Sheffield Hallam University

Blending the tangible and digital to craft new co-designed interactions for museums.

DULAKE, Nick and PETRELLI, Daniela

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meSch

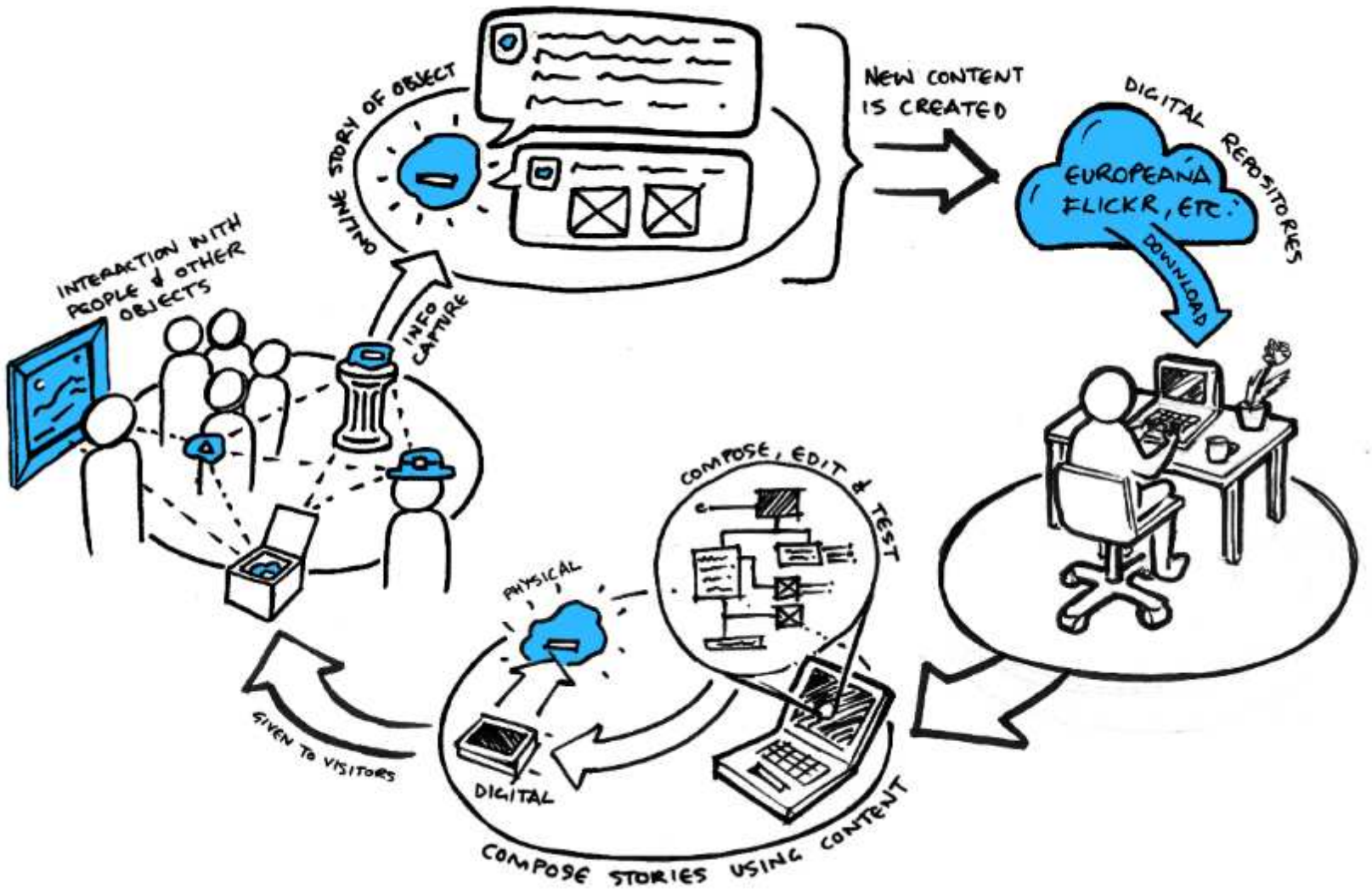
Material Encounters with digital Cultural Heritage

Blending the tangible and digital to craft new co-designed interactions for museums.

Nicholas Dulake
Daniela Petrelli

Sheffield Hallam University

meSch


ONLINE STORY OF OBJECT
NEW CONTENT IS CREATED
DIGITAL REPOSITORIES
EUROPEANA FLICKR, ETC.
DOWNLOAD
INTERACTION WITH PEOPLE & OTHER OBJECTS
INFO CAPTURE
COMPOSE, EDIT & TEST
PHYSICAL
DIGITAL
GIVEN TO VISITORES
COMPOSE STORIES USING CONTENT

Den Haag en de

Atlantikwall

oorlog in de stad van vrede

vanaf **10 apr**

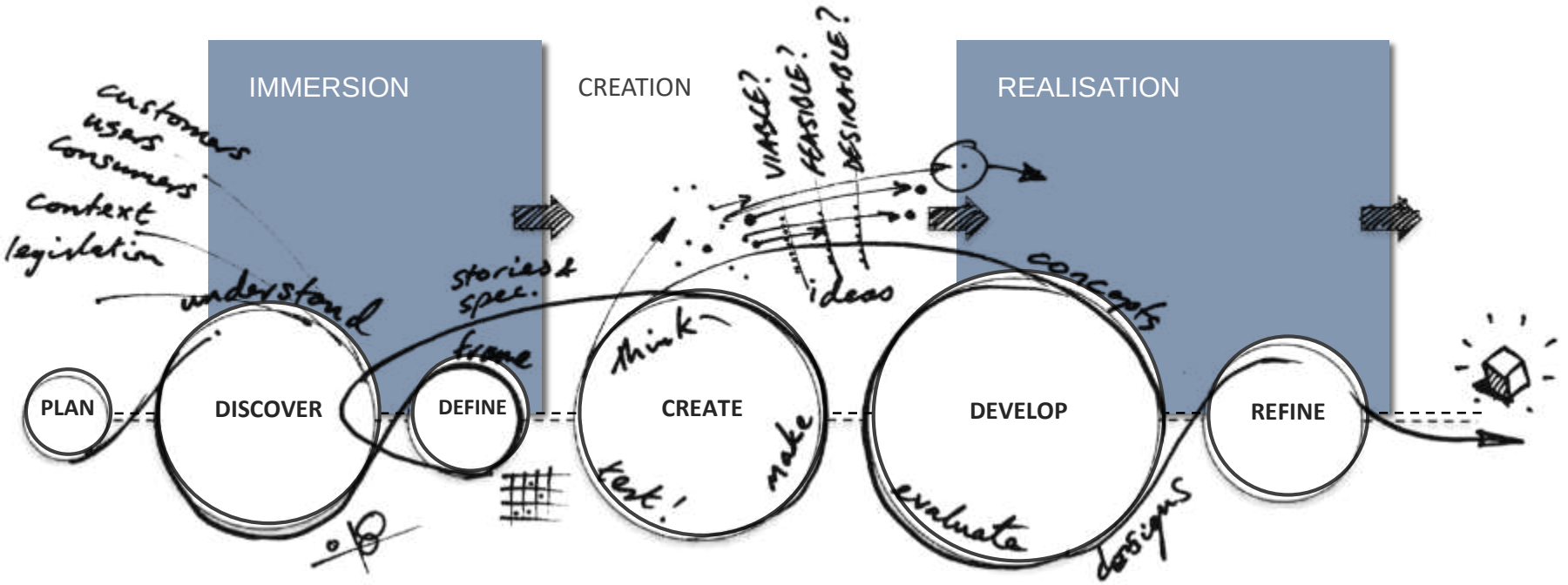
meSch

FORTE
POZZACCHIO
WERK
VALMORBIA
MUSEO STORICO
ITALIANO
DELLA GUERRA
CHIUS

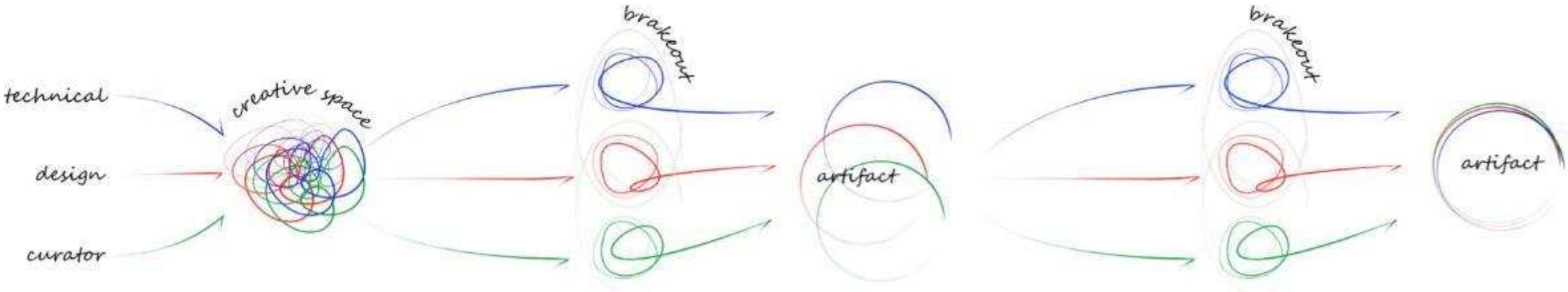
meSch

co-design process

meSch design process



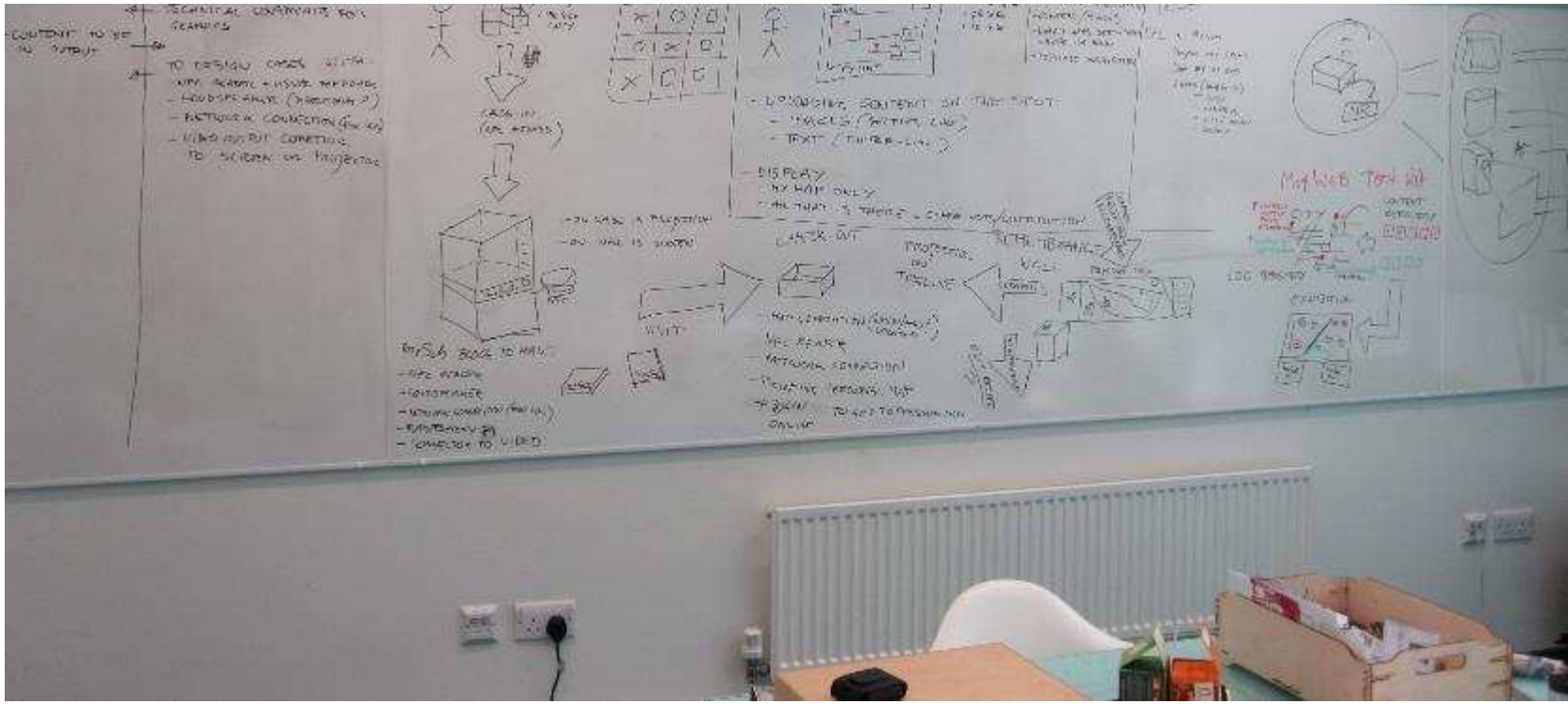
meSch artefact focus



The Hague and the Atlantikwall

Inspiration

co-design

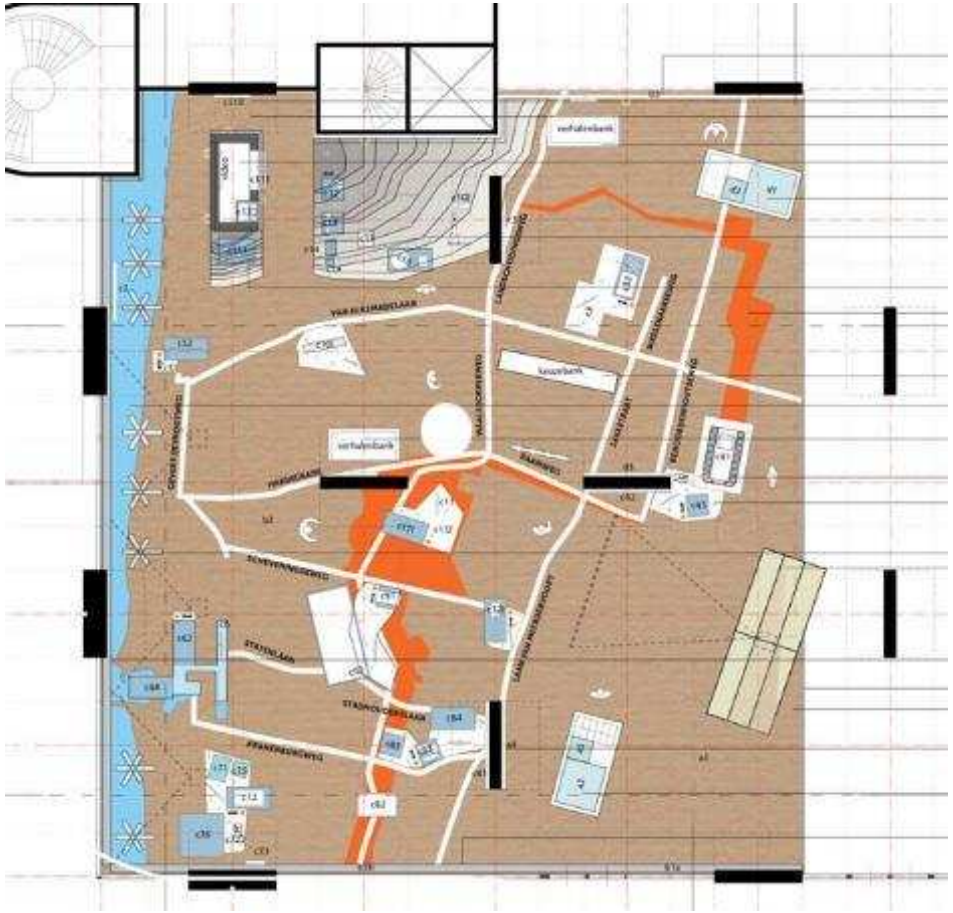


Overall concept

- Choice between three different perspectives
  - Dutch citizen
  - Civil servant
  - German soldier
- Started by means of a replica
- Sound clips supported by images from archives
- Based on historical resources
  Archives, newspapers, oral history
- Choice of language

Exhibition staring point

- 400 m^2
- Floor plan reflects The Hague city plan
- Connects past and present
- No fixed route



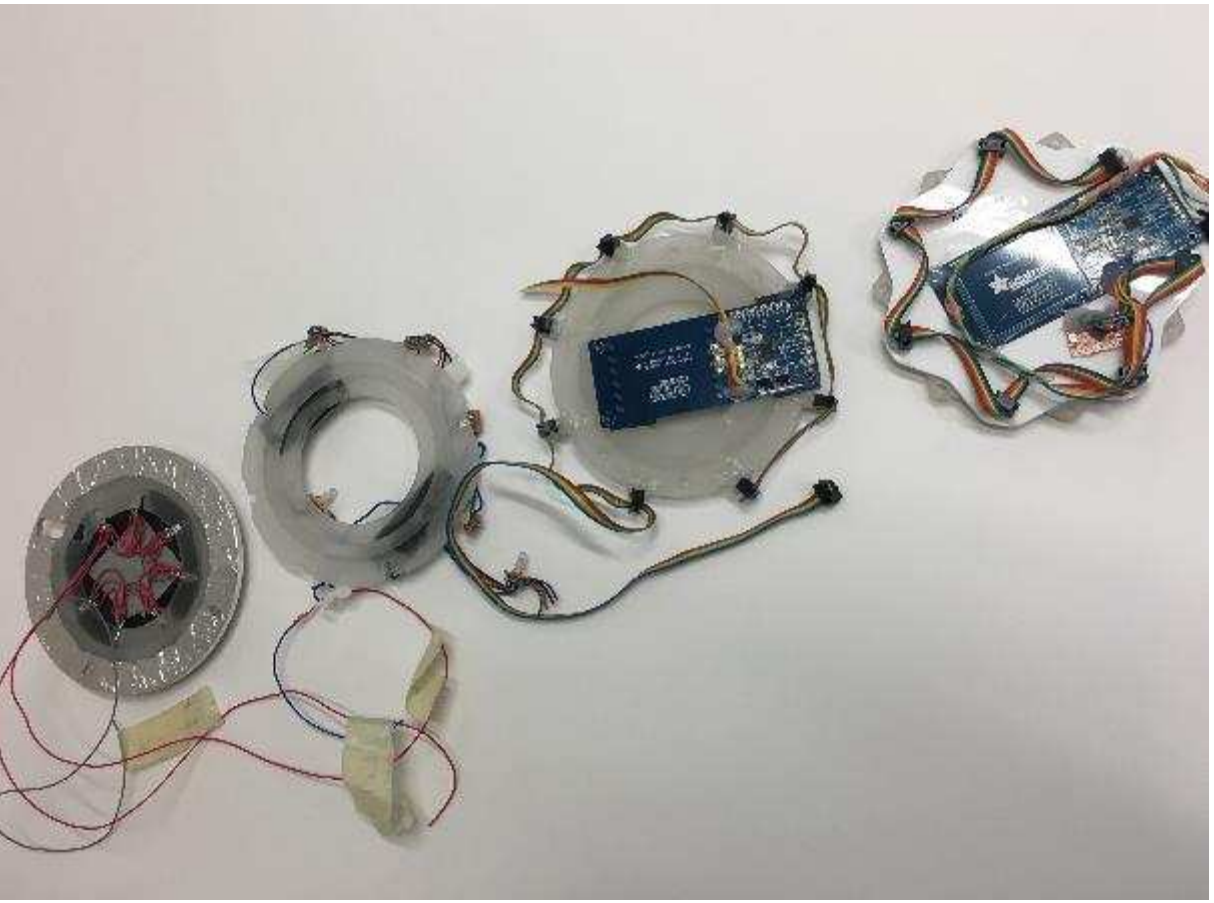
meSch requirments

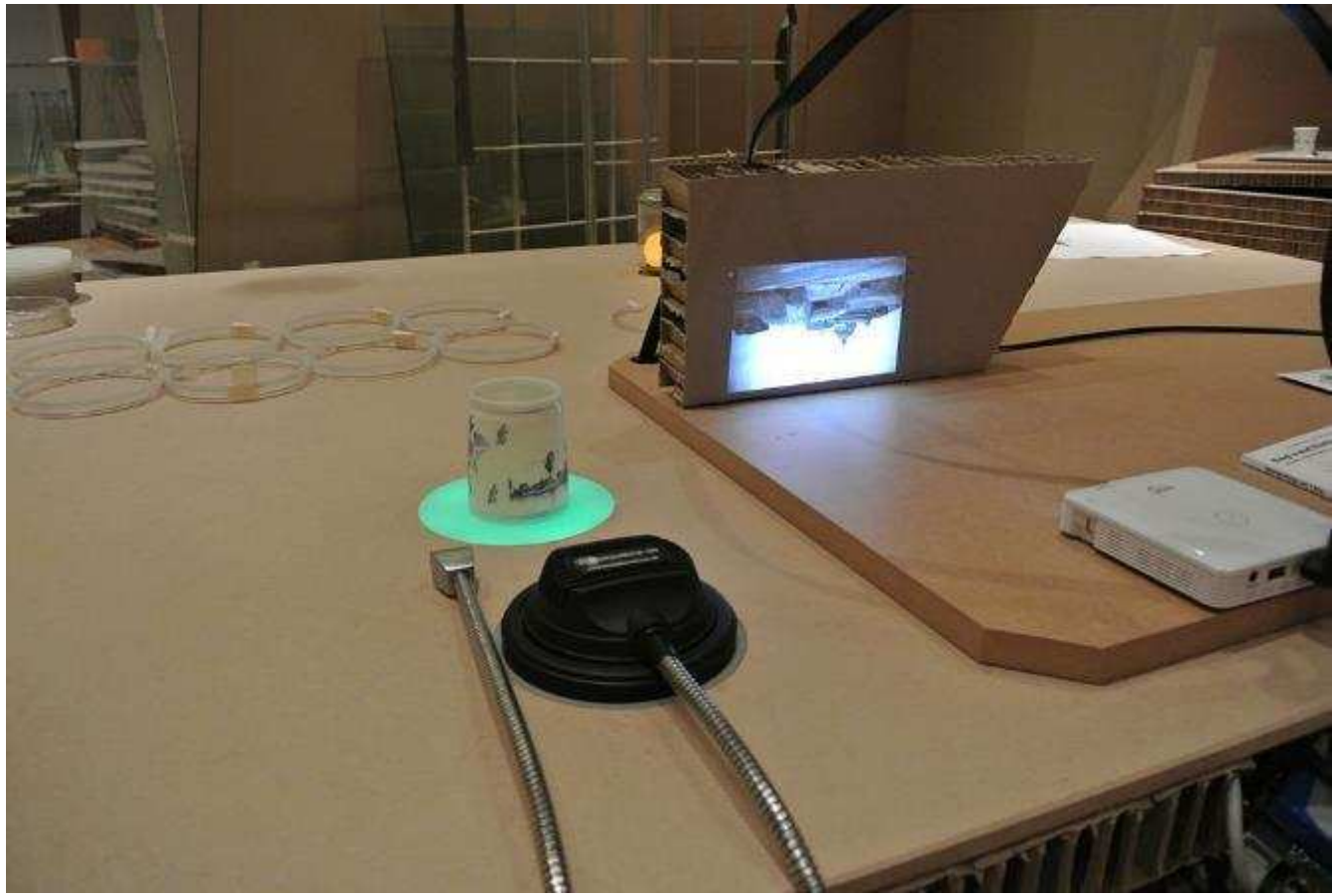
- Fully integrated
- Possible to visit the exhibition without meSch technology
- meSch as an additional layer
  Personal, evocative. Not about facts
- Connected to real objects
  Take into account noisy environment
- Exhibition design by external company

Activation hardware

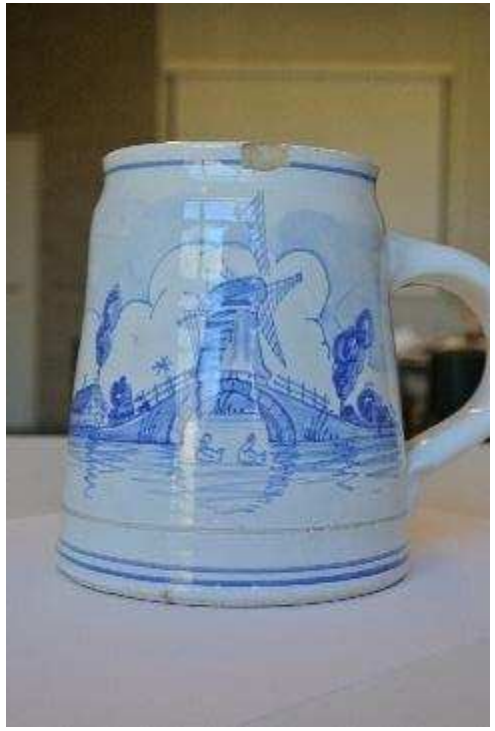
meSch

Activation hardware





Smart replica



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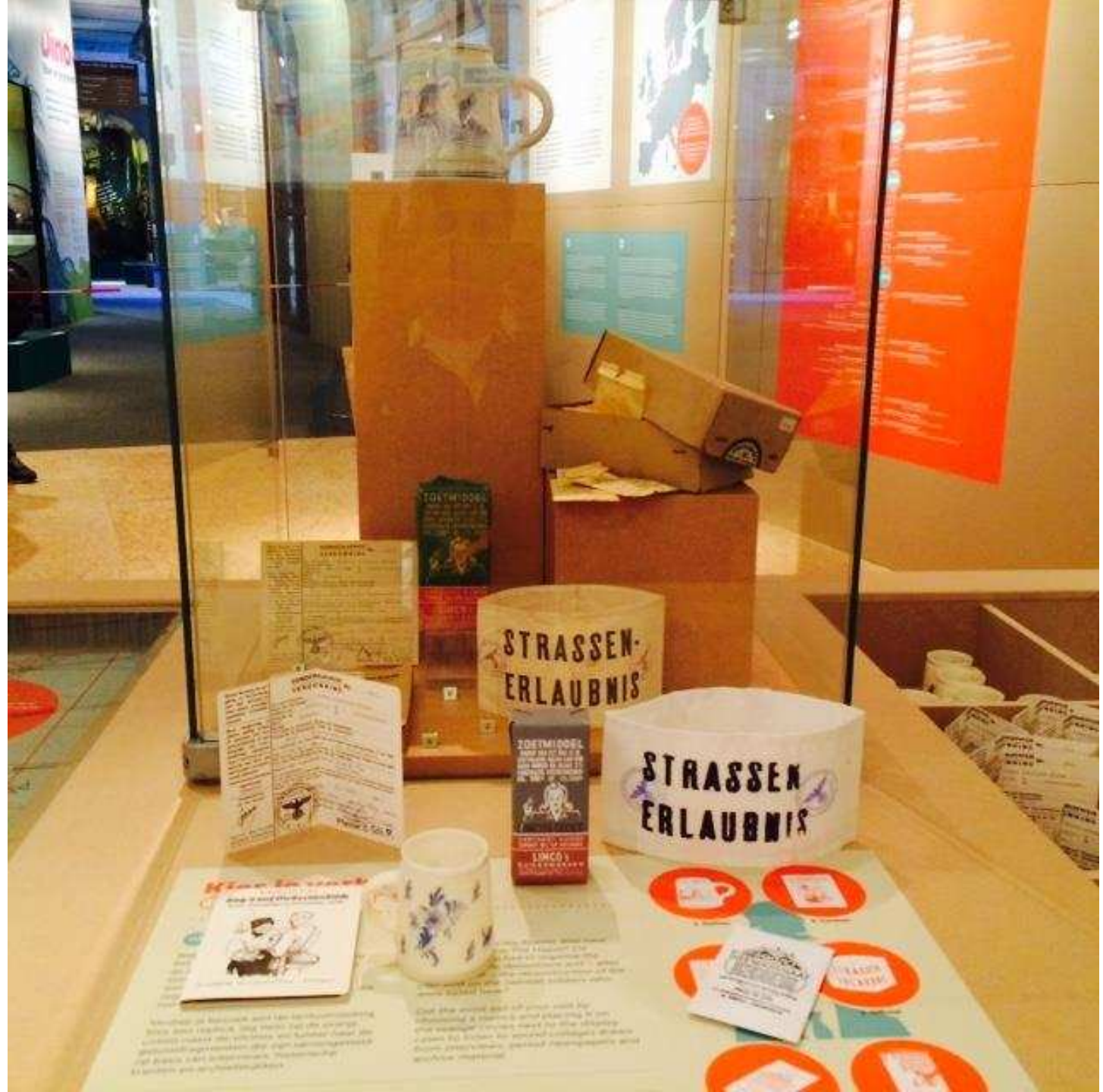
Deze vergunning is slechts geldig indien zij tezamen met een persoonsbewijs of een dergelijk van overheidswege afgegeven legitimatiepapier, waarop een foto van den houder voorkomt, wordt getoond
Eigenhändige Unterschrift
Handteekening van den houder
NADRUK VERBODEN
RIJKSUITGEVERIJ
SONDERAUSWEIS
VERGUNNING
Nr.
Zu- und Vorname
Naam en Voornamen
Geboren am
Geboren op
Beruf
Beroep
Wohnhaft in (Wohnort, Straße und Hausnummer)
Wonende in (Gemeente, Straat en Huisnummer)
Meister d. Sch. P.
ZOETMIDDEL
INHOUD VAN DIT PAK IS IN ZOETWAARDE GELIJK AAN 500 GRAM SUIKER EN BEVAT 2% KUNSTMATIG VERZOETINGSMIDDEL 250× OF 1% 550×
LIMCO'S TROEF
VERVANGT SUIKER ZONDER BIJ OF NASMAAK
LIMCO'S SUIKERWERKEN
AMSTERDAM-W.
STRASSEN-
LAUBNIS
Bog 'o auf Niederländisch


STRASSEN-
ERLAUBNIS
STRASSEN
ERLAUBNIS

ZOETMIDDEL
LIMCO'S TROEF
LIMCO'S
SUIKERWERKEN
Atlantik
wall

SONDERAUSWEIS
VERGUNNING Nr.
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Deze vergunning is slechts geldig indien zij tezamen met een persoonsbewijs of een dergelijk van overheidswege afgegeven legitimatiepapier, waarop een foto van den houder voorkomt, wordt getoond
Eigenhandige Unterschrift
Handteekening van den houder
Den Haag
Der Beauftragte des Reichskommissars
für die Provinz Süd-Holland
— Polizeioffizier
Dienstsiegel
Dienststempel
NADRUK VERBODEN
RIJKSUITGEVERIJ

Kies je verhaal
Choose your story

nl

Wat betekende de Atlantikwall voor het dagelijks leven in Den Haag? Voor de ambtenaren die de evacuaties, de sloop en - na de bevrijding - de wederopbouw van de stad moesten regelen? En voor de Duitse soldaten, die hier gelegerd waren?

Verdiep je bezoek aan de tentoonstelling. Kies een replica, leg hem op de oranje cirkels naast de vitrines en luister naar de geluidsfragmenten die zijn samengesteld op basis van interviews, historische kranten en archiefstukken.

en

What impact did the Atlantic Wall have on everyday life in The Hague? On the officials who had to organise the evacuations, the demolitions and – after the liberation – the reconstruction of the city? And on the German soldiers who were based here?

Get the most out of your visit by choosing a replica and placing it on the orange circles next to the display cases to listen to sound collages drawn from interviews, period newspapers and archive material.

1 Deze bierpul kregen Duitse soldaten tijdens Kerstmis 1943 als herinnering aan de legering langs de Atlantikwall.

2 De Duitse bezetter had een avondklok ingesteld. Als je na acht uur 's avonds beroepshalve op straat moest zijn, droeg je deze armband.

3 Thee was niet meer verkrijgbaar, maar met ingrediënten als eikels, witlof, appel en krokus viel iets te maken wat op thee leek.

4 This booklet helped German soldiers communicate with the Dutch population.

5 The German occupation authorities had imposed a curfew. If you had professional reasons for being out on the streets after eight o'clock in the evening, you needed a special pass (Sonderausweis).

6 Genuine sugar was in short supply; this was a substitute sweetener.

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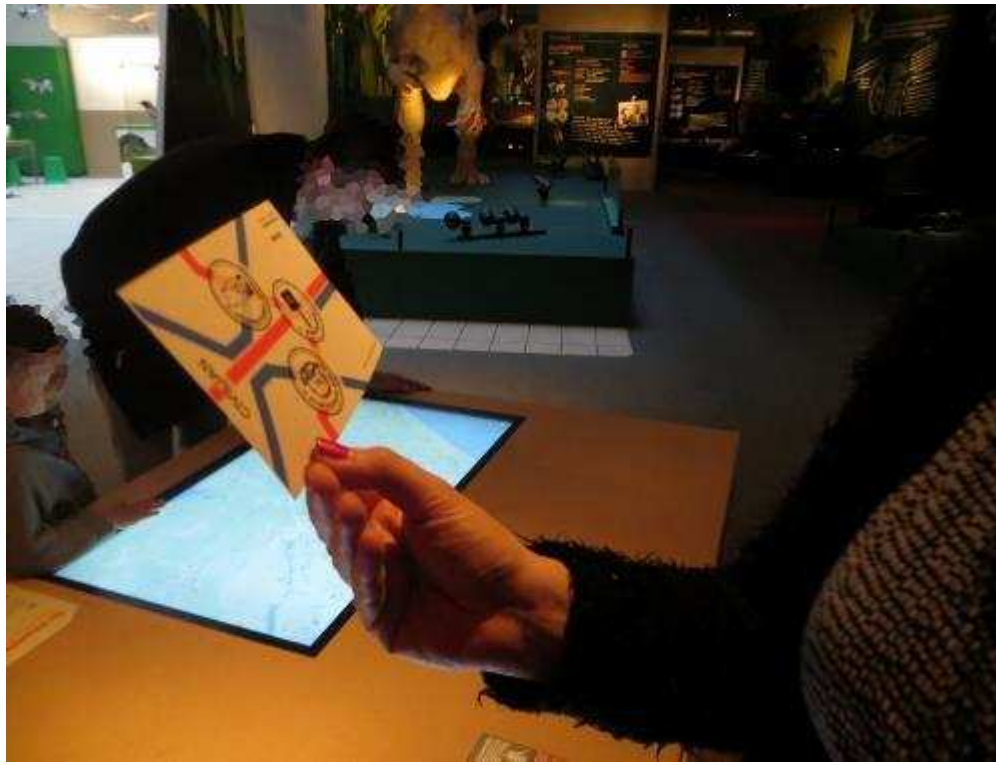
en German perspective
(English spoken)
en Official perspective
(English spoken)
STRASSEN-
STRASSEN
ERLAUBNIS
Atlantik wall
nl Ambtenaren ervaringen
(Nederlands gesproken)
nl Burger ervar
(Nederlands gesp

Checkout station



Home | Atlantikwall Museon | Logout

English

Click on the map to add a new location

The wartime fishing industry

In the course of 1940/41, the Germans requisitioned all the best boats in the Scheveningen fishing fleet. Only a small number of vessels were allowed to continue fishing and then only under German supervision. They had to stay close in-shore and return to harbour before evening. The aim was to prevent boats and their crews escaping to England. From September 1944, the fleet was confined to port and fishing

meSch receives funding from the European Community's 7FP ICT for access to cultural resources GA 600851.
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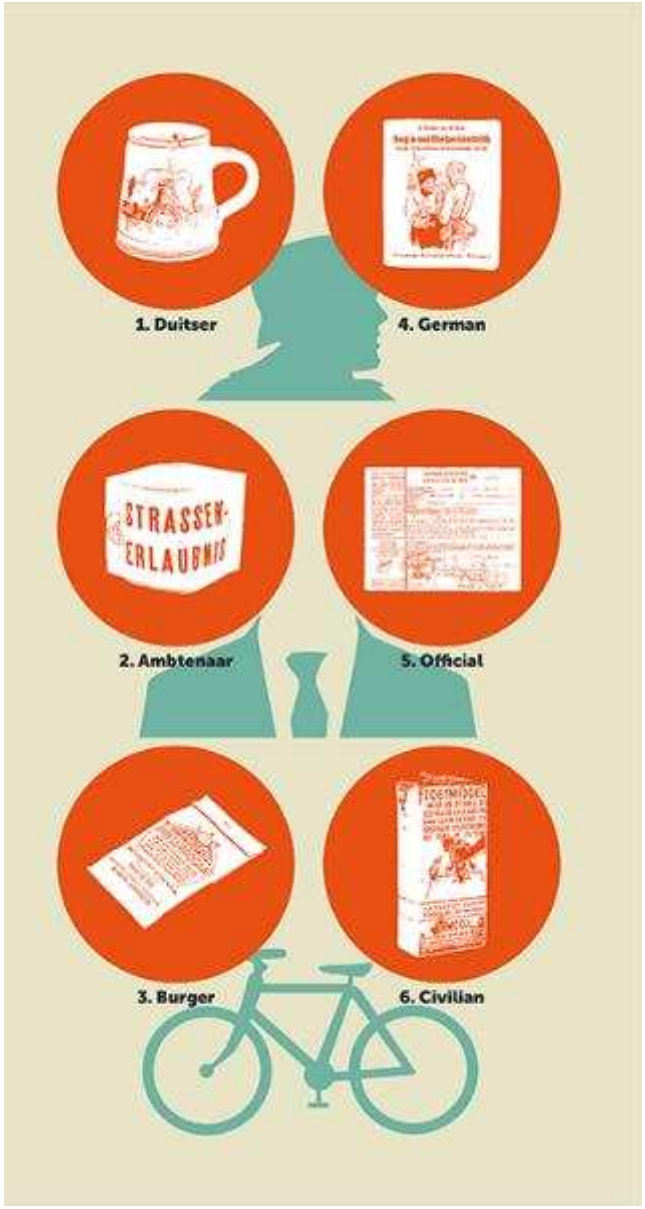
Evaluation

- 4 different cameras over 9 days
- 37 hours and 50 minutes of video captured
- Conversations at the smart replica station

logs

- Total visitor sessions: 14,853 [out of 20,000)
- Average sessions per day: 75
- Peak sessions per day: 187
- Average contents view per session: 48.5%

10 meSch points with 2 to 3 minutes of contents



Perspective	Dutch	English	
Soldier	4768	936	**5704**
Civilian	4484	1769	**6253**
Civil Servant	2352	544	**2896**

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Regular visitor study: duration of stay

	Atlantikwall	Ø
< 30 min	15%	10%
30 – 60 min	53%	41%
> 60 min	32%	49%

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Appreciation of replicas

Al-Arab	7.0
Heksen	7.4
Speed	7.7
Scheepvaart	7.8
Wetenschap	7.8
Imitatie	7.8
Atlantikwall	**7.8**
Plantastic	8.0
LL	8.1
Dino Jaws	8.3
Moordzaken	8.4
High Tech Rom.	8.4
Wildlife 2007	8.4

Use of replicas appreciation: 8.0

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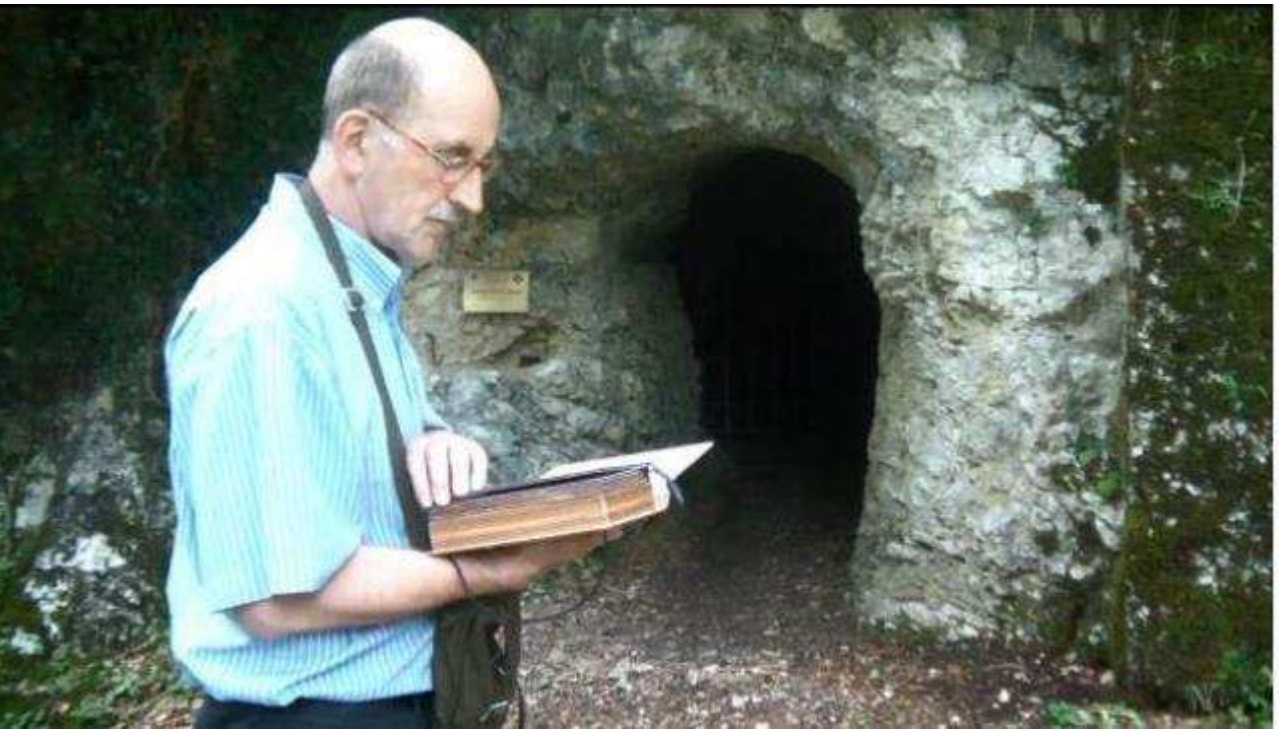
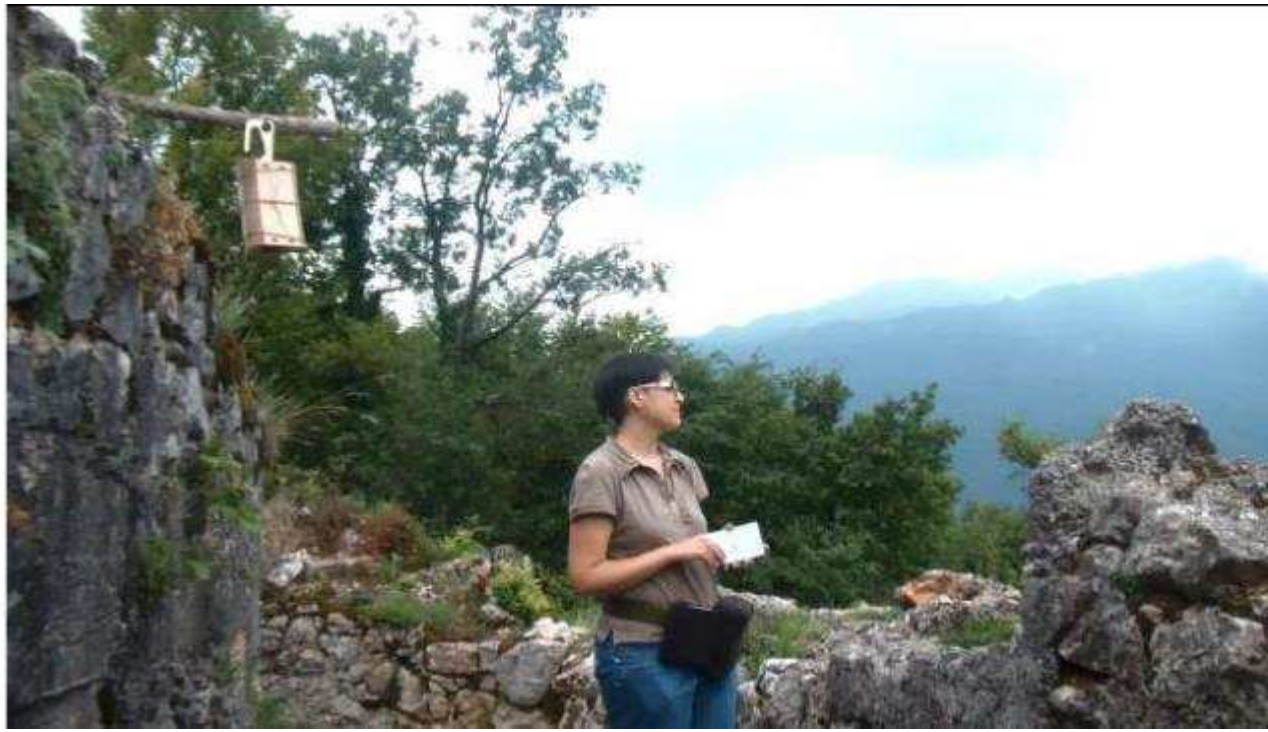
No. 236
Used 58 / 347
No. 296
Used 303 / 1737
No. 332
Used 28 / 161
No. 255
Used 8 / 27
ZOETMIDDEL
LIMCO'S
SUIKERWERKEN
Sag's auf Niederländisch
Frankhjche Verlagshandlung
Stuttgart

Fort Pozzacchio

Inspiration





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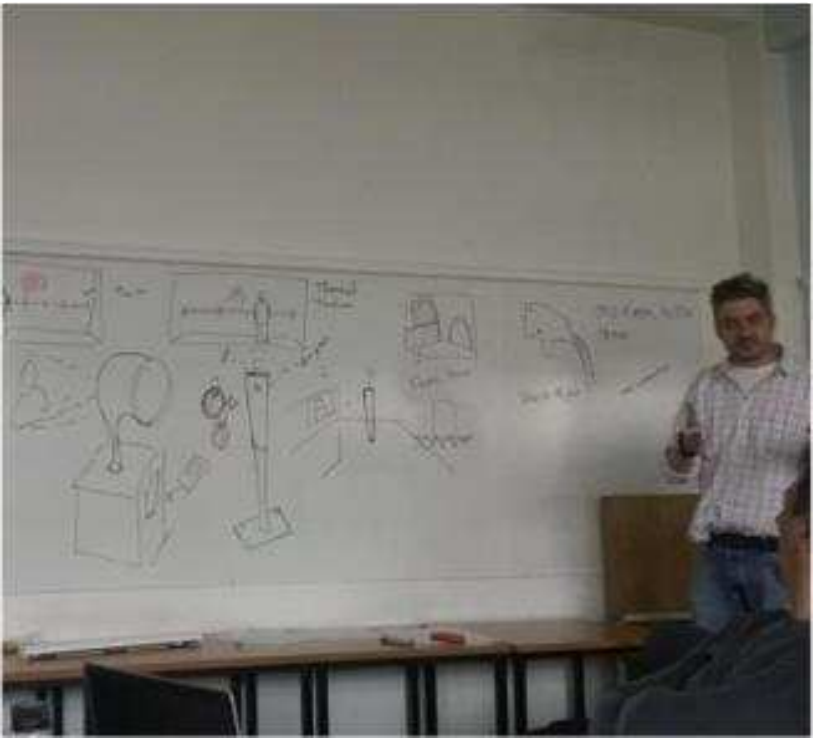
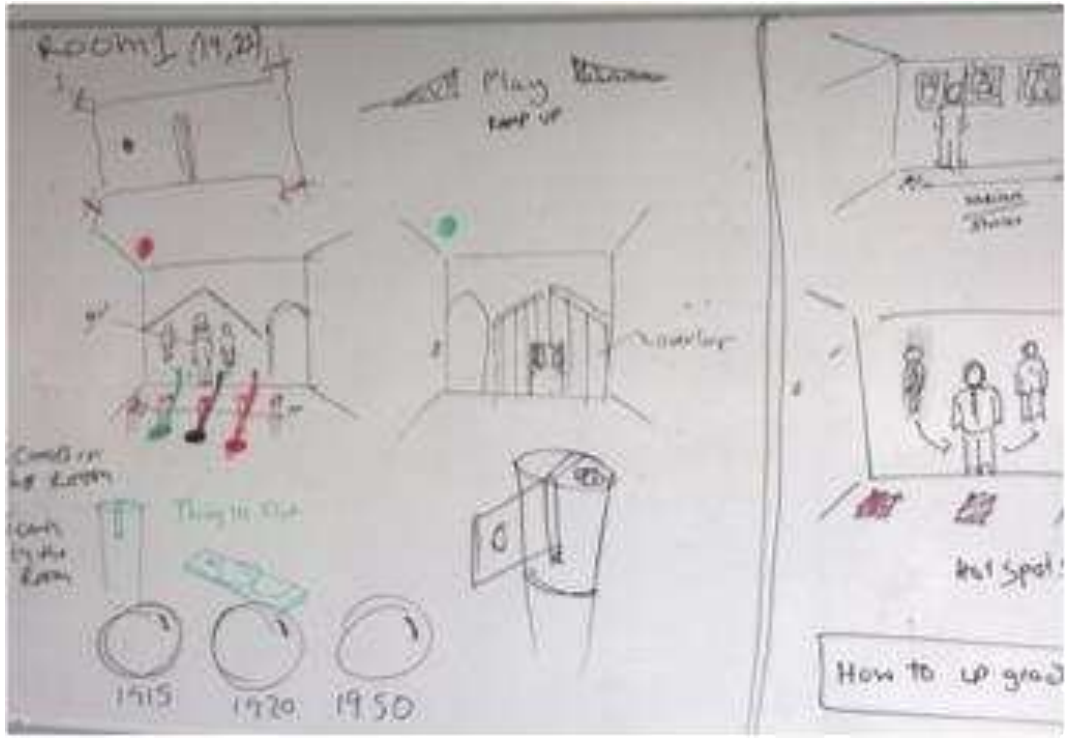
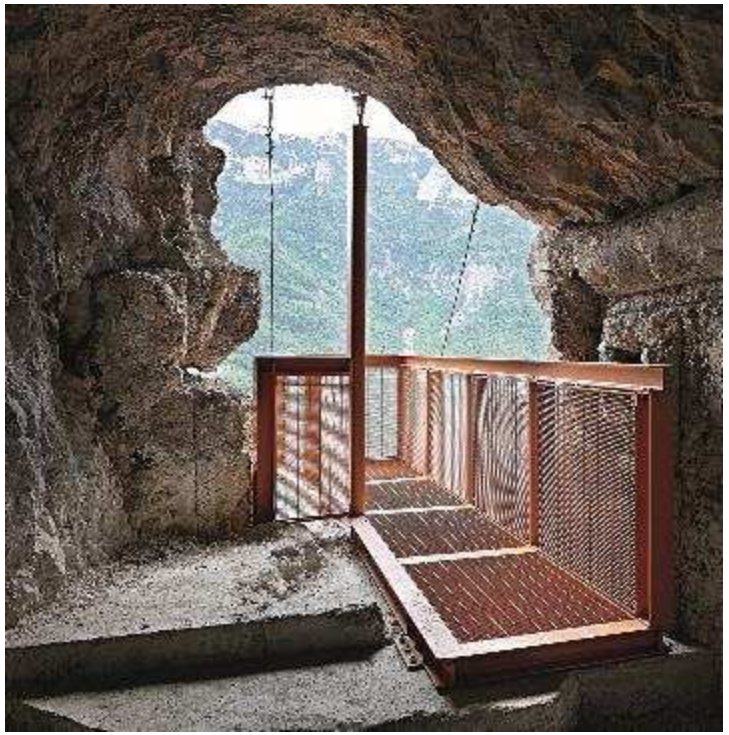
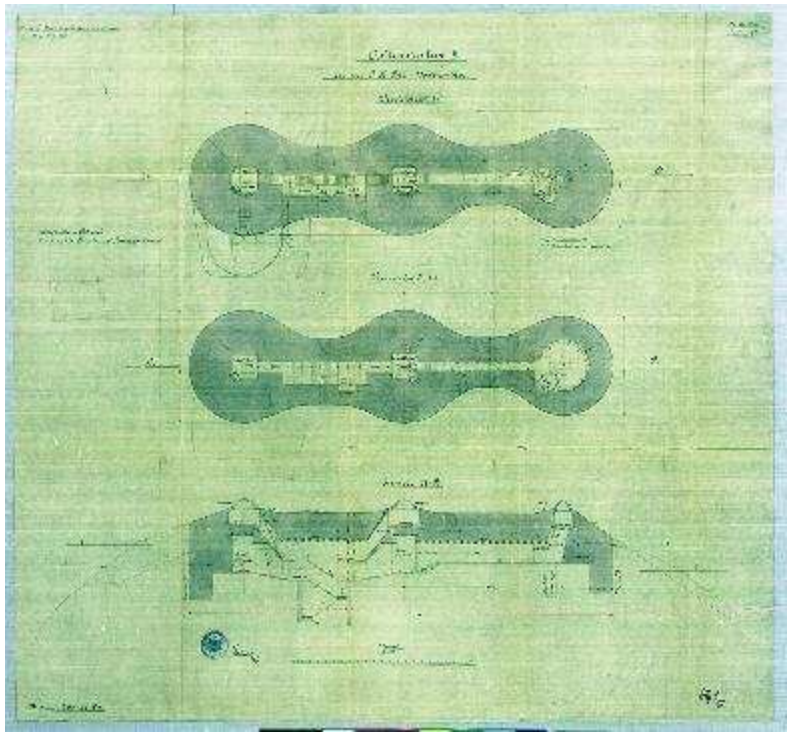
Concept brainstorming & exploration



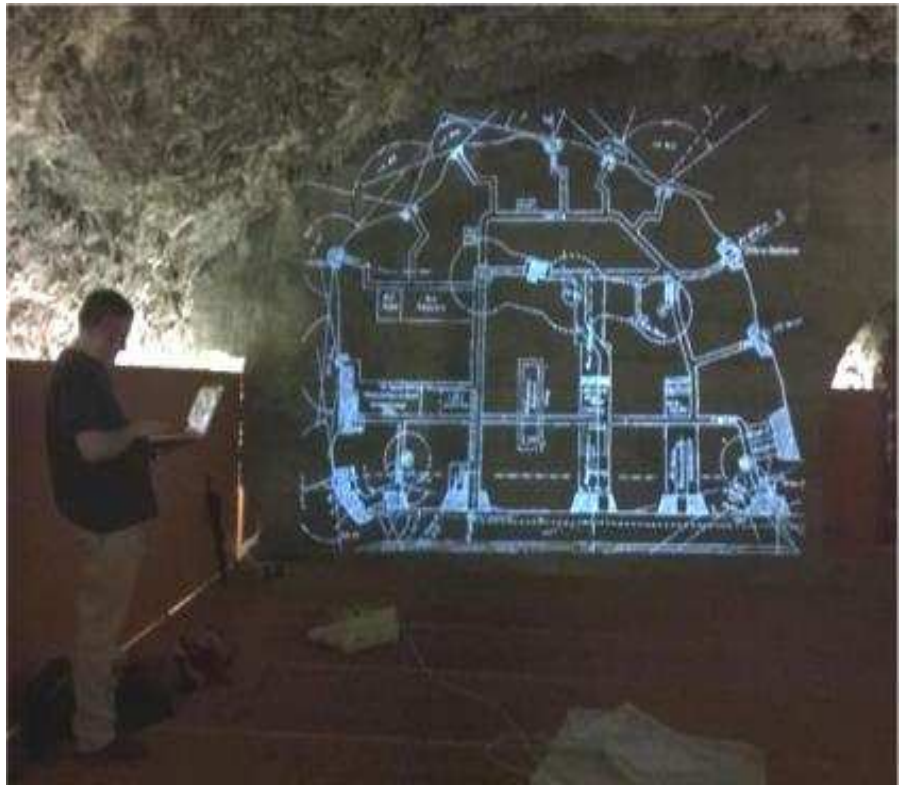


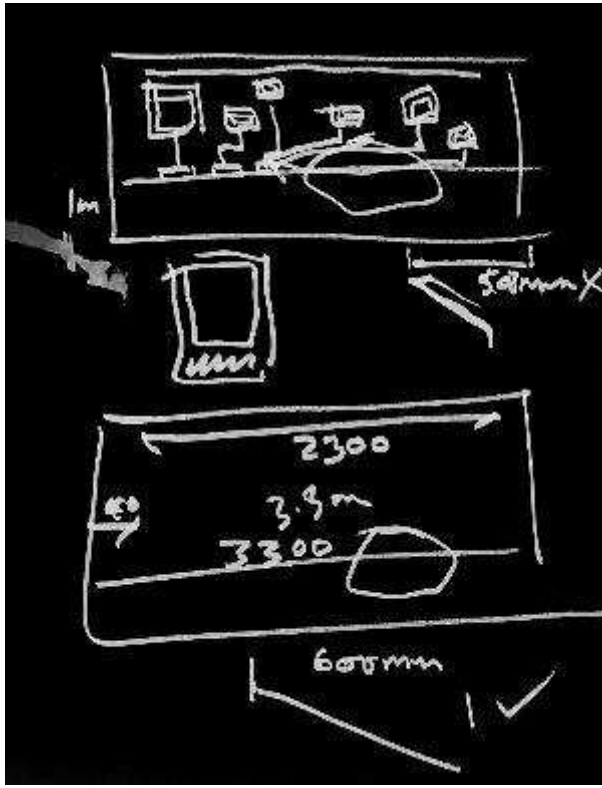




1912
1914
1920
1926
1938
1912
1914

In-situ testing





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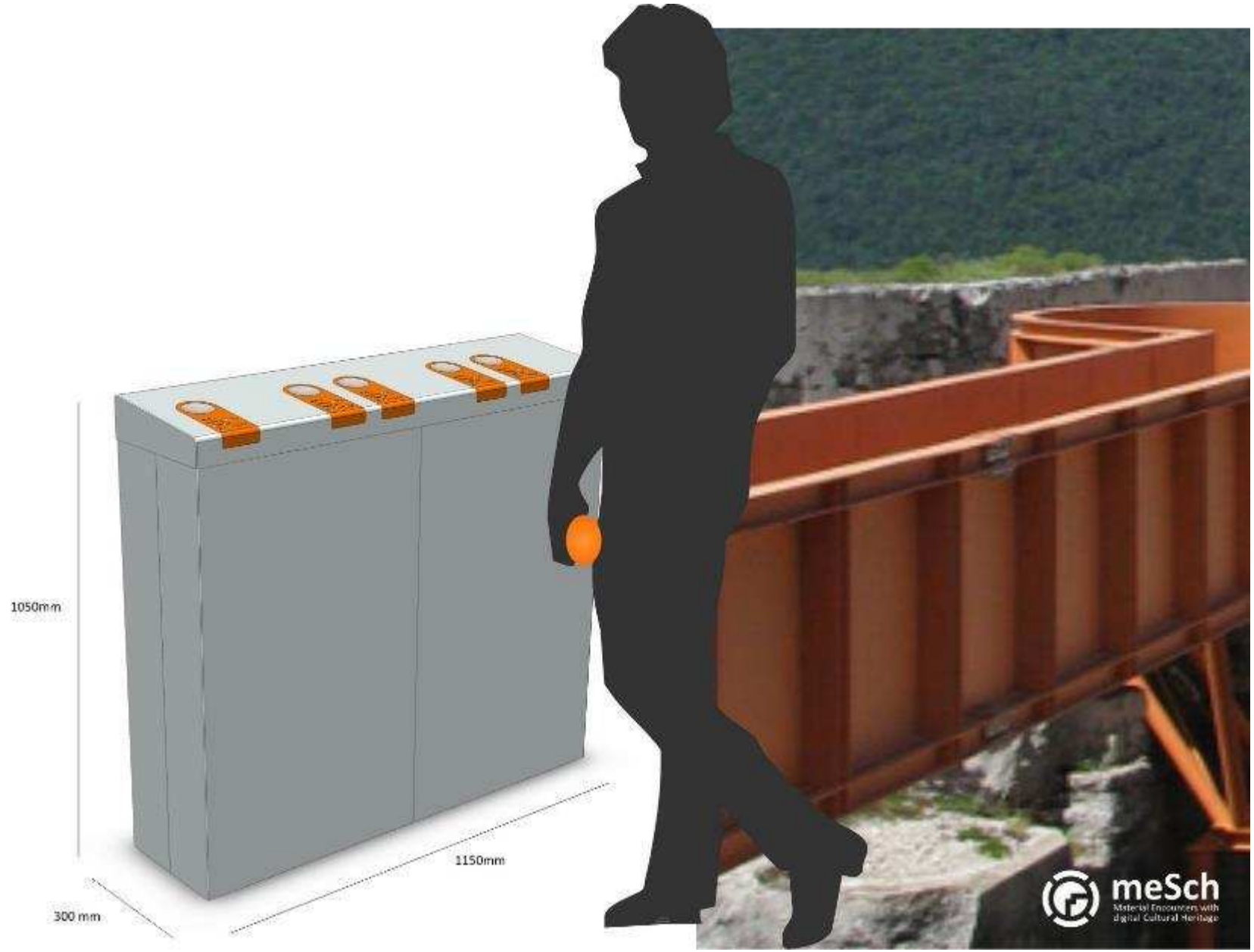
1050mm
1150mm
300 mm
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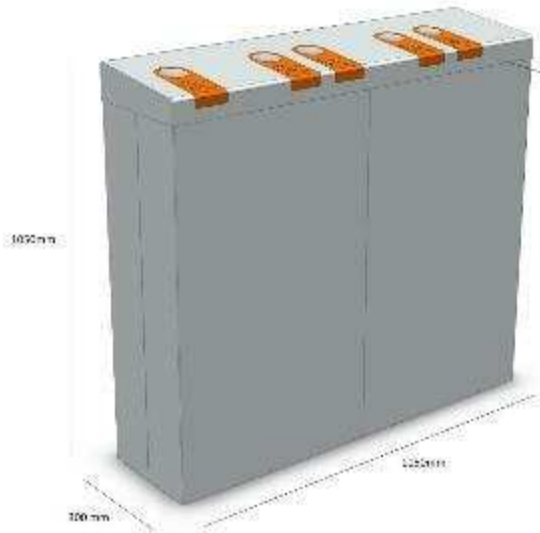
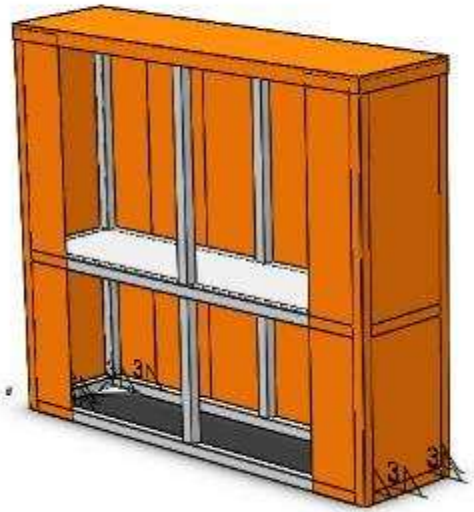
Material Encounters with
digital Cultural Heritage





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“VOCI DAL FORTE DI POZZACCHIO”

“Sezione Artiglierie della Grande Guerra
Museo Storico Italiano della Guerra”

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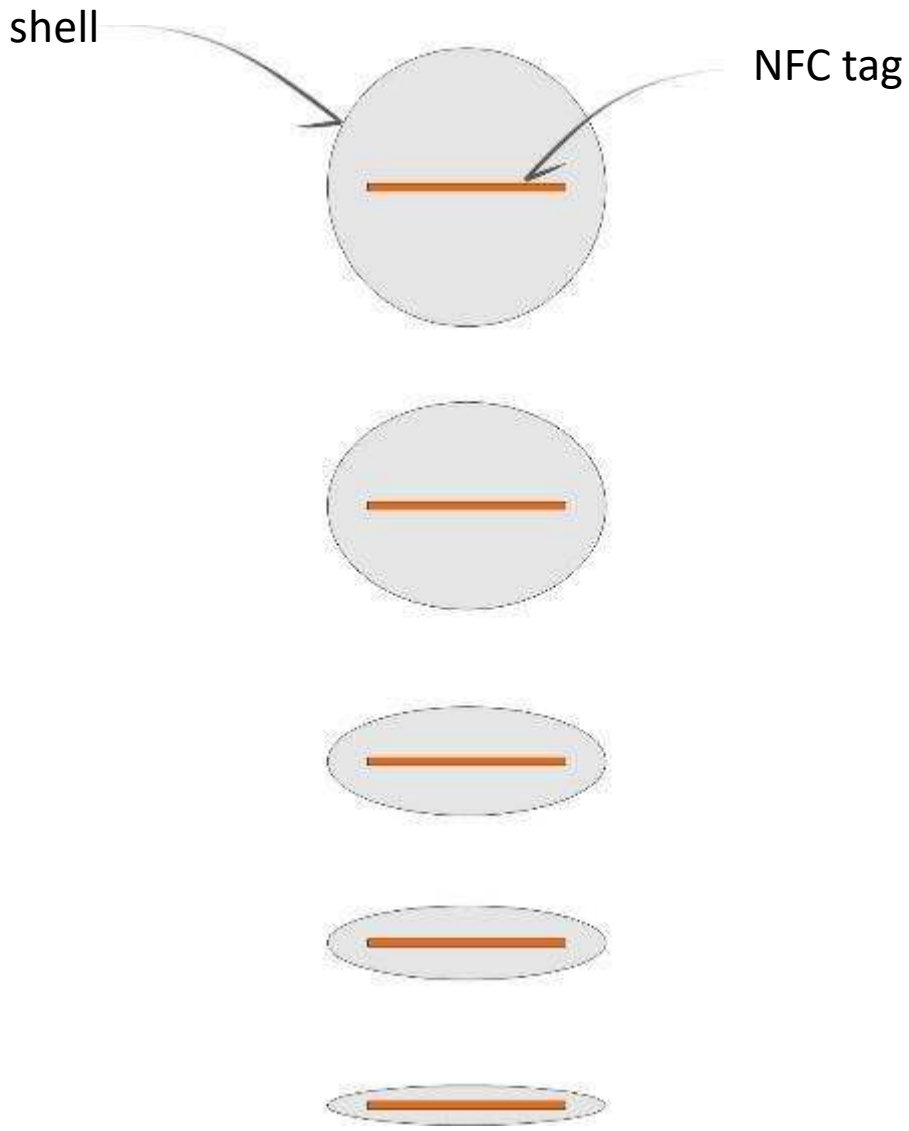
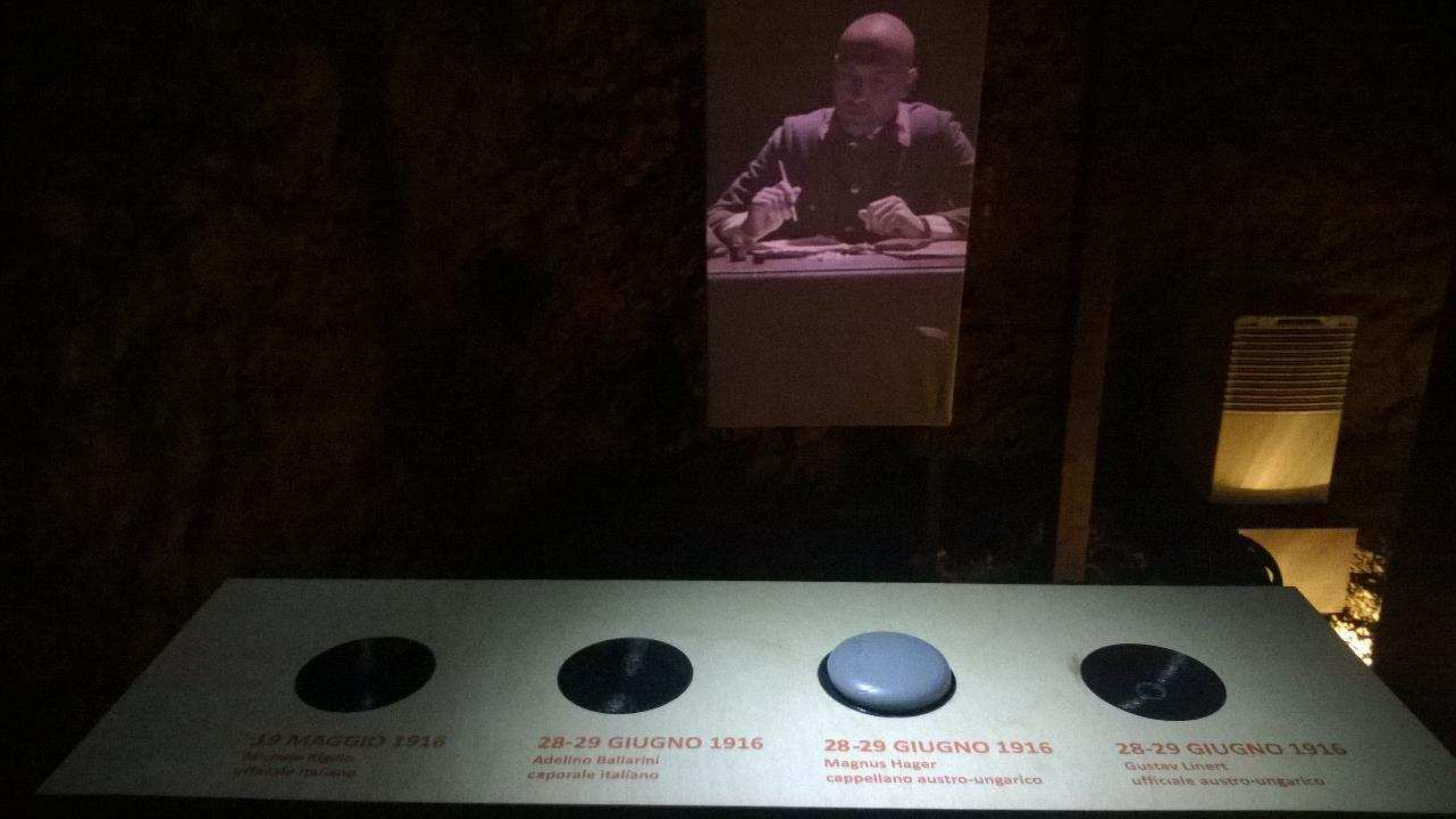
Material Encounters with
digital Cultural Heritage

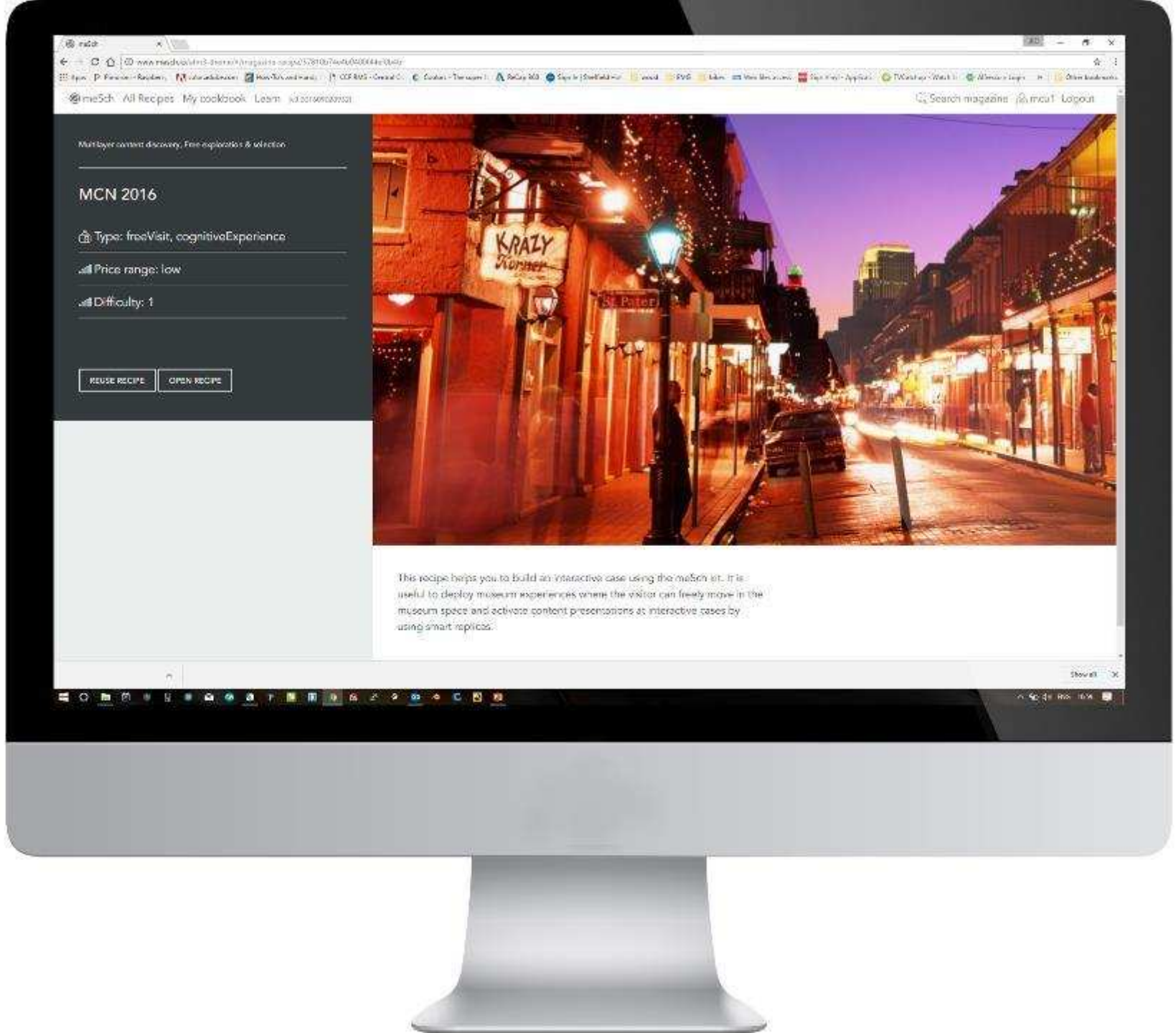

shell
NFC tag


19 MAGGIO 1916
28-29 GIUGNO 1916
Adelino Ballarini
caporale italiano
28-29 GIUGNO 1916
Magnus Hager
cappellano austro-ungarico
28-29 GIUGNO 1916
Gustav Linert
ufficiale austro-ungarico

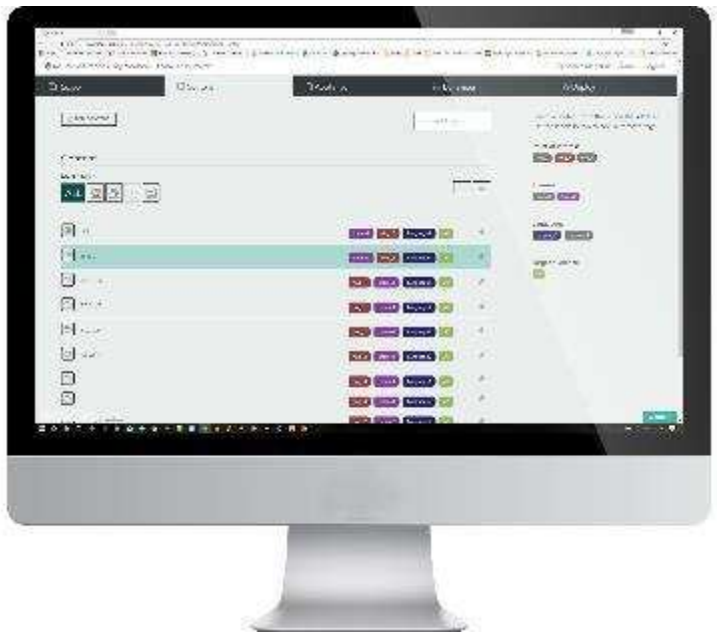
Uso dell'oggetto attivante: il "pebble"

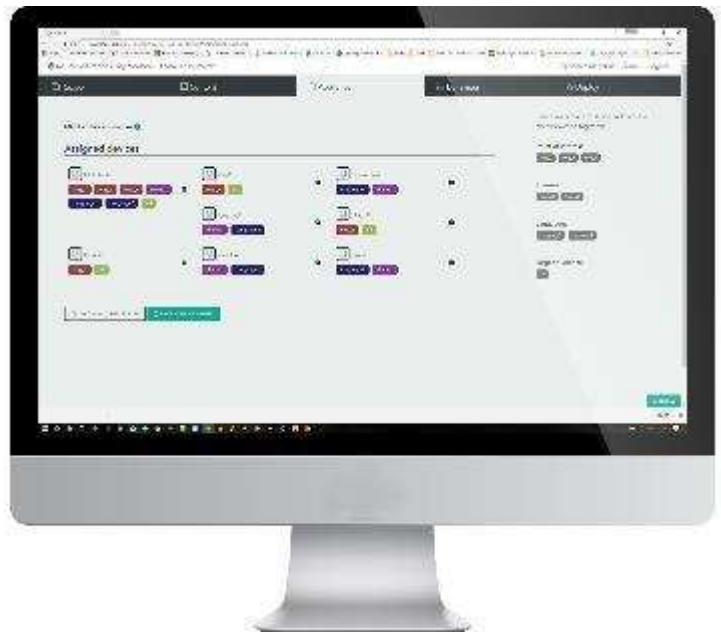
Using an activating object: the "pebble"

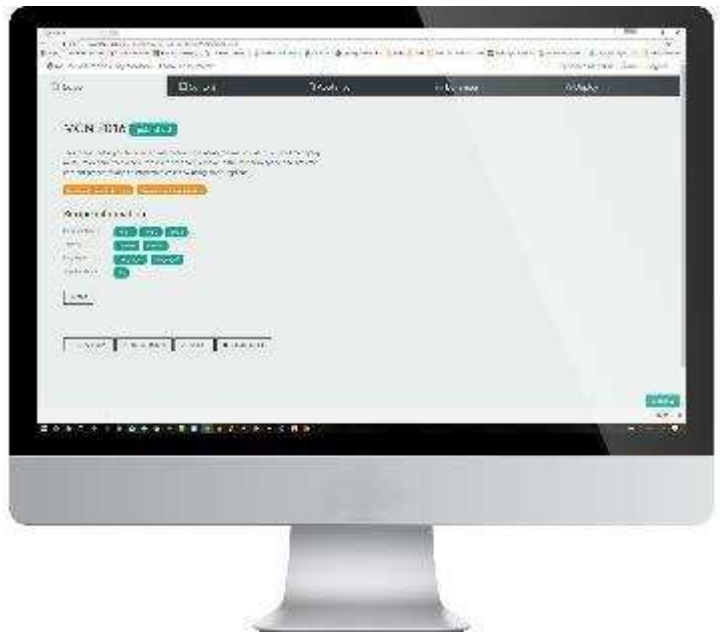
meSch Cloud tool


meSch
All Recipes
My cookbook
Learn
Search magazine
mcu1
Logout
Multilayer content discovery, Free exploration & selection
MCN 2016
Type: freeVisit, cognitiveExperience
Price range: low
Difficulty: 1
REUSE RECIPE
OPEN RECIPE
This recipe helps you to build an interactive case using the meSch kit. It is useful to deploy museum experiences where the visitor can freely move in the museum space and activate content presentations as interactive cases by using smart replicas.

meSch







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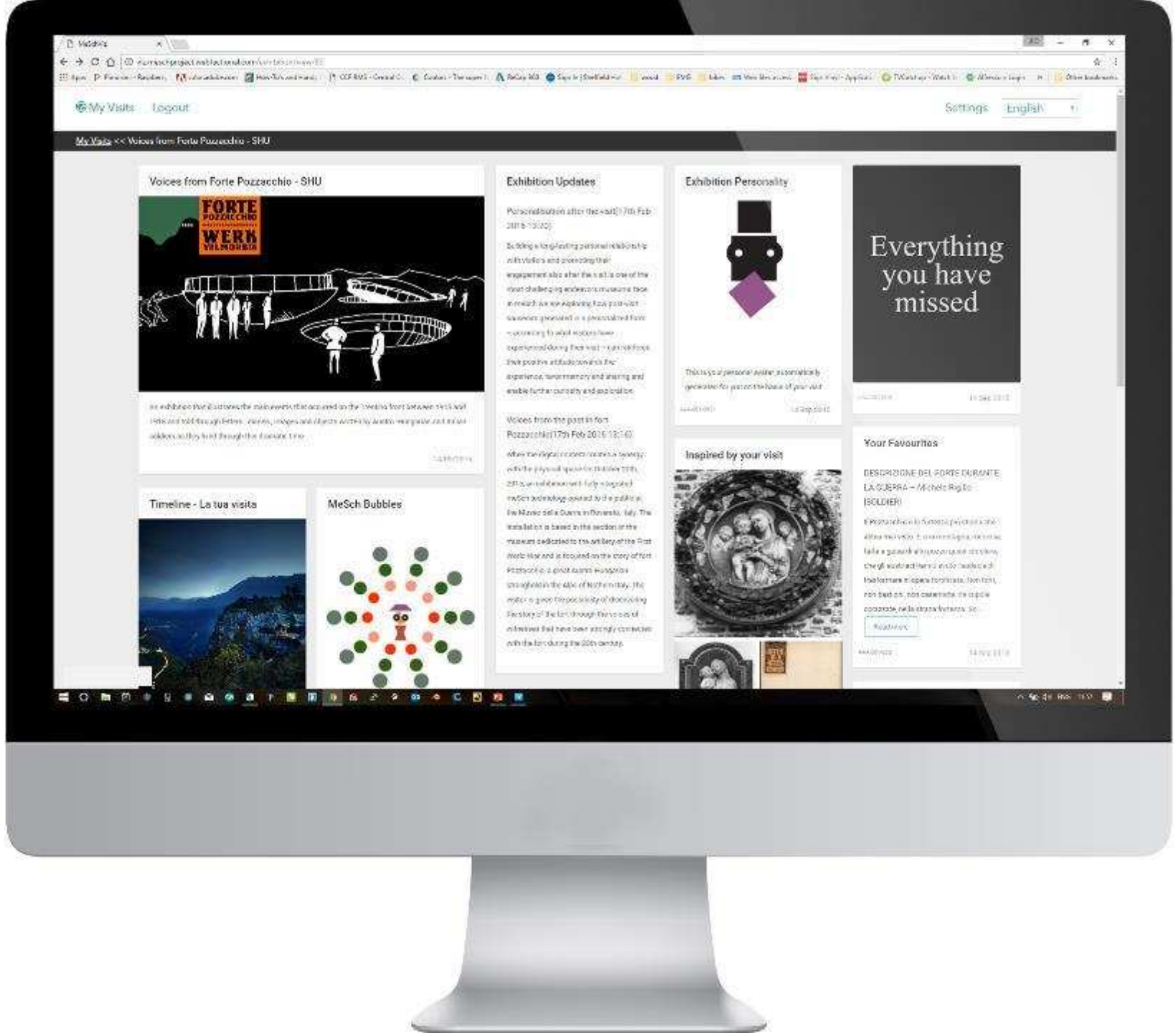
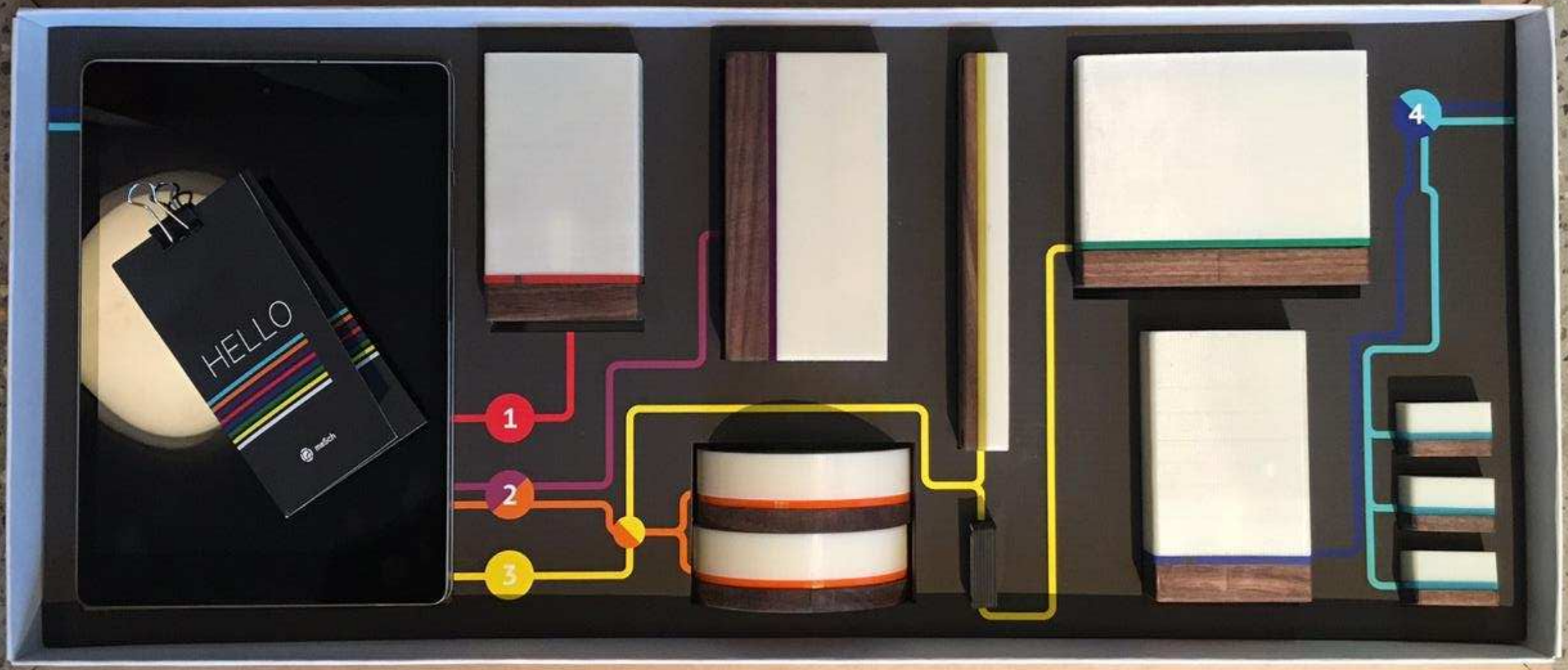
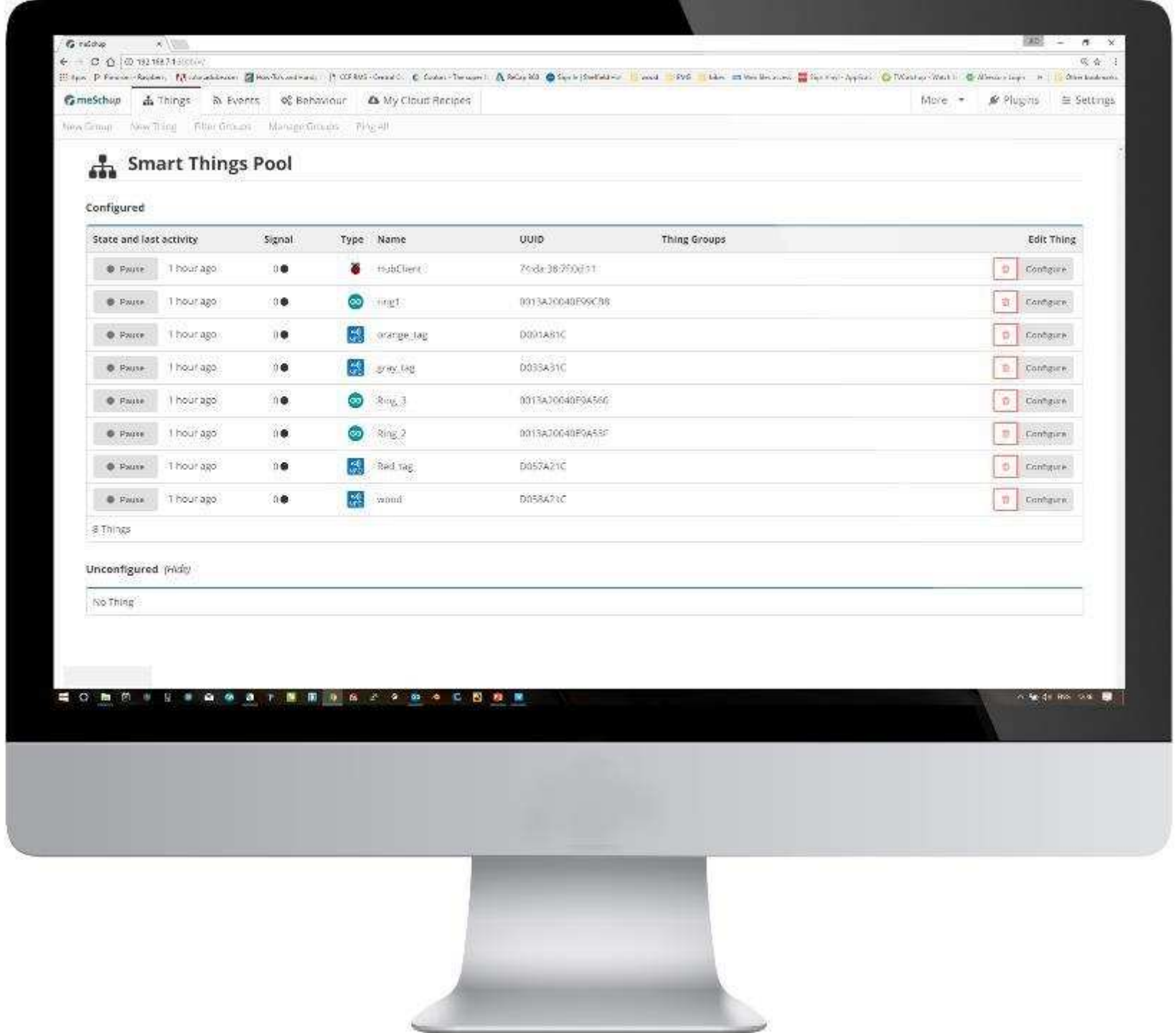

My Visits
Logout
Settings
English
My Visits << Voices from Forte Pozzacchio - SHU
Voices from Forte Pozzacchio - SHU
FORTE POZZACCHIO
WERK VALMORBIA
Exhibition Updates
Exhibition Personality
Everything you have missed
Inspired by your visit
Your Favourites
Timeline - La tua visita
MeSch Bubbles

meSch

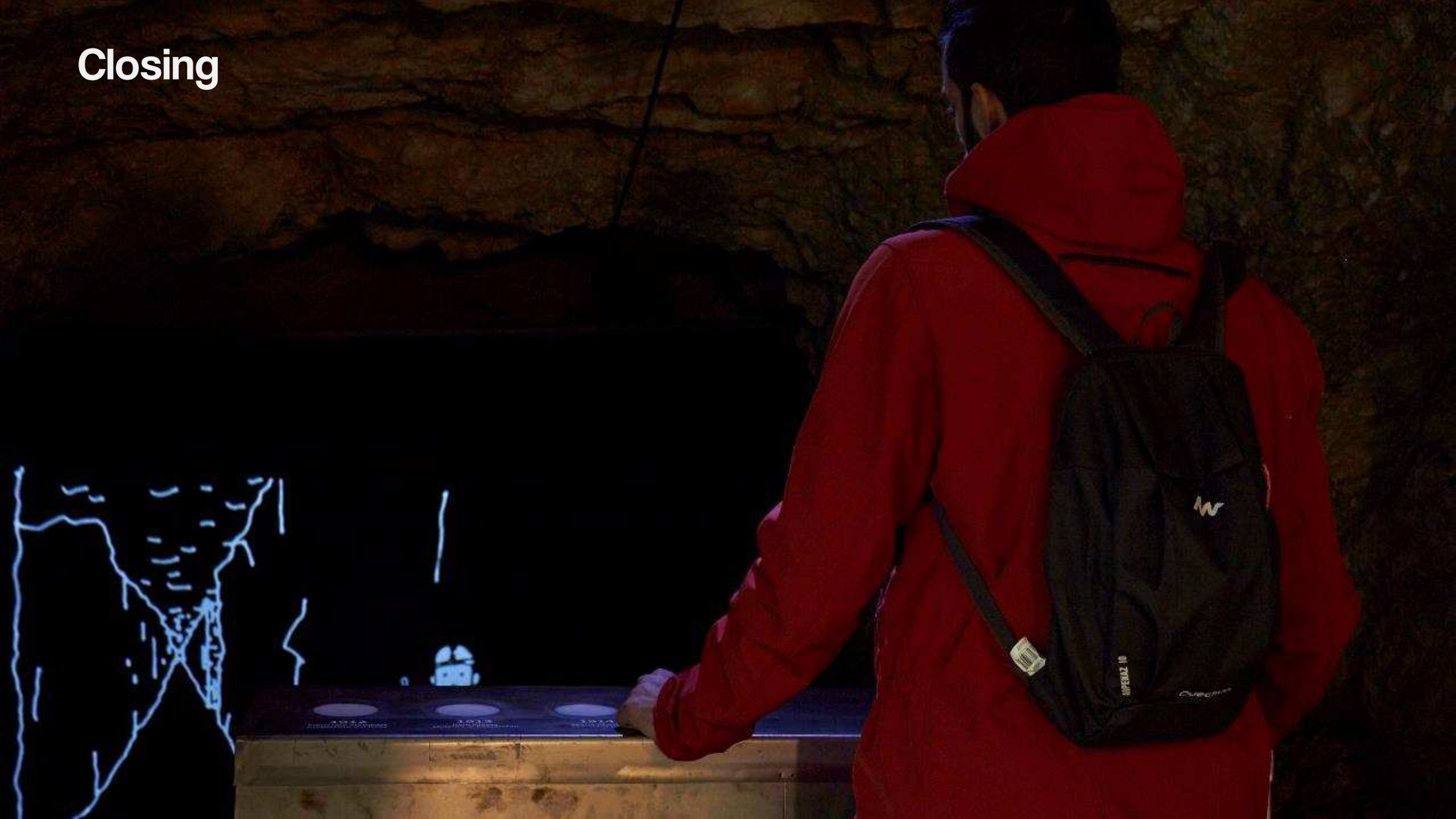
meSch Kit




meSchup
Things
Events
Behaviour
My Cloud Recipes
More
Plugins
Settings
New Group
New Thing
Filter Groups
Manage Groups
Ping all
Smart Things Pool
Configured
State and last activity
Signal
Type
Name
UUID
Thing Groups
Edit Thing
Pause
1 hour ago
hubClient
ring1
orange_tag
grey_tag
Ring_3
Ring_2
Red_tag
wood
Configure
8 Things
Unconfigured (Hide)
No Thing

meSch

Closing



www.mesch-project.eu @meschproject | #meschfp7

The project (2013-2017) receives funding from the European Community's Seventh Framework Programme 'ICT for access to cultural resources' (ICT Call 9: FP7-ICT-2011-9) under the Grant Agreement 600851.