silverj come semplici fosse senza alcun riparo dove le ossa non completamente combinate dai defunti sono mescolate a conchiglie, carboni e pochi oggetti di corallo.

Tomba 1 = VII sec. a.C.: tomba a fossa, manomessa.
SALETO-CASONE (VII-VI sec. a.C.)
A seguito delle segnalazioni da parte del proprietario di un terreno in località Salcito-Casone, Gentiloni Silverj conduce degli scavi nell'area (marzo 1890). Nonostante ciò, i contesti risultano per lo più manomessi e alcuni oggetti, rinvenuti dagli operai, verranno successivamente acquistati dal Conte per completarne i corredi scavati.
Tomba 1 = (seconda metà del VI sec. a.C.): tomba a fossa, manomessa.
Tomba 2 = (fine del VI sec. a.C.): tomba a fossa, manomessa.
Tomba 3 = (VII-VI sec. a.C.): tomba a fosse segnalata da una pietra; deposizione: capo rivolto a destra; sepoltura di un bambino.
Tomba 4 = (fine VI-iniz.VI sec. a.C.): tomba a fossa, manomessa. Tomba 5 (I prima metà del VI sec. a.C.): tomba a fossa, manomessa.

Approximately 4km from Tolentino's town centre and at a fair distance from the other necropolises, Gentiloni Silverj identified two areas that could be interpreted as two distinct groups of tombs.

ROTONDO-CASONE (8th century BC)
In 1884, Gentiloni Silverj conducted a brief excavation in the area of Rotondo Casone with the intention of going back to the same area in the future for further investigations. Here he unearthed two tombs. The first of them was intact while the other one had been disturbed by the farmer working on the piece of land. The man had kept the objects he had found, and those were later acquired by the Count. The Count noted that the tombs were simple pit graves without any shelter where undisturbed bones were mixed with ashes, charcoal, and a few grave goods.
T1 = (8th century BC) disturbed pit grave.

SALCITO-CASONE (6th-5th century BC)
After the suggestion by the owner of a piece of land in the Salcito-Casone area, Gentiloni Silverj excavated the area in March 1890. Despite this, the area excavated turned out to have been largely disturbed and some objects unearthed by the workers were later acquired by the Count in order to complete the group of grave goods already excavated.
T1 = (second half of 6th century BC) disturbed pit grave.
T2 = (end of 6th century BC) disturbed pit grave.
T3 = (6th-5th century BC) pit grave marked by a stone burial: head facing right; child. T4 (end of the 6th-beginning of the 5th century BC) disturbed pit grave.
T5 = (disturbance of 6th century BC) disturbed pit grave.



Disegni e resti della tomba 2 con i materiali del corredo.
Plan of the tomb 2 with the materials of the grave.
Drawing and remains of Tomb 2 with the materials of the grave.
Drawing and remains of Tomb 2 with the materials of the grave.

ORNAMENTI E OGGETTI DA TOILETTA ORNAMENTS AND TOILETRIES



Uomini e donna piconi venivano sepolti con gli oggetti che meglio rappresentavano il loro rango e status sociale in vita: il corredo. Nelle tombe femminili troviamo quindi ornamenti e oggetti legati alle attività domestiche.

Per quanto riguarda i primi, nelle necropoli di Tolentino, sono stati rinvenuti principalmente:

- collane (1) composte di vaghi realizzati principalmente in metallo, pasta vitrea, conchiglia, stoffa e ambra
- spille (2) usate in particolare modo per fermare o ornare le vesti (fibula), utilizzate anche da gli uomini;
- altri ornamenti come bracciali (3) e anelli;
- pettorali.

Anche gli indumenti potevano essere decorati con inserti a pendenti in materiali preziosi come l'ambra (4).

Tra gli oggetti legati alle attività domestiche, per la donna, troviamo principalmente elmetti legati alla tessitura (un pannello appeso è dedicato alle attività di filatura e tessitura). Infine, altri oggetti, legati alla cura della persona, come rasoi e specchi, sono talvolta presenti nei corredi rispettivamente maschili e femminili.

Men and women were buried with grave goods that better represented their rank and social status during their life.

In women's tombs there are ornaments and objects linked to domestic activities. Regarding the former in the necropolises of Tolentino, the following objects were mainly found:

- necklaces (1) composed of beads made out of metal, glass paste, shells, bones and amber;
- brooches (2) used to pin and decorate garments (fibulae). They were used by men too;
- other ornaments like bracelets (3) and rings;
- pectorals.

Garments too could have been decorated with inserts and pendants made of precious material like amber (4). Among the objects linked to women's domestic activities, we find mainly objects related to weaving (the specific textile panel is about yarn making and weaving). Finally, other objects, linked to personal care, such as razors and mirrors, are found among grave goods of men and women respectively.

FILATURA E TESSITURA SPINNING AND WEAVING



La stoffa, specie se di particolare qualità, erano beni pregiati, simboli di rango e così l'attività legata alla loro produzione.

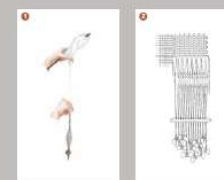
La filatura, per la più in terracotta, testimonia l'attività di filatura. Con l'ausilio di un fuso in legno, la filatura l'impugnava da sotto per la torsione delle fibre separate ai animali (fig. 1). Filare di dimensioni a poco differenti permettevano di ottenere differenti qualità di filato. L'attività di tessitura è testimoniata dai rocchetti (1), piccoli oggetti cilindrici in terracotta, la cui forma e dimensioni può variare leggermente, probabilmente in base alla sporcatura del filato utilizzato. I rocchetti, insieme ai pesi da telaio (2), oggetti in terracotta di forma troncoconica o troncopiramidale, servivano a mantenere in tensione i fili di ordito montati su teli verticali in legno (3). A causa della disponibilità dei materiali con cui erano creati, è possibile ipotizzare forme e dimensioni dei tali basandosi su testimonianze iconografiche. I fili dell'ordito (4), attaccati al subito del telaio (5) a turni tutti del peso, erano collegati in fili (6), bastoni che permettevano di spingere le sussi solo determinati fili, secondo un particolare schema, creando uno spazio attraverso cui far passare la navetta con il filo di trama. I rocchetti si associano in particolare modo alla tessitura a tavolotta (fig. 7), tecnica di tessitura che permette di realizzare stoffe di tessuto particolarmente resistenti e con motivi decorativi geometrici, impiegata soprattutto per realizzare la bordura dei tessuti.

Fiber, especially the types of remarkable quality, was a precious good symbolizing a high status, and so was its manufacturing.

Spinning, i.e. the production of yarn, is testified on archaeological sites by the presence of spindlewhorls, usually made in terracotta. Aided by the use of a wooden spindle, the spindlewhorls were used to twist the fibers obtained from plant and animal sources (fig. 1). Different sizes and weights of spindlewhorls allowed the manufacture of different types of yarn. Weaving activities are mostly testified by the finding of spools (1), terracotta cylindrical objects whose shape and size can vary slightly, probably depending on the thickness of the yarn used.

Spools and weightlooms (2) were needed to hold warp threads taut and were parts of wooden vertical looms (3). Weightlooms were made of terracotta and had a conical or pyramidal shape.

Threads were made out of perishable materials. It is only possible to hypothesize their shape and size thanks to iconographic evidence. Warp threads (4) were wrapped around the beams of the loom (5), held taut by weights, and linked to harness frames (6). The latter are wooden bars that allow only specific threads to move forward according to the pattern and to create a space through which the shuttle with the weft yarn passes. Spools are associated in particular to tablet weaving (fig. 7) which is a weaving technique that creates extremely resistant stoffe of fabric particularly resistant and with decorative geometric patterns. This technique was used in particular on the edges of cloths.



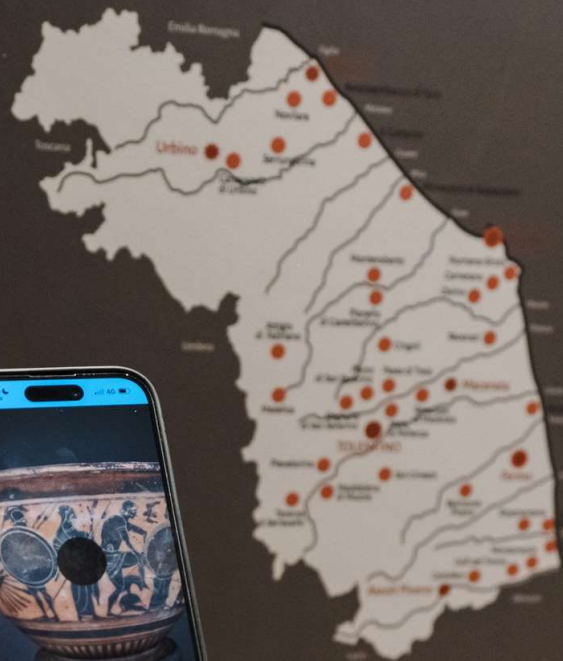
1. Spinnolo: rappresentazione della tomba di Rotondo Casone (VII sec. a.C.) e della tomba di Salcito-Casone (VII-VI sec. a.C.).
2. Pesi da telaio: tomba di Rotondo Casone (VII sec. a.C.).
3. Telaio: tomba di Rotondo Casone (VII sec. a.C.).
4. Fili dell'ordito: tomba di Rotondo Casone (VII sec. a.C.).
5. Sussi: tomba di Rotondo Casone (VII sec. a.C.).
6. Bastoni: tomba di Rotondo Casone (VII sec. a.C.).
7. Tavolotta: tomba di Rotondo Casone (VII sec. a.C.).

Prehistory — Experimental archaeology (tactile experience)



Principali siti del territorio marchigiano dove sono state individuate tracce della civiltà picena.
Main sites in the territory of Marche region where traces of Picene civilisation were found.

- Capoluoghi di provincia delle Marche.
Provinces of Marche Region.
- Localizzazione di Tolentino.
Location of Tolentino.
- Siti dove sono documentati ritrovamenti piceni (sono segnalati solamente i siti che hanno restituito tracce di abitato, necropoli o tombe).
Sites where Picene civilisation traces are documented (the map shows only those sites where evidence of villages, necropoles, and tombs have been found).



customs related to
This is because Dionysos
the man who was in
During the banquet,
grave goods, there are
In antiquity, preparing
which were diluted in wine



The banquet
—
AR
3D of the
vases

Hydria of Despotes Hippon

3D print - projection - puzzle



The Picene Village

—

Soundscaping



Roman
Tolentinum

—

Mapping
projection on
inscription



Gentiloni Silverj and how to transform a 19th century collection into an innovative experience

- Focus on the founder → intro and history of the Museum
- Life and work of Gentiloni Silverj
 - projection of phrases from the journals
 - scans of the journals
 - graphic adaptations of his drawings
- The excavation of a Tomb → VR experience with the adaptation of the text from Gentiloni Silverj's journal



Gentiloni Silverj introducing the Museum



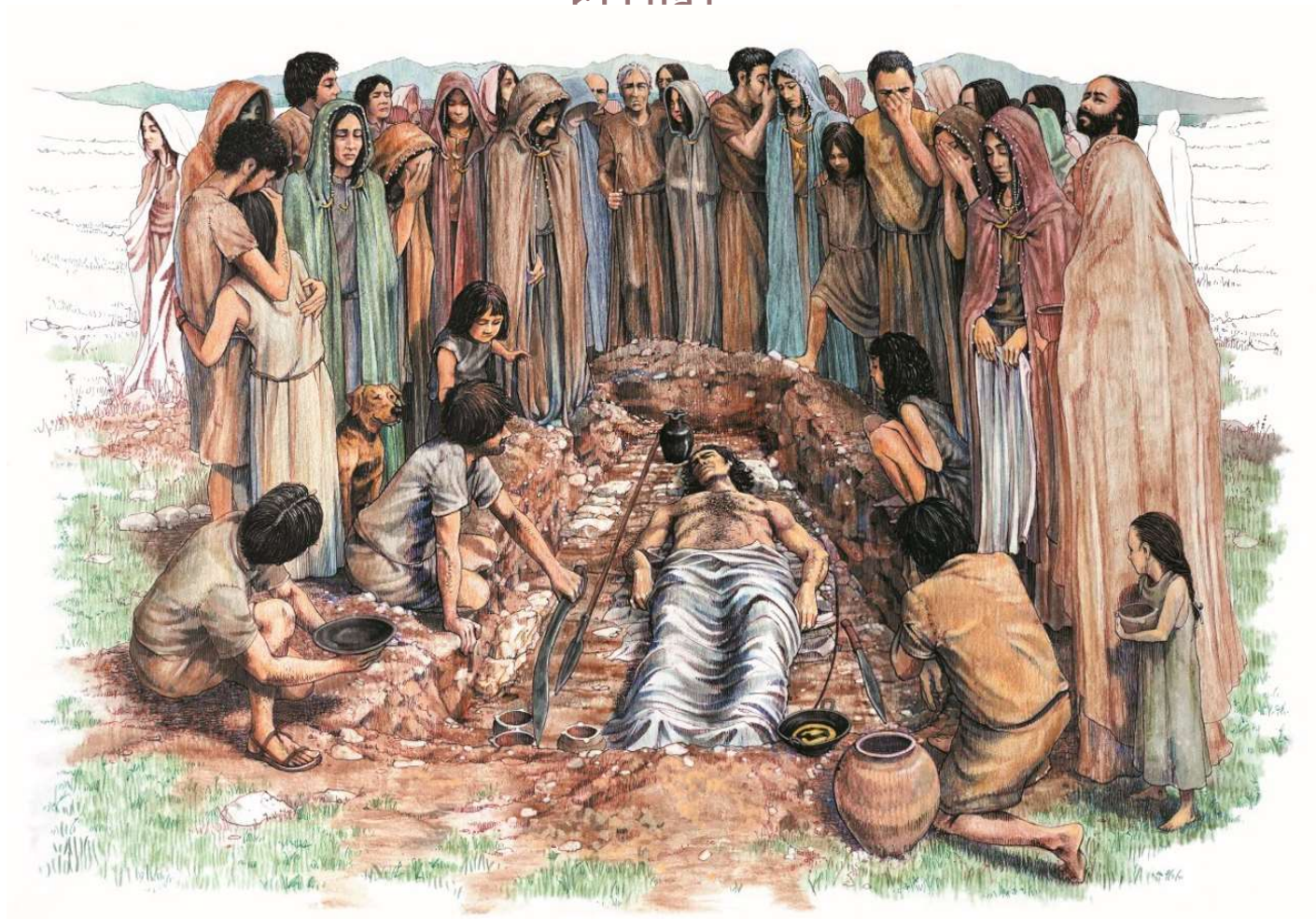
Gentiloni Silverj as a kid – the job of the archaeologist for children



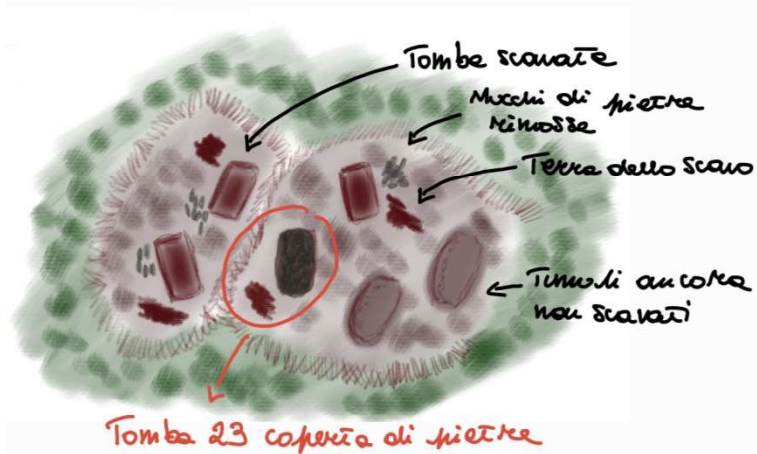


Restitution of
the Tomb 23
Settedolori
and its panel

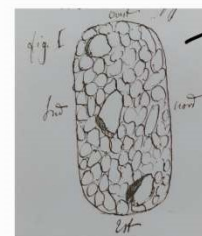
Tomb 23 Necropolis *Settedolori* -Illustration: funeral
ritual



Scena 1



Scena 2



→ Tumulo visto dall'alto
copre l'intera tomba



↳ Sezione: le pietre non formano
il tumulo di superficie ma
vengono trovate dopo la
rimozione di un po' di terra

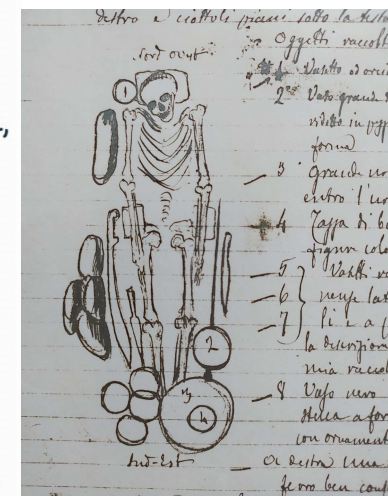


1. Brocchetta: intera =>
va rappresentata rovesciata

gli oggetti in ferro (spada, lancia,
spiedo, coltello) vanno
rappresentati nella loro
posizione e ricostituiti (senza
manici in legno)

Tutti i vasi di piedi vanno rappresentati
in frammenti

N.B. la posizione delle pietre va rispettata
(esattamente come sono nel
disegno)



Tomb 23 Necropolis Settedolori - Voiceover

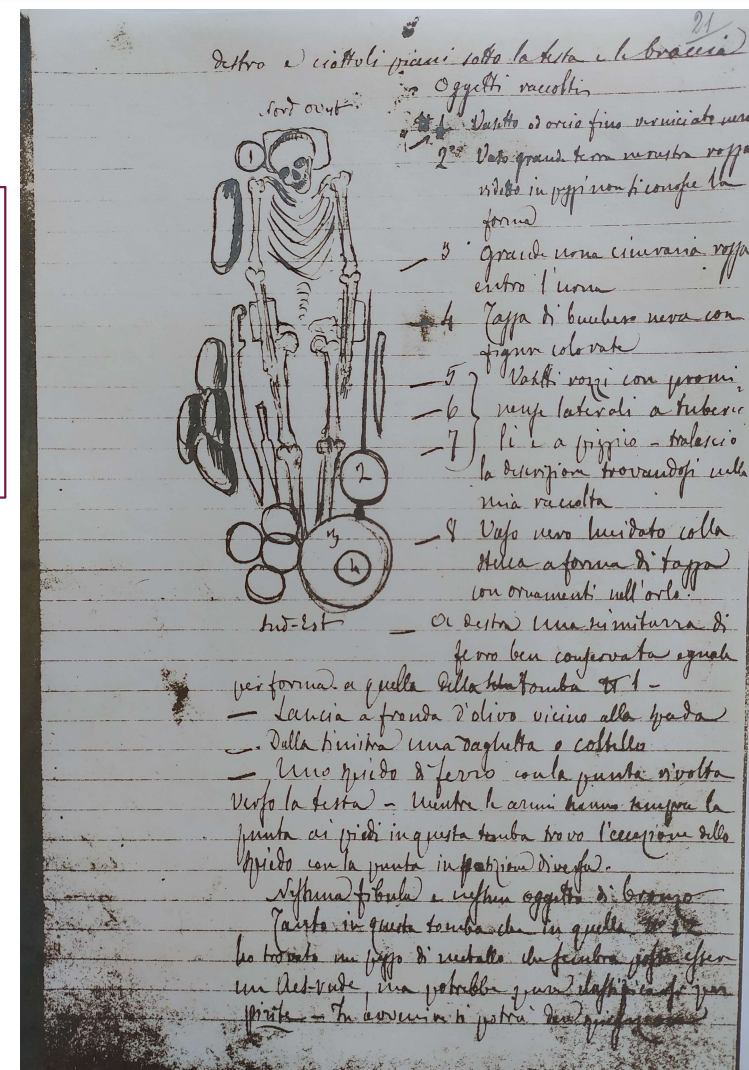
[Scena 2] Visione della tomba scavata

Tolta la terra con la massima cura, scoprii il piano della tomba e lo disegnai nel mio diario. Lo scheletro, alto 1 m e 85 cm, era supino. Una pietra arenaria era posta lateralmente all'omero destro e, sotto la testa e le braccia, si trovavano dei ciottoli piatti.

Il defunto era stato sepolto con le sue armi in metallo e, ai piedi aveva un gruppo di vasi, trovati in frammenti.

[Scena 2] Visione della tomba scavata

Mentre rimuovevo con cura la terra, scoprii il piano della tomba e lo disegnai nel mio diario. Di fronte a me, lo scheletro, alto 1 metro e 85 centimetri, giaceva supino. Una pietra arenaria era posta lateralmente all'omero destro e, sotto la testa e le braccia, notai dei ciottoli piatti. Il defunto era stato sepolto con le sue armi in metallo e, ai suoi piedi, c'era un gruppo di vasi, purtroppo trovati in frammenti.



- Gentiloni Silverj's journal, publications and notes
- Elaboration of a text in current Italian and with new element for consistency
- Adaptation for a better communication



A VR experience for the Republican Kilns of *Pollentia- Urbs Salvia*



A Pilot Action for the Archaeological Park of *Urbs Salvia*

TRANSFER PROJECT

POETOVIO

MIRINE-FULFINUM

Birbriska Glavica

Velika Mrdakovica

URBS SALVIA

ANTIGONEA

DODONA

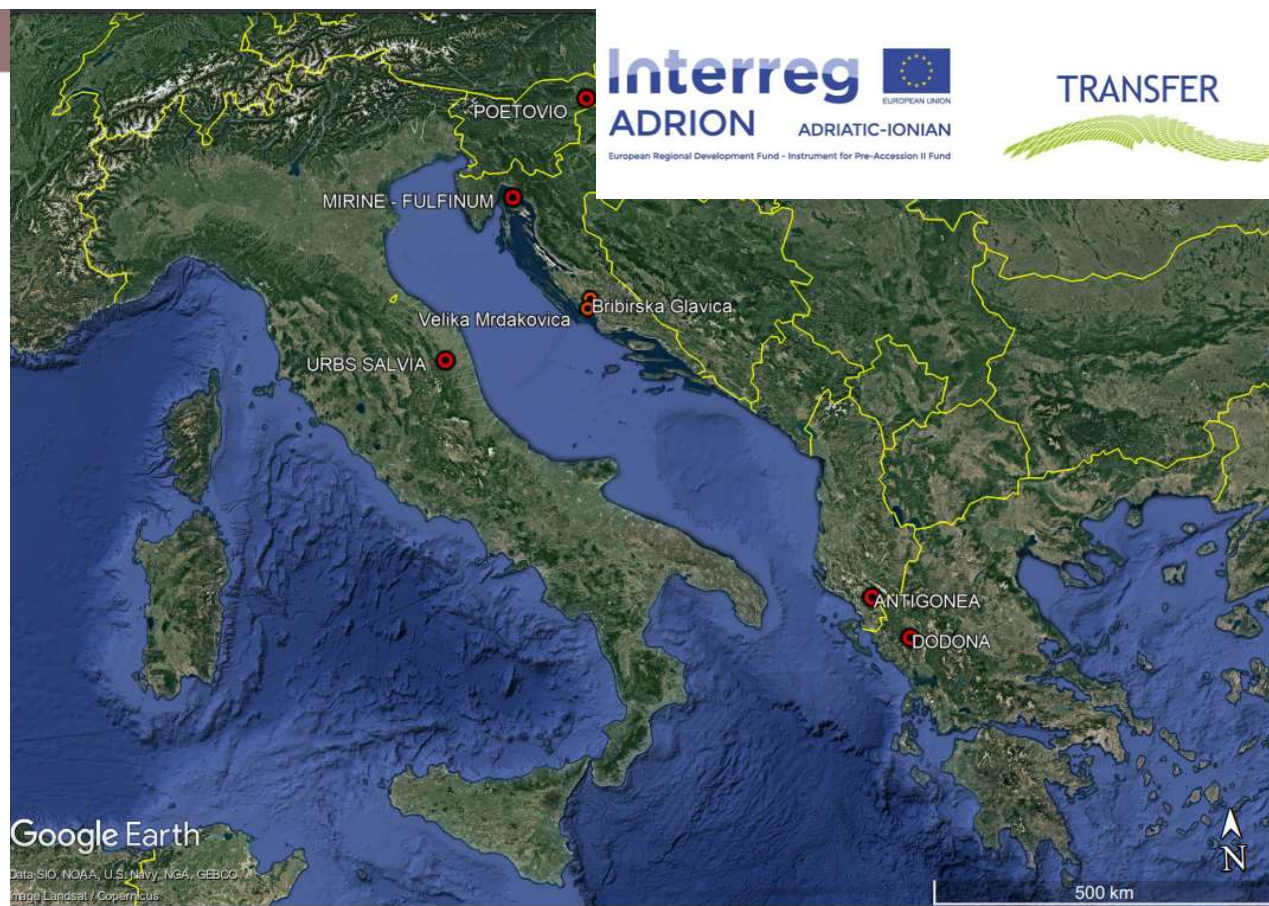
**Common Sustainable Model for Archaeological
Parks**

Preservation

Management

Economic sustainable development

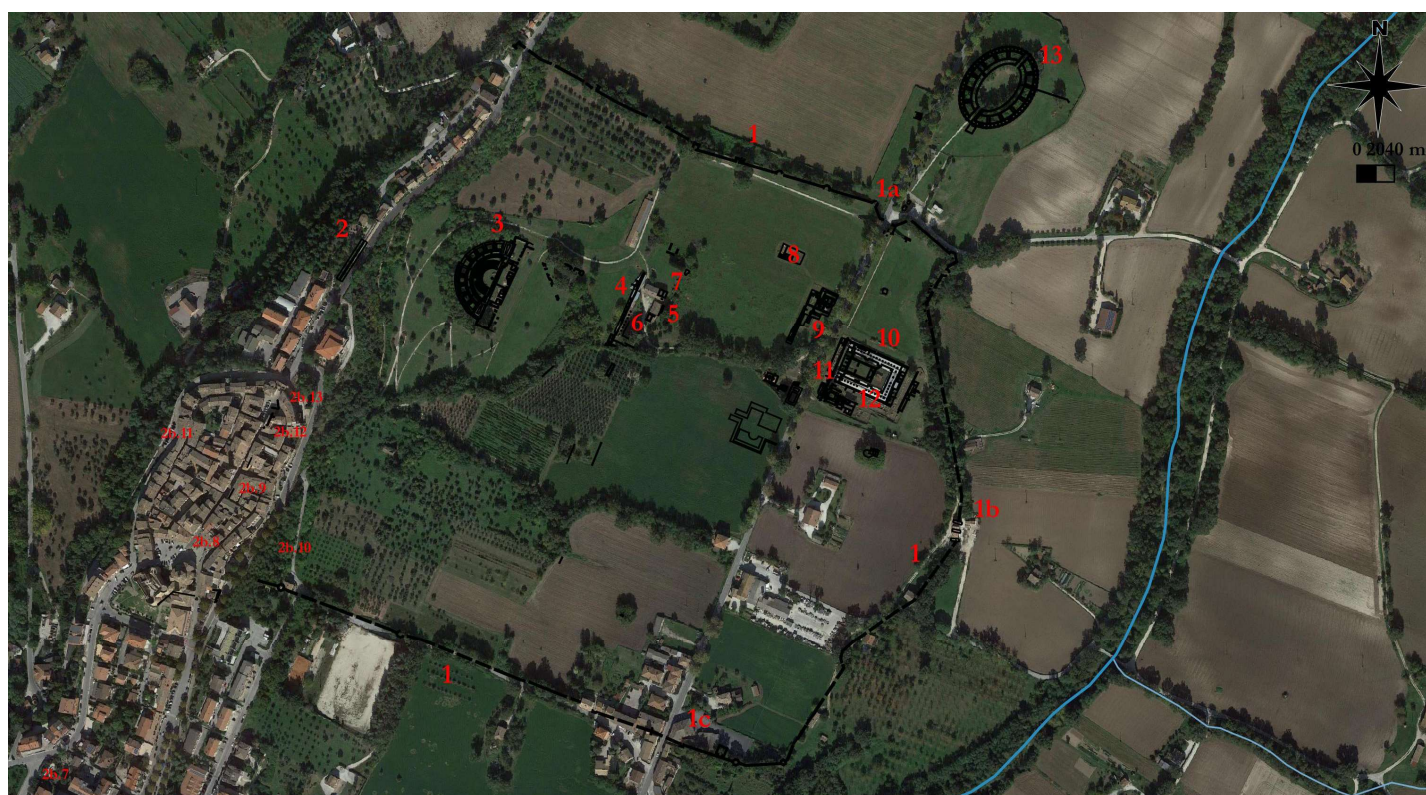
Valorisation and use of ICTs



DIPARTIMENTO DI
STUDI UMANISTICI



Pollentia-Urbs Salvia



- First settlement → *conciliabulum* (maybe already) in the 3rd cent. BC
- Roman colony → 2nd cent. BC
- Augustan period → first monumentalisation
- After the 2nd cent. AD → decline
- 4th cent. AD → Gothic invasion – destroyed by Alaric

In the picture:

(1) Walls; (2) Cistern;
(3) Theatre; (9) Forum;
(10) Temple, Cryptocenturius

The Archaeological Park of Urbs Salvia

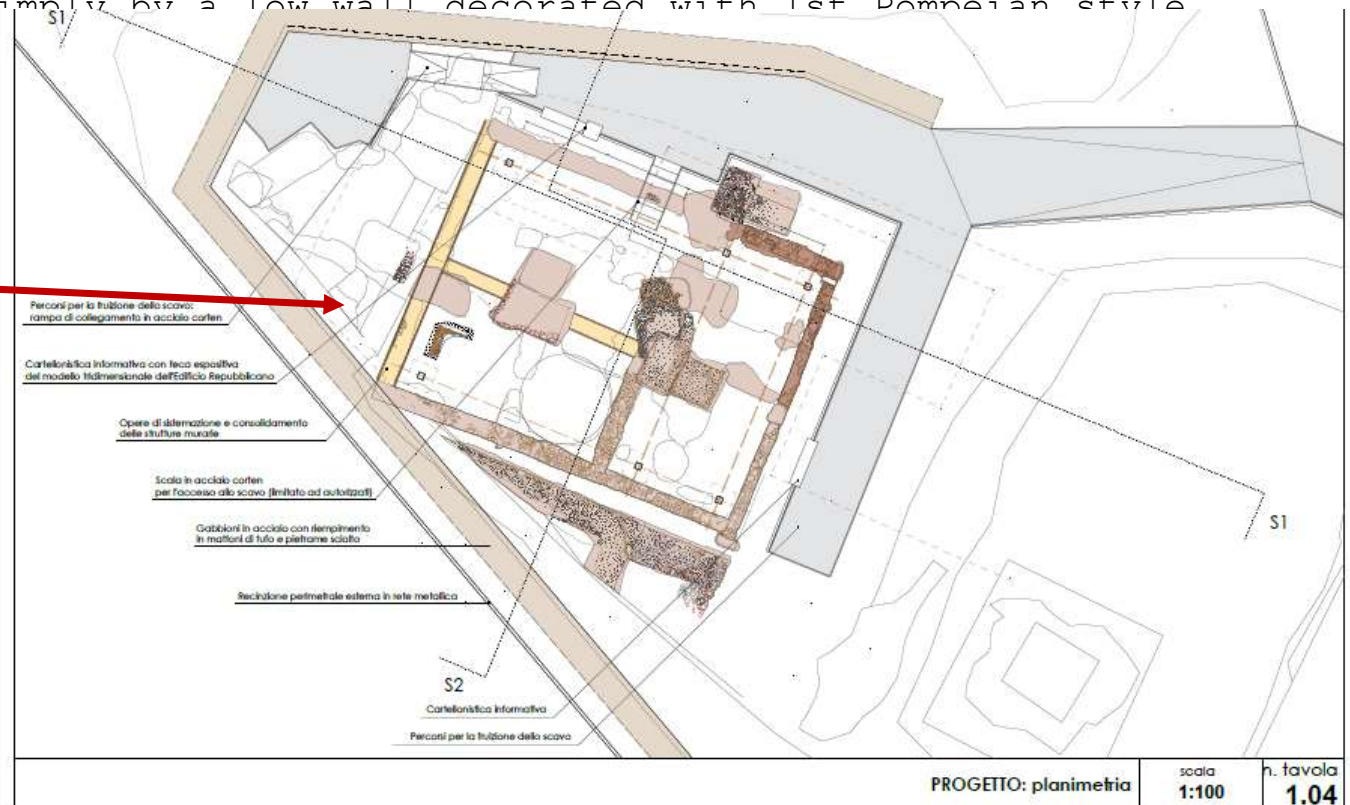
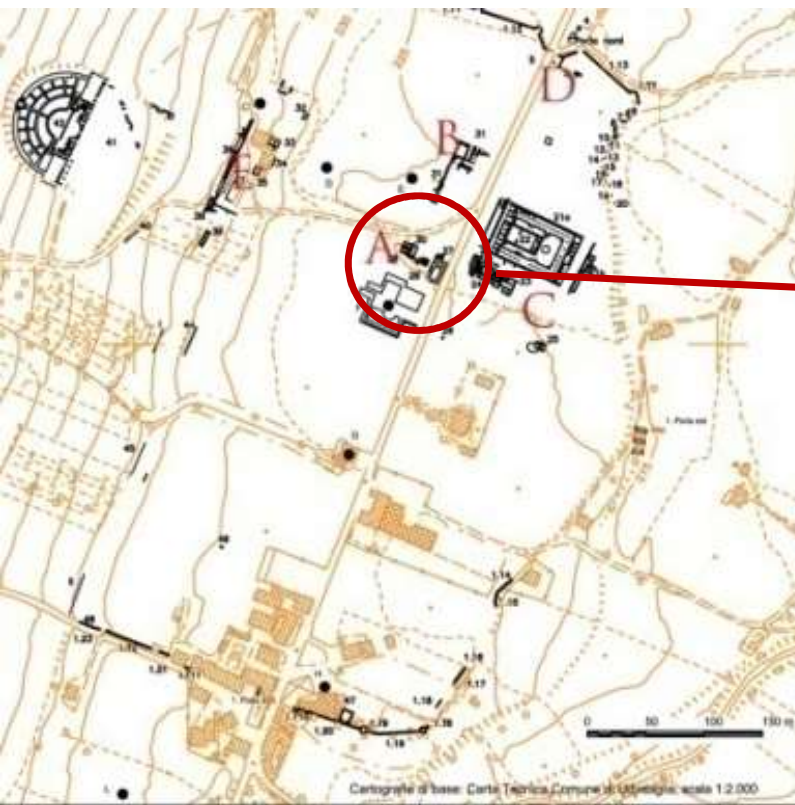
- Next to Macerata
- Connected with the Protected Natural Area of *Abbadia di Fiastra*
- Roman *Urbs Salvia* is located in the valley just below the modern town of Urbisaglia (from the 12th cent. onwards)

On the right: Map showing the tourist paths in Urbisaglia (in the city and in the park) and its main connections with the territory

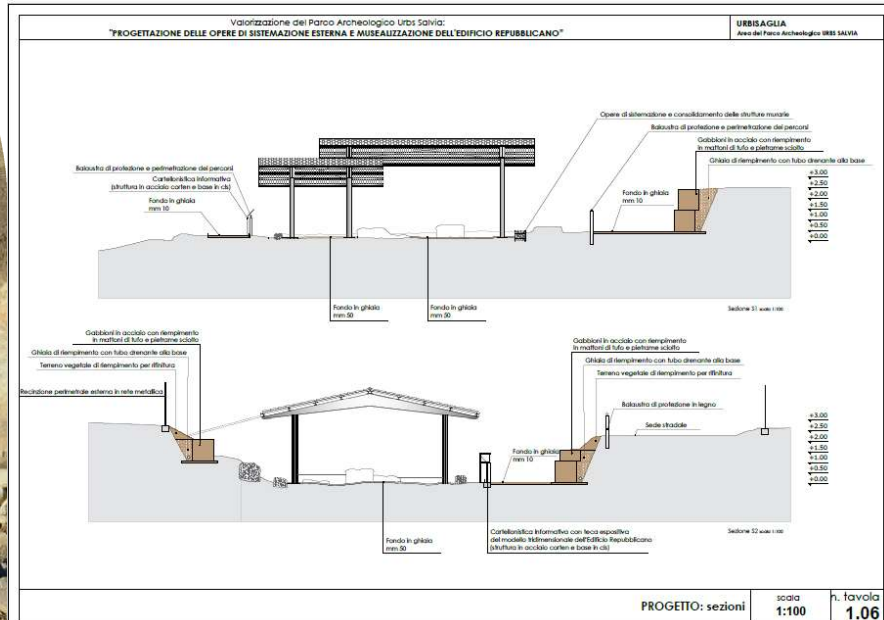


The area of the Republican Building

- The southwest corner of the forum was bordered by the so-called Republican building
- It has been interpreted as a cult building
- It is formed by two identical rectangular spaces (3.7 x 6.3 m) preceded by a portico (7.4 x 4.9 m) bordered on the outside simply by a low wall decorated with 1st Pompeian style

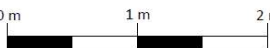


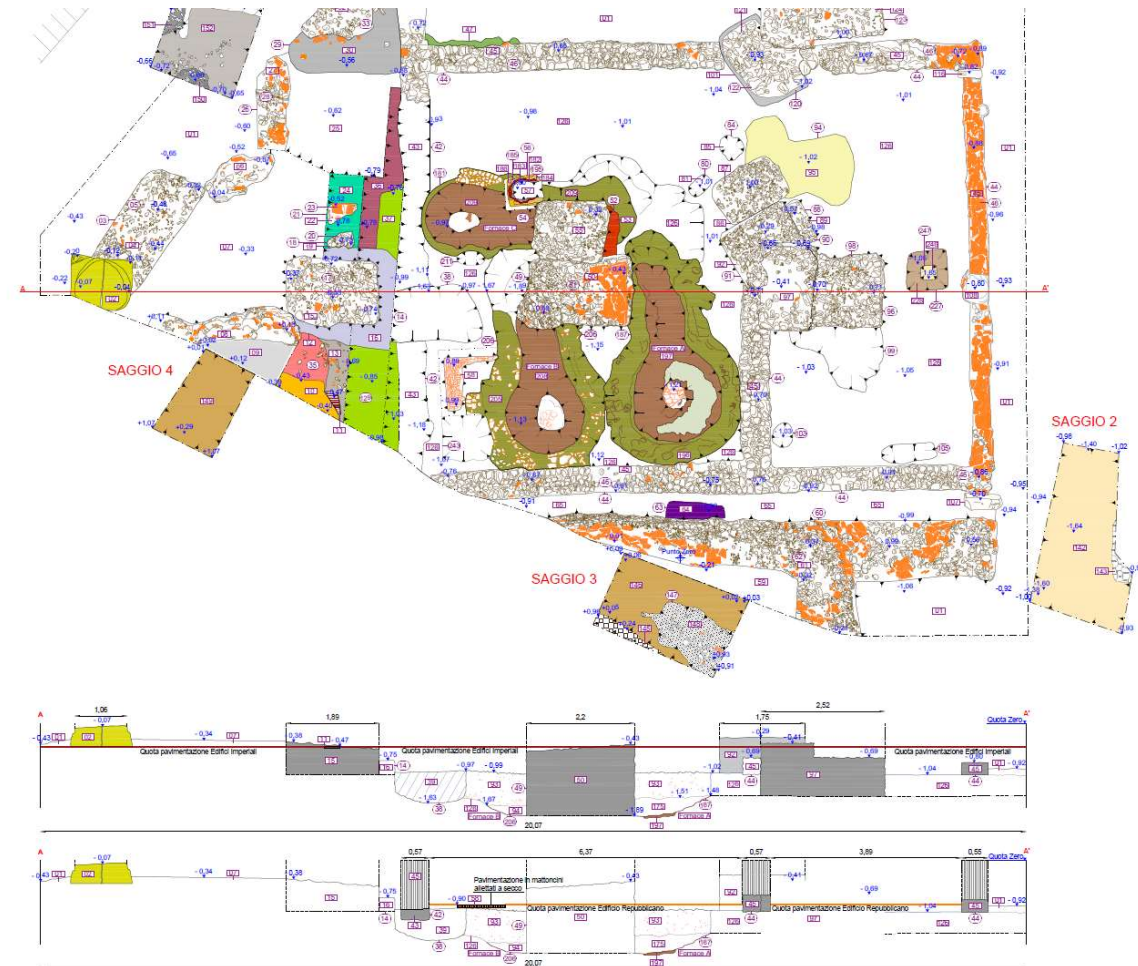
- The foundation of the *Republican building* covered a previous pottery workshop
- The excavation and preservation works conducted in the years 2000-2017 led to an enhancement of the *Republican building* and a complete obliteration of the kilns due to their poor state of conservation



The kilns' Complex under the Republican building – 2017 excavations

- Kilns A and B are contemporary
- Kiln C is the latest
- In the last phase of the complex, kiln C is destroyed, and a forge is built
- SU 126 is the walking level when the kilns are working
- The destroyed kilns are filled with layers of pot sherds

 MINISTERO PER I BENI E LE ATTIVITÀ CULTURALI	
SABAP Marche Piazza del Senato, 15, 60100 Ancona AN	ABACO Società Cooperativa Via G. Leti n. 82 - 63900 (FM) Piva 01926770445
Direzione Scientifica dott. Stefano Finocchi	info@abacocooperativa.it www.abacocooperativa.it
Urbisaglia (MC) - "Progetto per il restauro conservativo delle strutture archeologiche del lato Sud dell'Area Forense (Tempio Sud del Foro, Basamento, Edificio Monumentale, Ambiente di Età Repubblicana) della Colonia Romana di Urbs Salvia, presso Urbisaglia" Anni 2012-2017	
Tavola 1	Timbro e Firma
Rilievo: Abaco Società Cooperativa Disegno: Abaco Società Cooperativa	
Scala 1:50  	



The remains of the kilns



This is the situation at the end of the excavation campaign of 2017

All the phases of the workshop are visible

Kilns A and B

Structure:

- a circular combustion chamber dug into the ground and partly built with selected clay and bricks
- a single central elliptical pillar (slightly moved towards the left)
- *praefurnium* ca. 1,3 m

Kiln A

Combustion chamber ø 1,77 m

Kiln B

Combustion chamber ø 1,6 m



Kiln C and the forge

- Same structure as kilns A and B
- Combustion chamber $\varnothing$ 1,3 m
- This is the latest kiln
- It covered the entrance of kiln B's *praefurnium* → it was built when the complex A+B was not working anymore or because kiln B collapsed
- The existence of a forge on the



The Pottery Workshop of the first *Conciliabulum*

Study of pottery production of the kilns → **end of the 3rd – end of the 2nd cent. BC**

It was, in general, an **artisanal area** dedicated first to the production of **pottery**, mainly tableware (coarse and cooking wares) and, in its last phase, to **metal production**

Traces of other artisanal complexes have been found in the surrounding area (in 2022 the excavations brought to light a forge in what later would have been the *forum* area)

These artisanal quarters probably covered all the southern area of the *forum* and the Republican building and must have been **connected with** the planning and organisation of the ***conciliabulum***

Before the ***conciliabulum*** there was probably already a ***vicus***



Pottery production in Pollentia-Urbs Salvia

Waste and damaged goods

- Many fragments of pottery waste and “damaged” goods have been found in the area
- The most significant pots are an overcooked jar and a damaged table amphora
- These fragments are the evidence of the local production of these types of pots



2



1



Public Archaeology, ICTs, Promotion, Engagement

- Accessibility of the CH
- Educational purposes → Edutainment
- Promotion and enhancement of the sites
- Engagement of the user and the community
- Gamification and users' issues with highly-immersive tools



The project of an "archaeo-digital" chain



unimc
UNIVERSITÀ DI MACERATA

l'umanesimo che innova



**DIREZIONE
REGIONALE
MUSEI MARCHE**



**SOPRINTENDENZA
ARCHEOLOGIA BELLE ARTI E
PAESAGGIO PER LE PROVINCE DI
ASCOLI PICENO FERMO E MACERATA**



**UNIVERSITÀ
POLITECNICA
DELLE MARCHE**



- Excavation and documentation
- Research
- Experimental archaeology
- Enhancement and communication
- Storytelling
- 3D modelling
- 3D printing
- Lights, green screen filming, sounds and music, postproduction
- VR app
- Training, use, tourist implementation
- Education



l'umanesimo che innova

**DIPARTIMENTO DI
STUDI UMANISTICI**

Republican Kilns: strengths, problems, opportunities



Existing situation analysis:

- Poor conservation conditions
- Covered → visitors can only see the Republican Building
- Belong to the early history of the site → *Pollentia*
- ~~The production of the kiln is under study~~

Republican Kilns: strengths, problems, opportunities

Opportunities:

- Possibility to show something now invisible to visitors
- Archaeological research opportunities enhanced by the use of ICTs
- Enhancing the experience of on-site visit
- Possibility to strengthen the connection between the park and the museum
- Possibility to use the content in other locations/manifestations or for remote activities
- Focus on an artisanal activity still very present on the territory



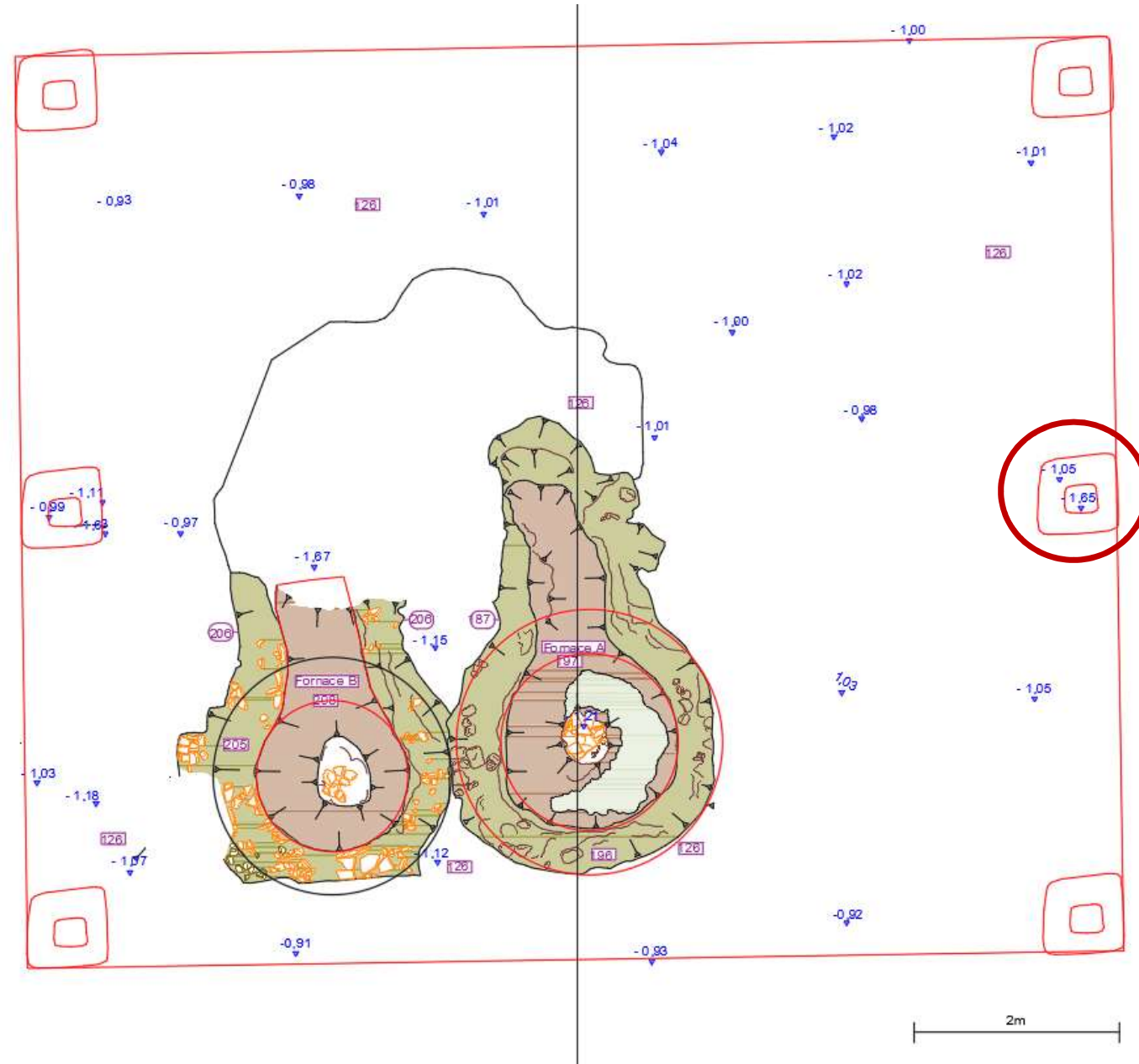
Storytelling and communication focus

- How an ancient kiln worked
- Explaining a production cycle
- Encouraging engagement through the focus on ancient people's everyday life
- Shed light on the earlier phases of the city
- Give the visitor/user an overview of the possible organization of a workshop → immersive experience + interaction



The first phase of the complex

- Excavation data → kilns A and B worked together
- The squared pit identified as the hole for a pillar belongs to the same phase of the kilns
- The kilns may have been covered by a roof sustained by 6 pillars



Kiln classification: Shape, Characteristics, Features

Archaeological record from *Urbs Salvia* → **Type Ia** of Cuomo Di Caprio's classification

Dome's proportions: possibly 1:2 / 1:3 combustion chamber : firing chamber

Combustion chamber → maybe underground

I: Circular

II: Rectangular



IIa



Ib



IIb



Ic



IIc



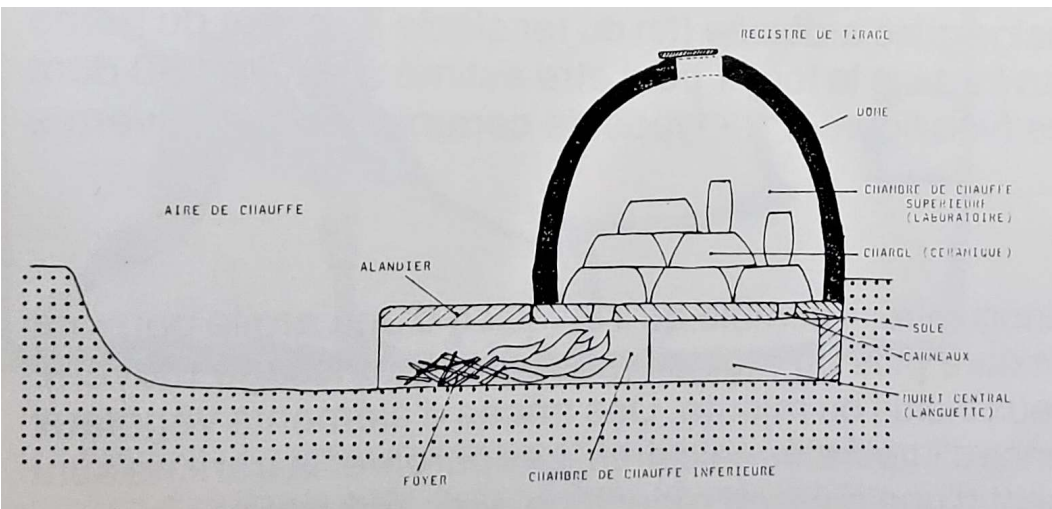
Id



IId



Ie



Kilns on *Pinakes* from Corinth – *Penteskouphia*

Representations → some info about the firing process and kilns' characteristics

- The importance of fire control
- Firing material set on fire at the entrance of *praefurnium*
- Side door in the firing chamber for the stacking procedure

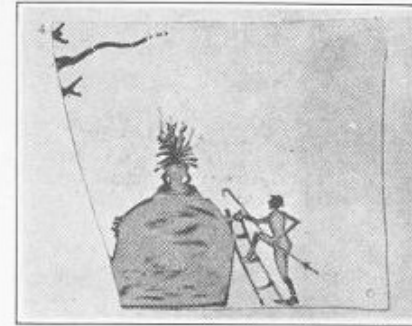


Fig. 74.



Fig. 75.



Fig. 76.



Fig. 77.

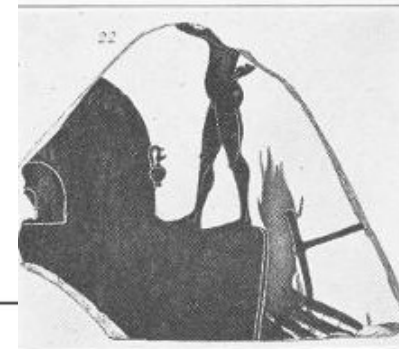


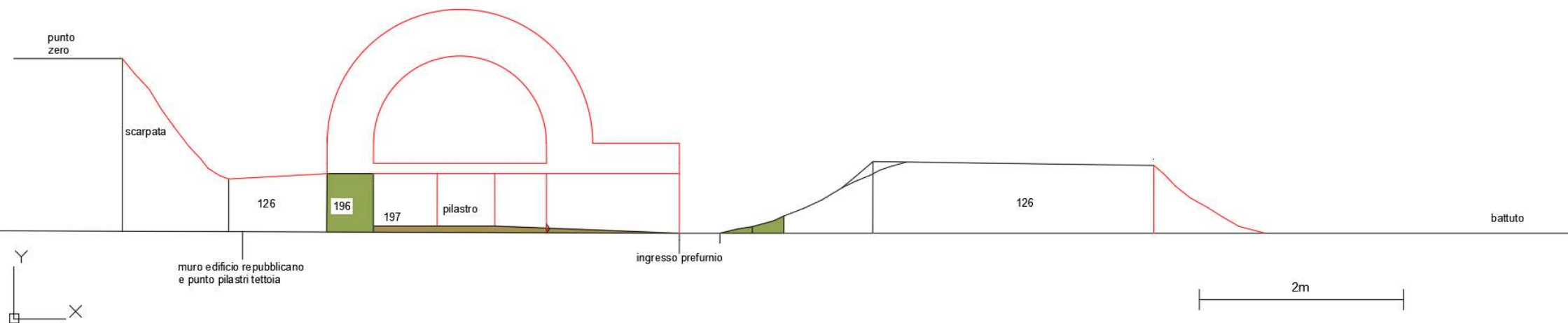
Fig. 78.



Fig. 79.

Structure of the kilns

- Permanent dome with a central smoke vent
- Combustion chamber underground
- Hollow working area in front of *praefurnium*

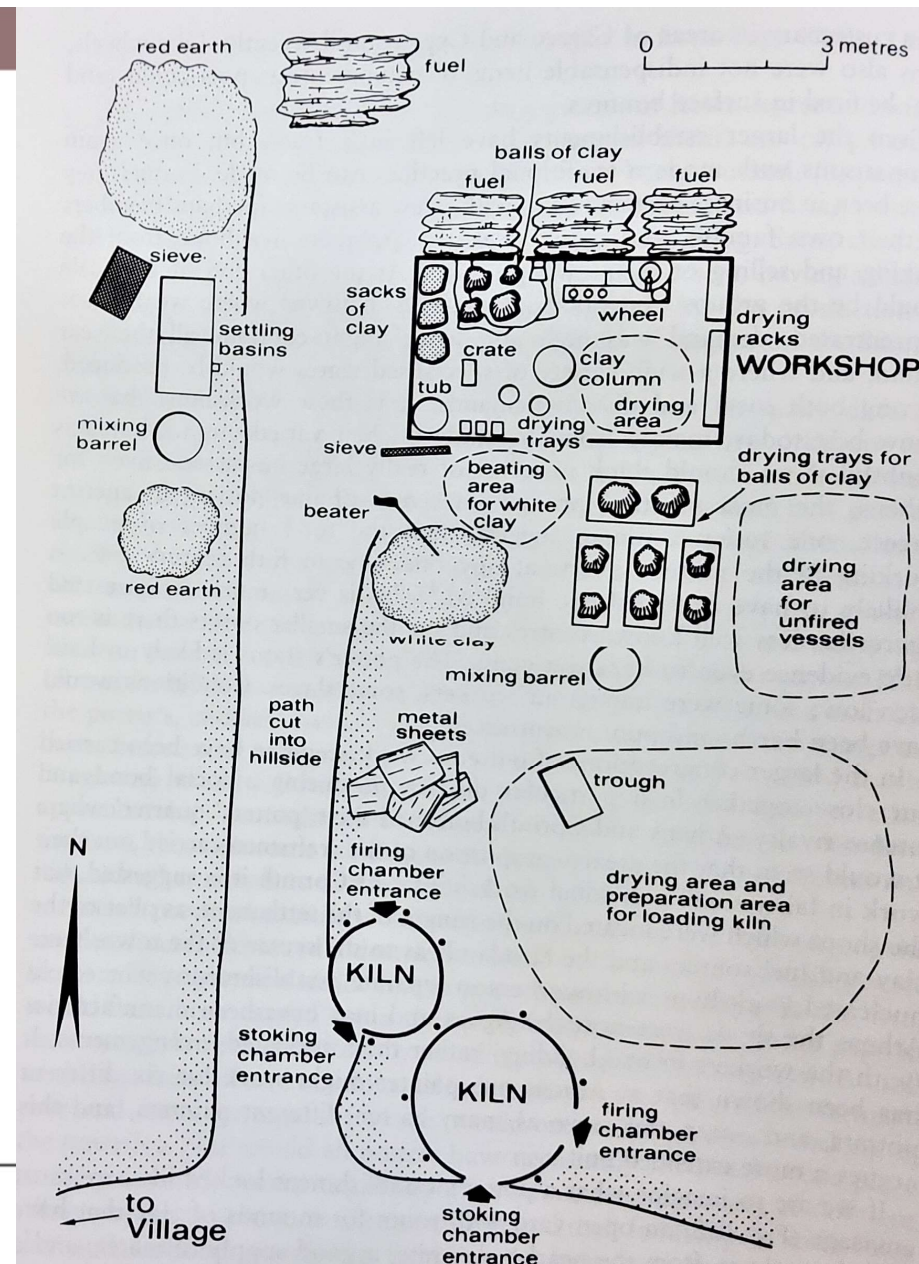


Structure of a workshop – the examples of modern traditional ceramic workshops

"In larger congregations of potteries work seems to have been carried out close together in particular districts, producing social bond and intense rivalry. [...] If we are to imagine what a potter's establishment looked like, we must envisage an open yard with room for mounds of clay that have been brought from the nearby clay pits, a good supply of water, and a generous store of wood needed for the firings. To one side of the yard would be the shed in which the potter's wheel, etc. was housed, and not far away would be the kiln itself [...] room would be needed for the drying-out of the pots after they have been formed and before the firing."

(Greek pottery. An introduction – Brian A. Sparkes)

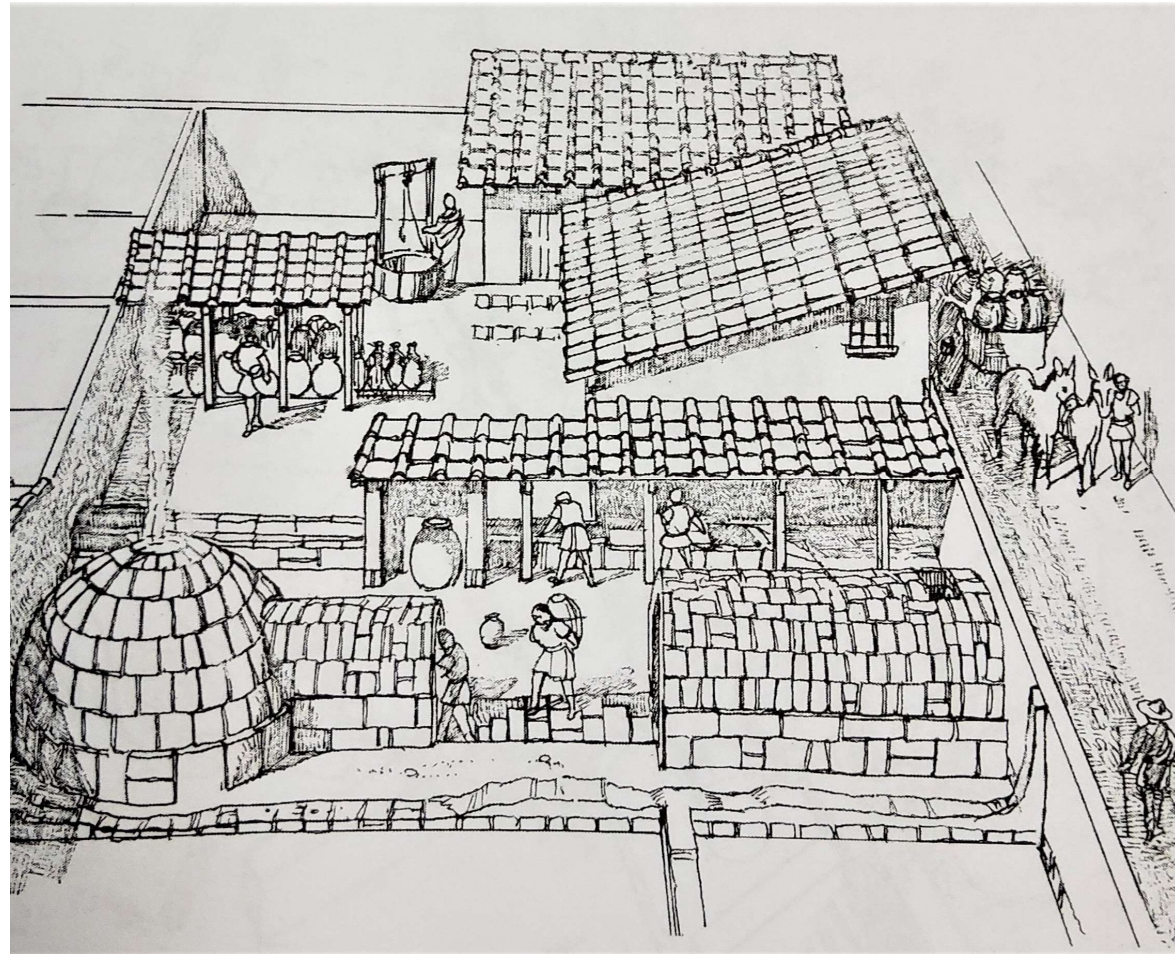
Plan of modern potter's traditional workshop in Crete



Poleis and artisanal areas

"[...] most potter's workshops are non-domestic technical installations, strongly and efficiently focused on production. Their typical concentration at or just outside the periphery of towns seems linked to visibility and ease access (for raw materials and possibly clients) while also keeping pollution out of the town"

(Giving the *kerameikos* a context: ancient Greek potters' quarters as part of the *polis* space, economy and society - Vladimir Stissi)



Lokroi Epizephyrioi (Barra Bagnasco

1996)

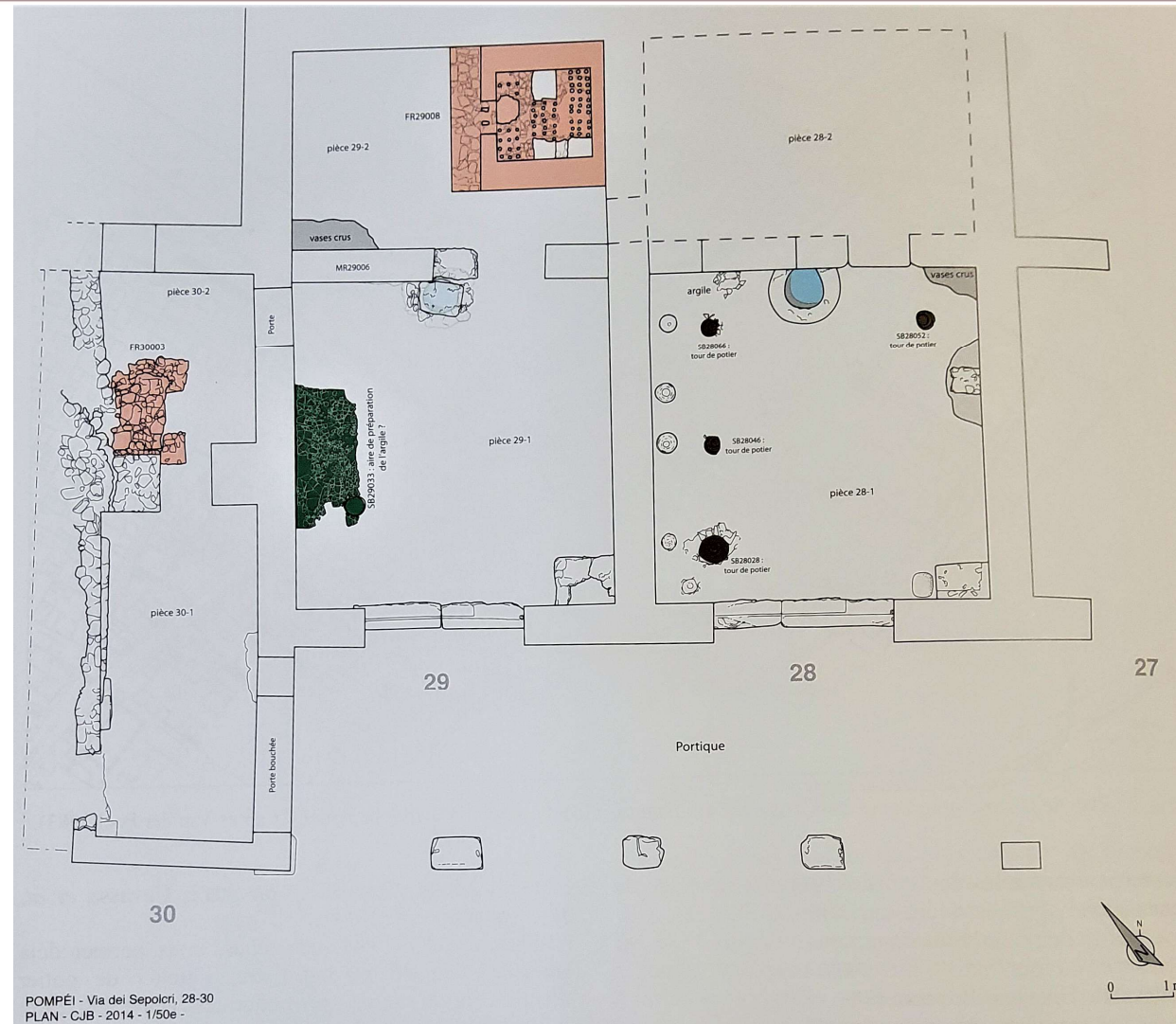
 **UNIMC**
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DIPARTIMENTO DI
STUDI UMANISTICI

l'umanesimo che innova

A roman example from Pompeii

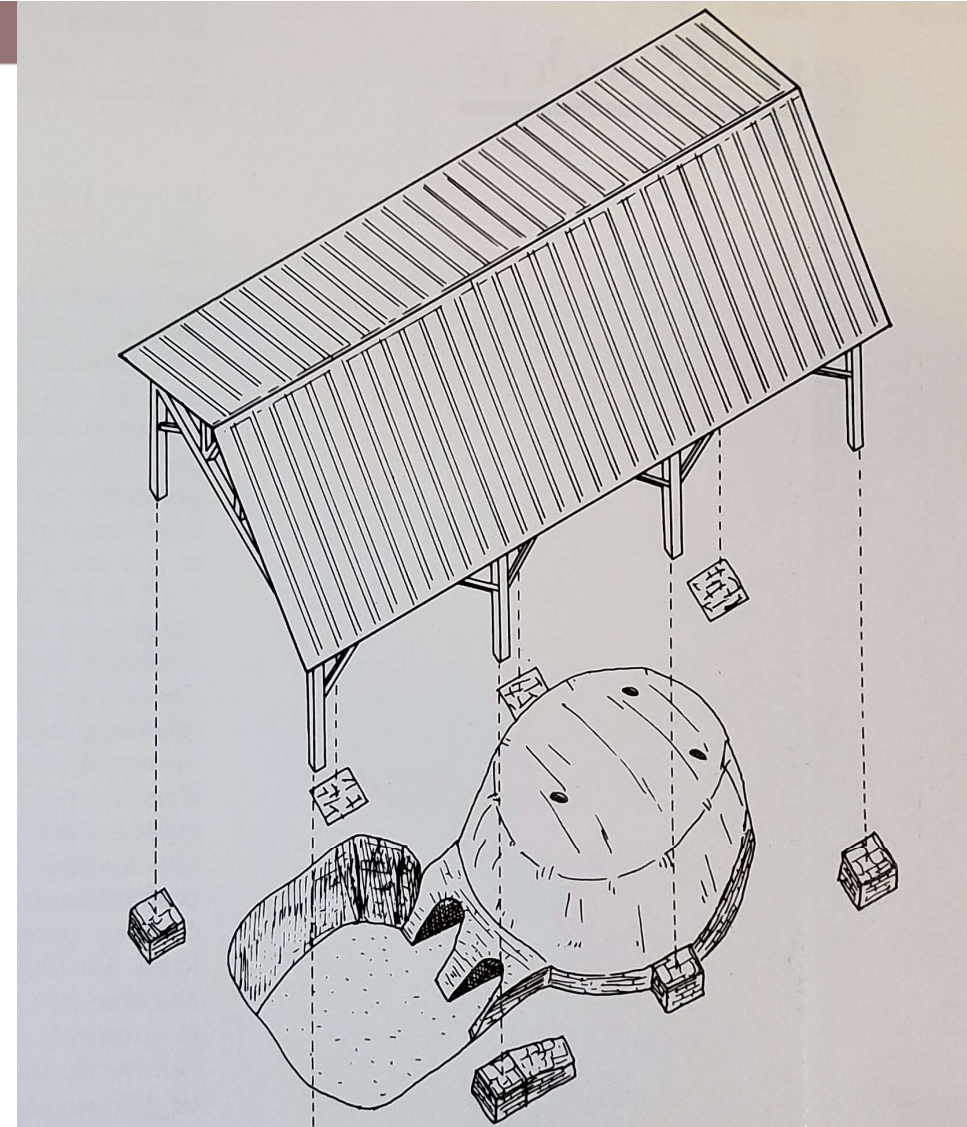
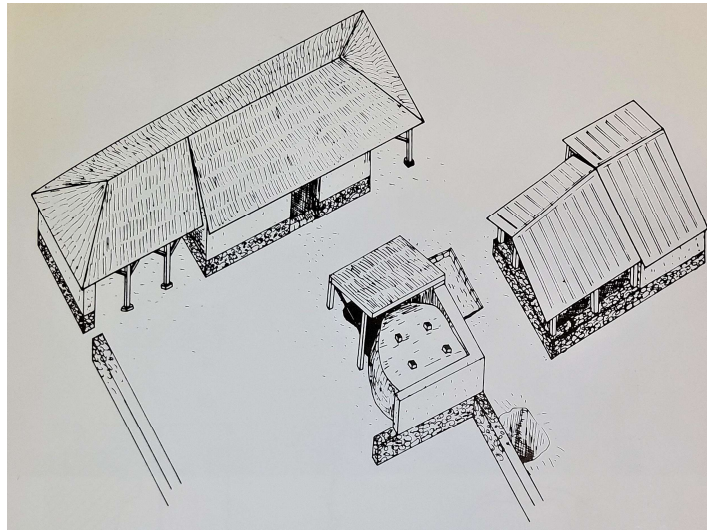
- *Un atelier de potier en activité à Pompéi au moment de l'éruption du Vésuve (79 ap. J.-C.)* - L. Cavassa and B. Lemaire
- A building that includes a room for the kiln, spaces for the storage and one room for the potters
- Evidence of a porch



Sheds, roofs, mixed structures – were
the kilns outside or inside?

*Sallèles d'Aude. Un complexe de potiers
gallo-romain : le quartier artisanal –
Fanette Laubernheimer*

To the left:
second phase of
the workshop –
first half of
the 1st cent. AD
To the right:
third phase of
the workshop –
from 60 AD to
the 2nd cent. AD

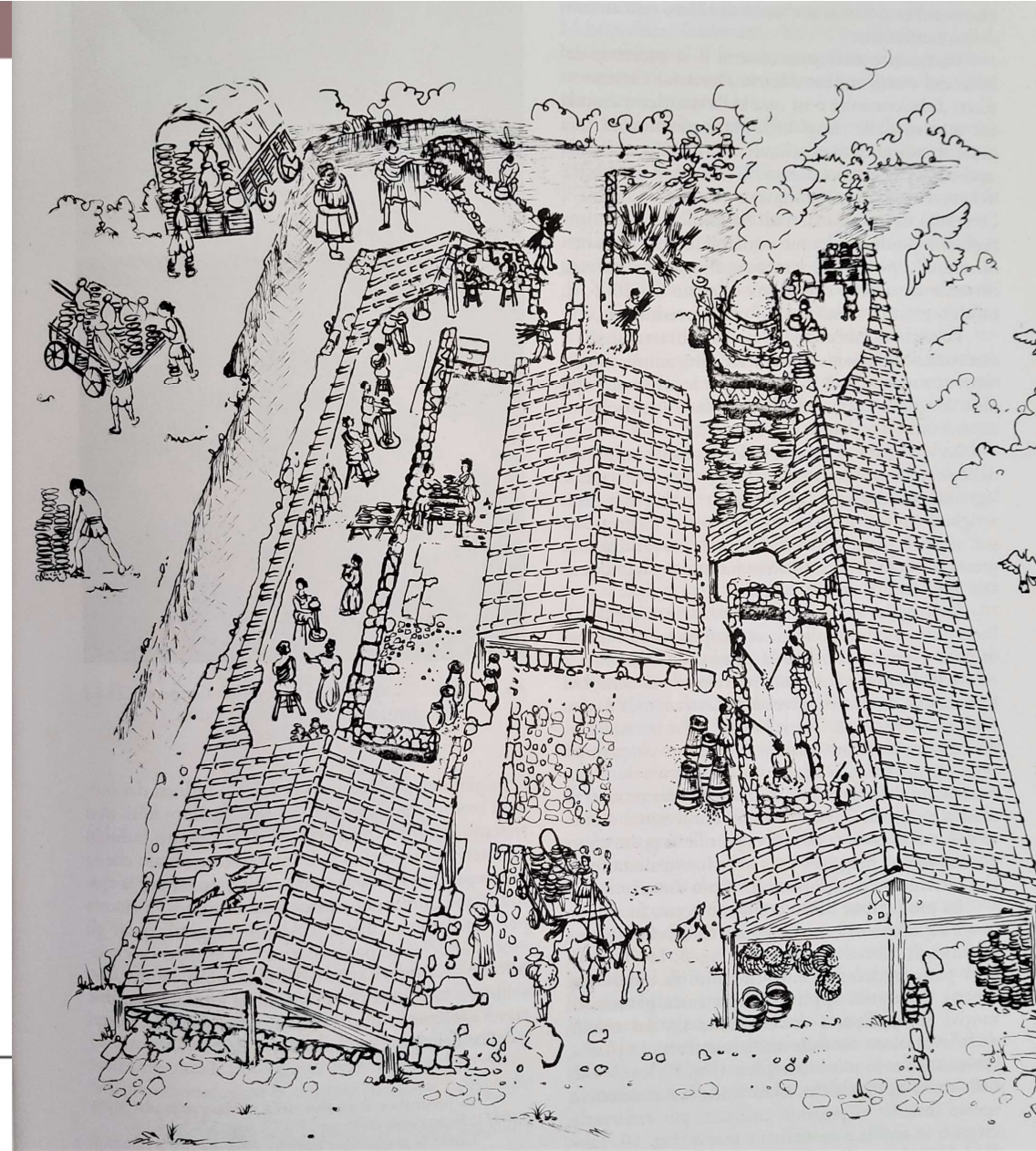


The example of Scoppieto - Umbria

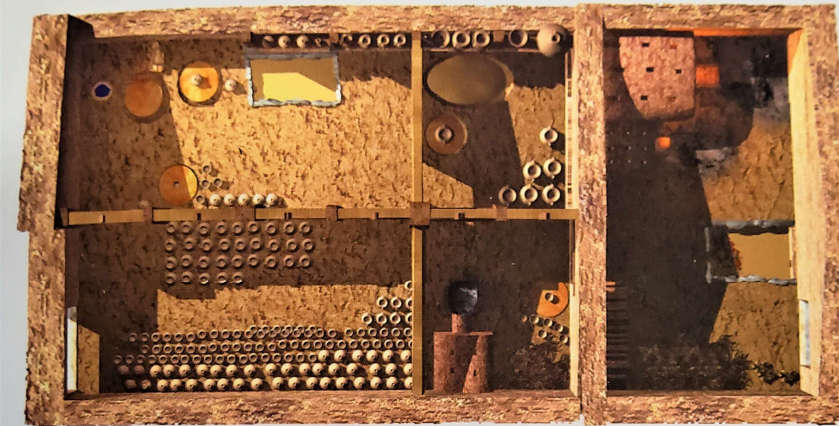
- The activity started already during the Hellenistic
- The well-known phase is dated from the Augustan age

Characteristics:

- Sheds and open spaces
- Access to the road
- Highly productive workshop with several potter's wheel positions

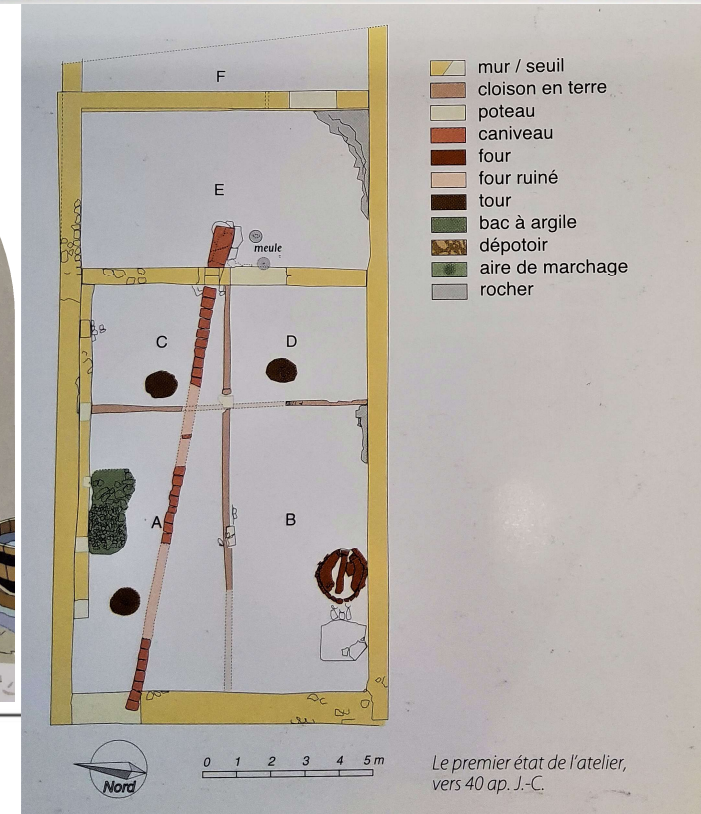


Lots of
evidence...many
details



*L'atelier de potiers
antique de la rue du
Chapeau Rouge à Viase
(Lyon 9e) - A. Desbat*

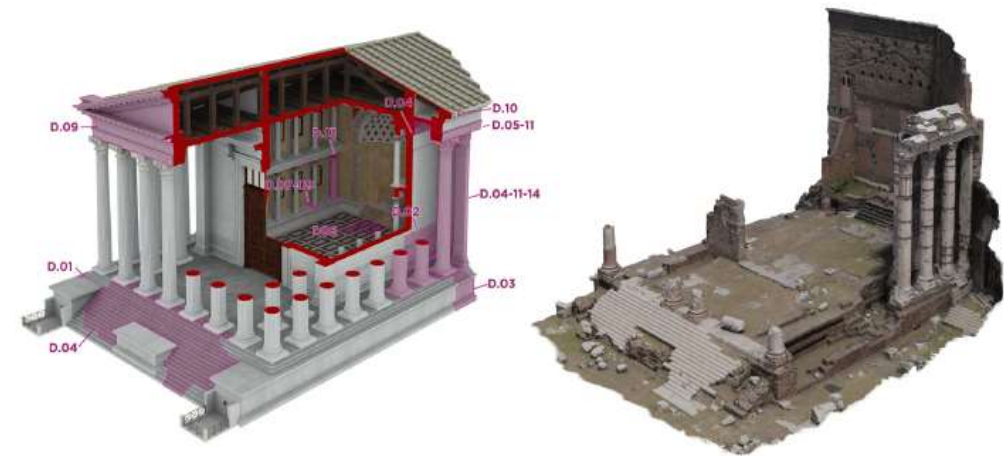
- Structured workshop
- From 40 AD to the 2nd cent. AD
- Evidence of rooms for potters, potter's wheel, kilns
- Walls of the workshop well preserved



Dealing with plausibility: extant structures, evidence, sources, research

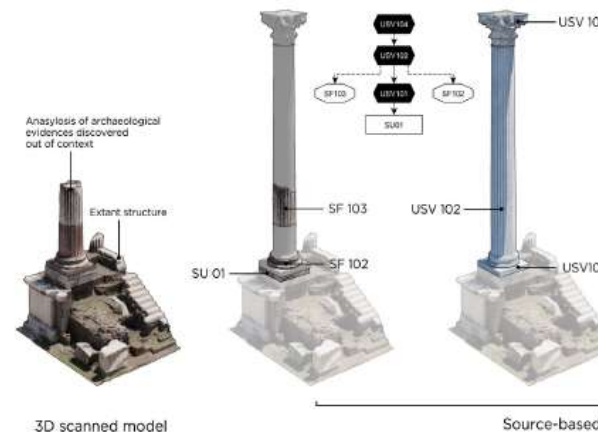
Current state of preservation → reconstructive hypothesis

- Extant structures
- Archaeological evidence out of context
- Sources
- Scientific studies
- (the example of the Forum of Augustus in Rome)



Visual mapping of the sources used for the reconstructive hypothesis

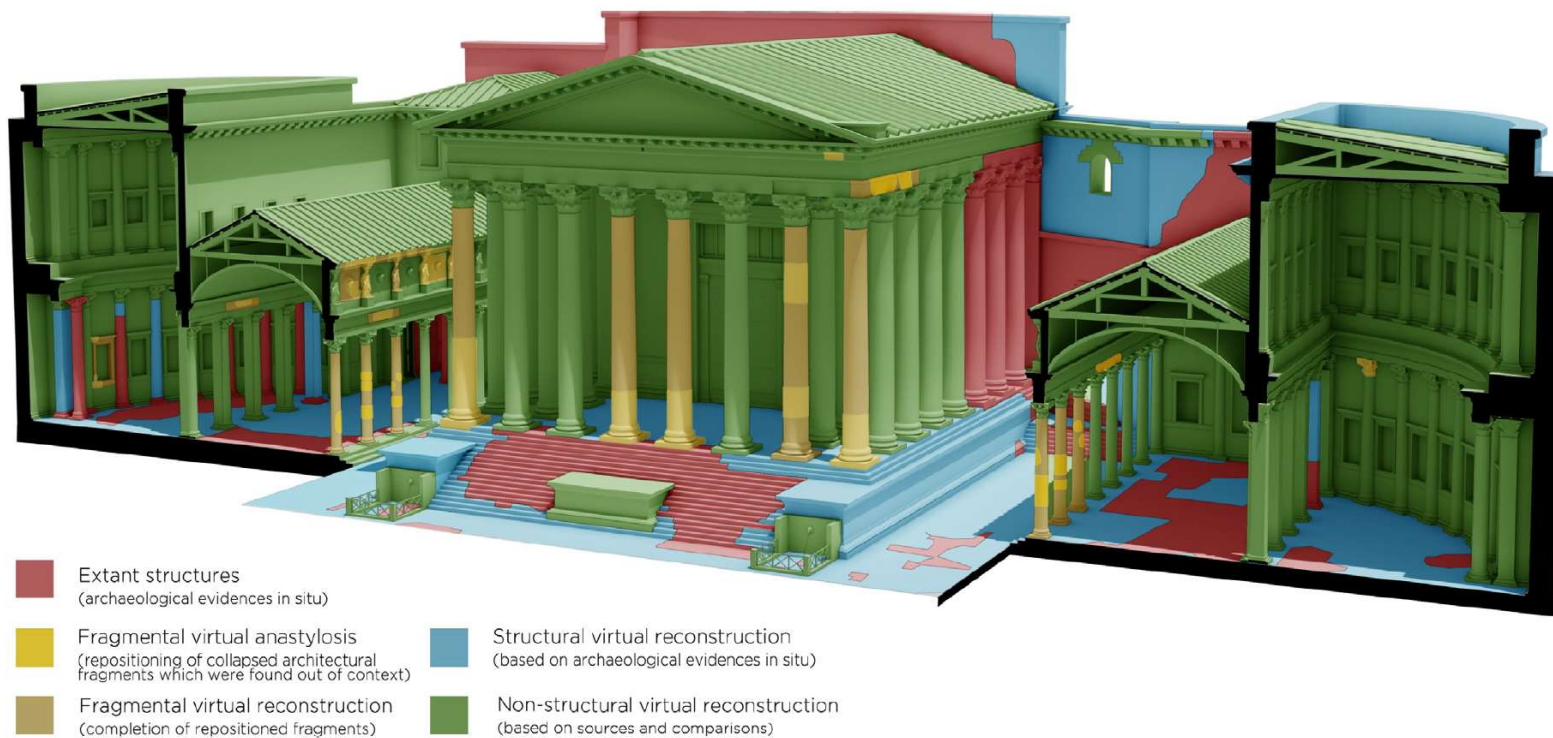
3D model of the temple of Mars in its current state of preservation



Source tracking

	Properties	Interpretation	Sources used
USV 104: Capital	existence dimension shape style material	testimonies comparisons	D.11 D.12 D.05
USV 102: Column	existence dimension shape style material	testimonies special finds comparisons	D.11 SF 102-103 D.05
USV 101: Basis	existence dimension shape style material	extant structure comparisons	SU 01 D.05

Visualisation of reliability



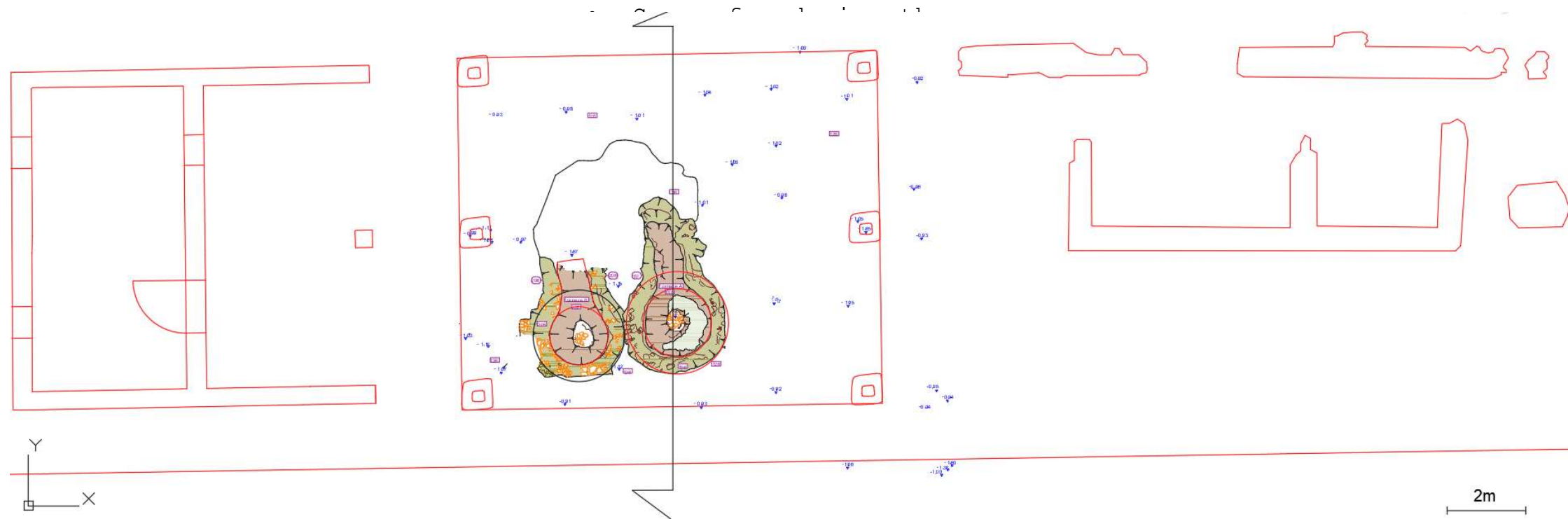
Proxy model of the Forum of Augustus → shows the different levels of reliability in the anastylosis

Visualisation → research, sources, comparison

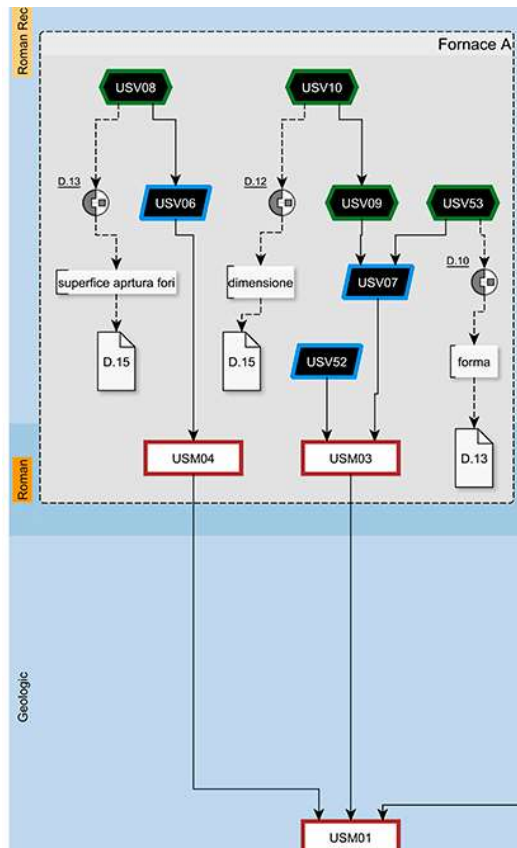
... going further → putting evidence in context!

Drawing an artisanal area ...

- Access to the road
 - Access to resources
 - Space for stockage
 - Space for working with the clay and modelling the pots
- uncooked pots
 - Space to work around the kilns
 - Possibly a space to store/sell products



The Extended Matrix ICTs and archaeological research



Each coloured geometry indicates a relevant stratigraphic unit (real or reconstructive) of the archaeological object.

 Evidence found in the archaeological site

 Virtual reconstruction of elements related to an element found in the archaeological site

 Purely virtual reconstruction of structural elements of which we have no evidence on site

We can directly link documents consulted by inserting an extractor specifying the studied feature and directly connecting the source making it recallable



Extrac
tor



Proper
ty



Document

The EM is made using yEd, a general-purpose diagramming program with a multi-document interface - courtesy of Mirco D'Alessio (Marche Polytechnic University)

Proxy version of the artisanal area

The extended matrix was directly linked to the virtual reconstruction project in **Blender**, using the Open Source EM tool. We have been able to assign each characteristic specified in the matrix directly to the corresponding geometry, obtaining a "Proxy" model divided by stratigraphic units.

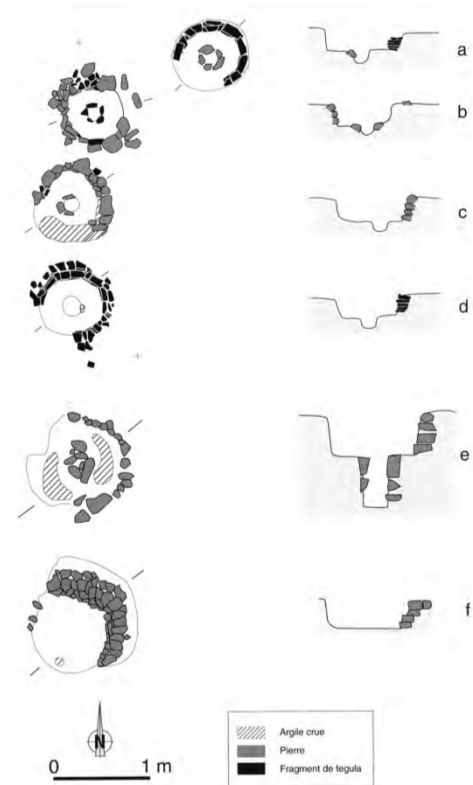
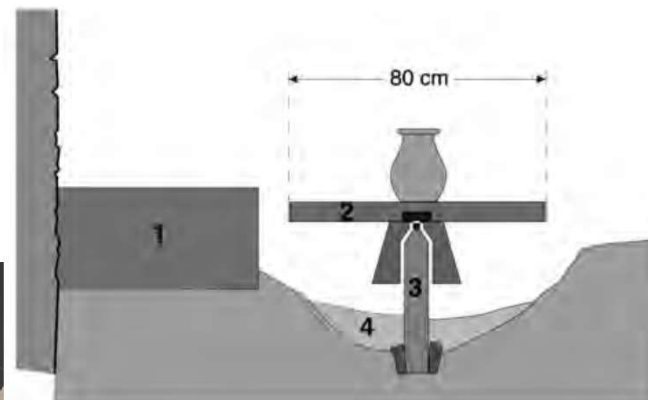
(Courtesy of Mirco D'Alessio - Marche Polytechnic University)



Details - the potter's wheel

Reconstruction of a potter's wheel from the workshop at rue de Chapeau rouge (Desbat et al. 2000)

ective (Local)
fabricazione_tornio | secchio.001

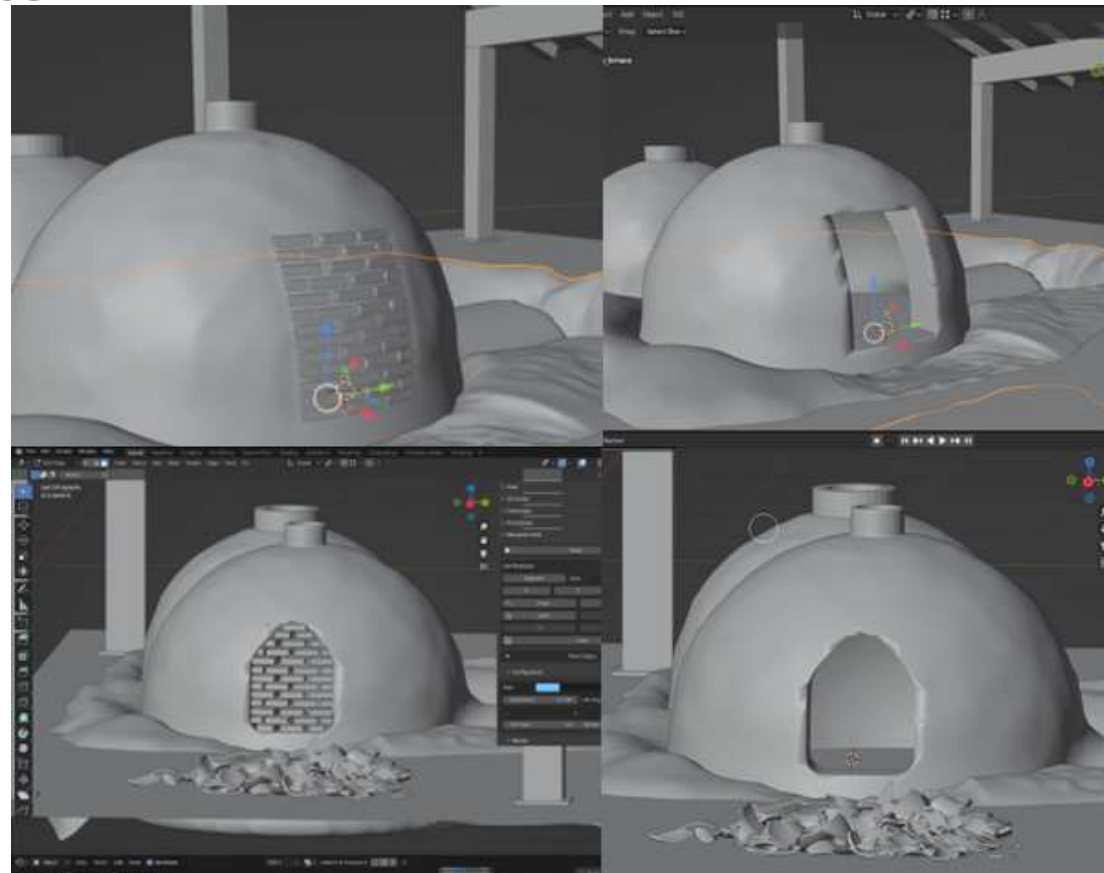


Potters' representations:
- Pompeii (Insula II, 3, 7-9);
- terra sigillata from El Aoudja

Our work on the potter's wheel for the VR experience of the workshop at

Evidence of potter's wheels - from La Boissière-Ecole (Dufaÿ et al. 1997)

Details - the loading door of the firing chamber



Archéologie expérimentale 1991 - Les potiers du site gallo-romain de Bliesbruck (Moselle) : reconstruction expérimentale de fours et production de céramiques - Gilles Greff

Stages of the realisation of the loading door for the kilns of *Urbs Salvia*

Giving life to the working scenes

Understanding gesture and organization of work:

- Stacking pots in the kiln
- Firing the kiln
- Unloading the kiln

-How many people should work at the kilns?

-Who were they?



Evidence for women working lives

Sophie Mano → 574 mentions of working women (names of jobs referred to women) for Italy and Gallia in the Imperial period



A



B

(A) Septimia Stratonice, cobbler (?), funerary monument of the 2nd cent. AD from Ostia, Museo Ostiense, Magazzino, Inv. 1418 (CIL 14.46989); (B) Marble relief of a butcher and a woman dealing with accounts - from Rome, first half of the 1st cent. AD, Skulpturensammlung, Staatliche Kunstsammlungen Dresden, Inv. ZV44 (from Larsson Lovén, 2016).

Not just aiding...
Women owning businesses, crafting, making...

Relief of a pharmacist (?)
Mid 2nd cent. AD, Épinal, Musée Départemental des
Vosges, inv. 61 (from Becker 2016).



A male business?

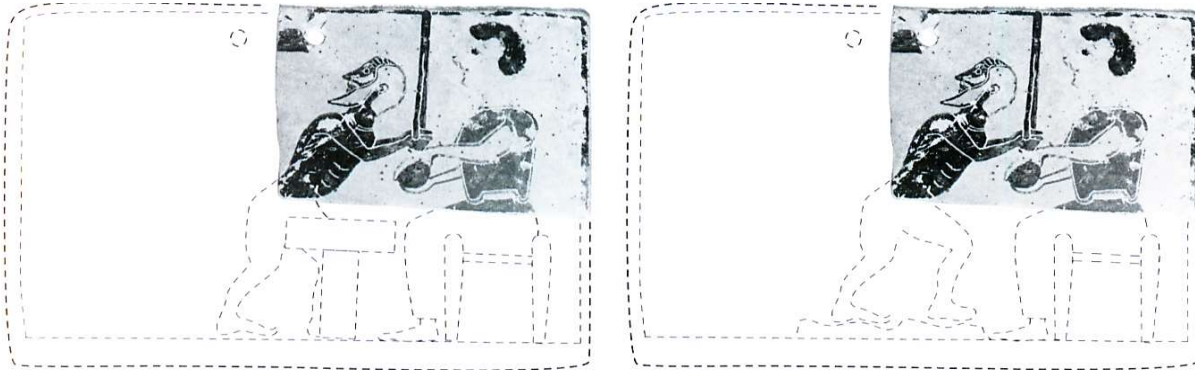
Main studies on pottery
production:

Pottery making = side activity
→ women

Pottery making = main activity
(specialization) → men



Iconographic evidence



Pinax from Penteskouphia

B18 from Hasaki's catalogue –
Antikensammlung, Staatliche
Museen zu Berlin F 891 (P 355) –
(from Hasaki 2021, Fig. 4.35).

*Hydria from Ruvo (Puglia), Leningrado
painter – Milano, collection "H.A", C
278 (from:
<https://paragone.hypotheses.org/7939>)*



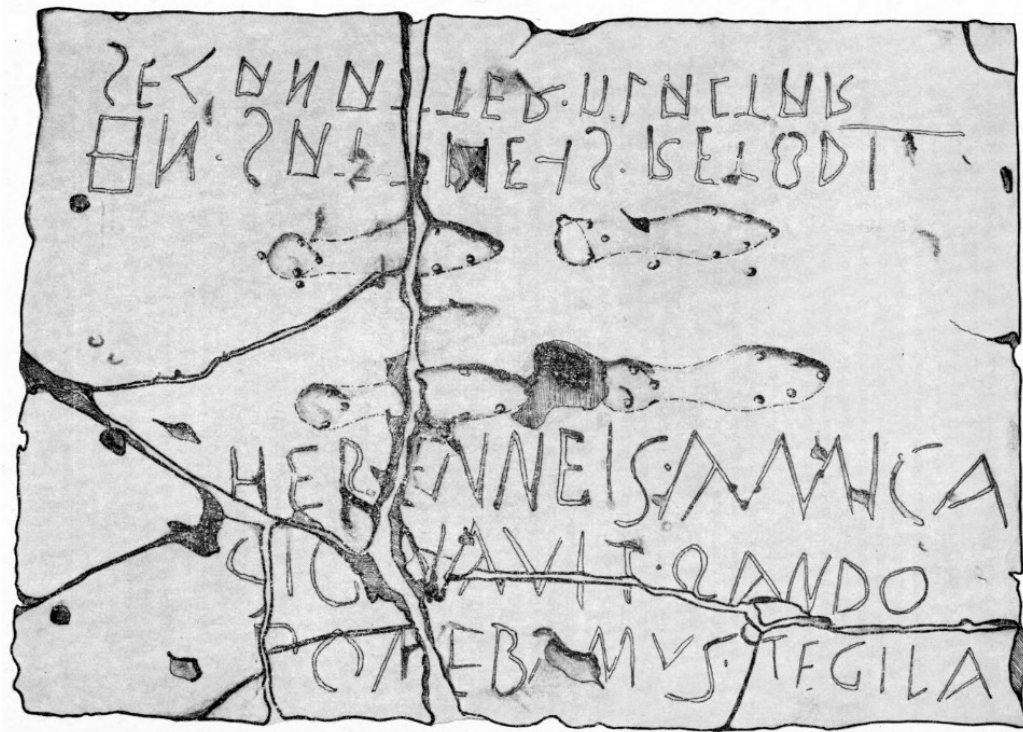
A controversial painting...

Drawing of the fresco from Pompei -
Insula I, 8, 10, external wall of
the *Hospitium dei Pulcinella*

→ A worker or a client?



Epigraphic evidence



A: *eire]n[eis] sattiies detfri*
seganatted plavtad

A: Detcfri (slave) of Herennius
Sattius, signed (this) with her
shoe soles

B: *herenneis amica signavit*
q[u]ando ponebamus tegila(s)

B: Amica (slave) of Herennius
signed (this) while we were
setting down the tiles

So-called *tegolone* from
Pietrabbondante

Beginning of the 1st cent. BC (from
La Regina 1976)

Archaeological evidence

Francesca Caresani:
experimental archaeology
project → kiln supports
among female grave goods may
represent the exact
specialised role they had in
pottery production

Three-headed stamp for
pottery decoration

Grave goods from Tomb
1 at Casalecchio

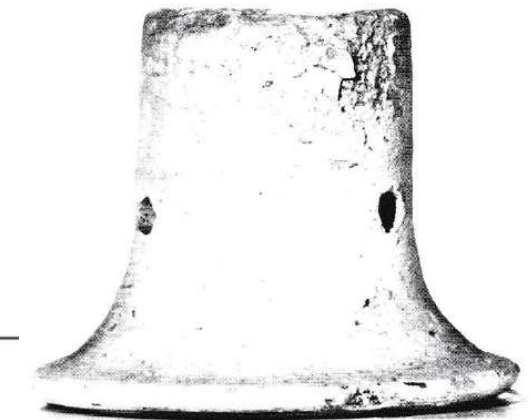
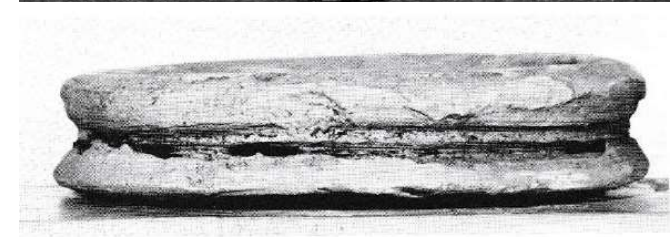
(from Kruta-Poppi,
Neri 2015)



Kiln supports or
spacers

Grave goods from the
Tomb 366 of Spina -
4th - 3rd cent. BC

(from Patitucci Uggeri
1988) .



Ethnographic evidence

Moknine potters' quarter
(Tunisia)
(Hasaki's research
project)

→ Male business BUT on
some occasions, women
participate in the
activity with specialised
tasks



Working at the kilns:
a family-based
ceramic workshop

Conciliabulum = small groups of settlers

Mid-Adriatic context of the 3rd – 2nd cent. BC

Dimension and loading capacity of the kilns (see studies of Heleni Hasaki on Moknine for the dimensions of the workshops)

Representation of the artisans working at the kilns (Penteskouphia)

Gender Archaeology = representation of the female labour

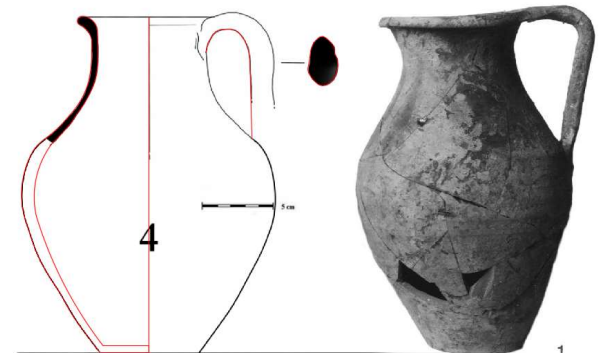
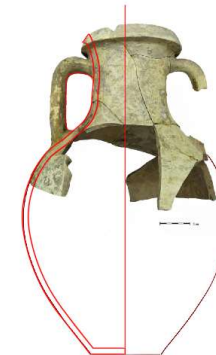
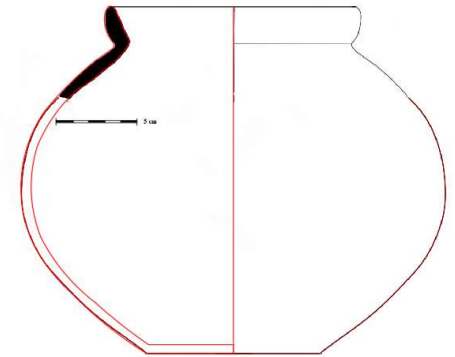
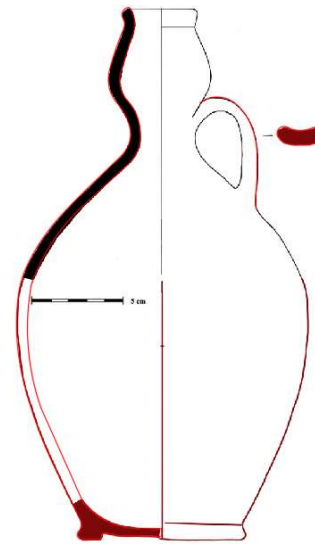
→ individual workshops managed within the family unit = need for more fluidity between the different *modes of production* (Peacock)



Details - From pot sherds to 3D

The pots chosen for the video are the most representative of what we think was the production of the kilns - data come from the comparison between the pottery coming from the filling of the destroyed kilns and the other sherds found in the same area

The study of the shapes and types found in the area enabled their reconstruction for the 3D modelling



Props - research, 3D printing, and experimental archaeology

Filming the scenes in green screen requires all objects touched by the actors to be real.

3D models of the most significant pots found at Urbs Salvia have been ...

... 3D printed and painted in grey shades → uncooked pots

... made by a potter → fired pots



Experimental archaeology and costumes



- Clothes are designed, made, and coloured based on ancient representations and with experimental archaeology techniques - some details are influenced by filming needs



Storytelling, filming, postproduction: how to build a VR

experience

VR experience architecture

1. Introduction
2. The potter's workshop
3. The work at the kilns (filmed scenes):
 - Loading the kiln
 - Firing the kiln
 - Unloading the kiln
4. Selling the pots: an interactive experience

User experience

- Intro → knowledge about the research method
 - Exploration
 - Narration
 - Interaction
- Knowledge about the ceramic production





Implementation and dissemination



Strategic lines and possible further storylines for the enhancement of the Park-Museum system at *Urbs Salvia*

VR experience

- Great potential = it is not estinguished by the use of the experience itself
- Multiple possible storylines = they can enrich the Park experience andh the link with the Museum

Musealisation of the ceramic production from the kilns together with its reproductions and waste

Use of props and costumes to tell the story of the development of the VR experience

Extraction and further development of specific interactive content

3D prints and tactile experience