

Virtual and augmented reality to local and global community in museums.

The cases of T.E.A.S.E., TimeMaps and Museu Ibérico de Arqueologia e Arte of Abrantes projects

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VIRTUAL REALITY

Simulates the effective reality,
that allows to make artificial life
experiments

Biocca, F.; Delaney, B. (1995)

Person live in a non-reality, made
by information added or
subtracted electronically

AUGMENTED REALITY

Enrichment of human
sensory perception through
information, usually
manipulated and conveyed
electronically, that would not
be perceived with the five
senses

Communication Strategies Lab (2012)

Person continues to live in the
physical reality, but receives
additional information or
manipulation of reality

TRANVERSAL EXPERIENCES IN ARTS: SHAPING ENVIRONMENTS

Câmara Municipal
de Abrantes

Centro Universitario
Europeo per i Beni Culturali

Instituto Terra
e Memória

Koinetwork

AIM: create a place with specifies vocation to give artists a place to make creative actions with new technologies

TOOL: specific laboratory to create objects based on design inspiration to traditional forms and its creative manipulation with virtual reality

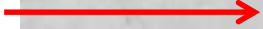
*TRADITIONAL SHAPES TO
CREATIVE VIRTUAL ACTION*

*CREATIVE VIRTUAL ACTION
TO REAL DESIGN*

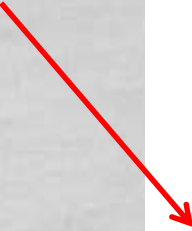


VIRTUAL REALITY

BASIC CONCEPT



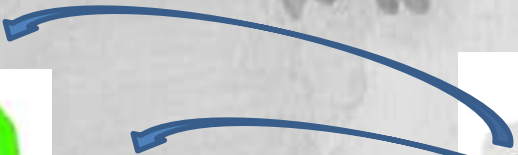
Infrared scanning



Manipulating shapes in 3D environment

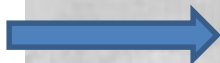


Printing design piece



Museum's artefact

DEVELOPPING



3D PRINTING
OUTPUT

USING TRADITIONAL
RAW MATERIAL

TYPICAL CULTURAL SHAPE



CREATIVE DESING



TRADITIONAL
RAW MATERIAL

COMUNITIES CREATING IN CONNECTION

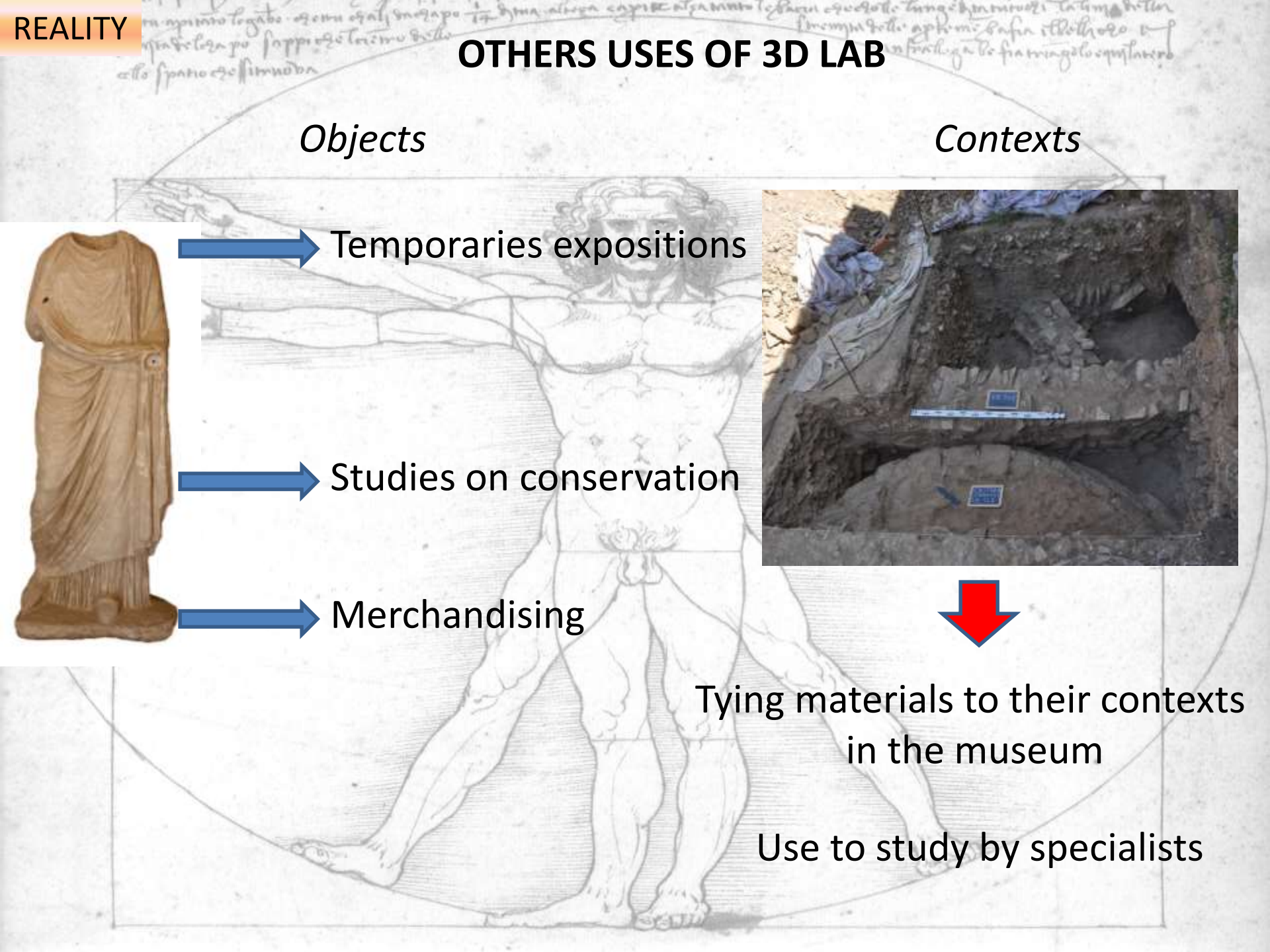


ABRANTES

SHARING CREATIVE
ACTION



RAVELLO



OTHERS USES OF 3D LAB

Objects

Contexts



→ Temporaries expositions

→ Studies on conservation

→ Merchandising

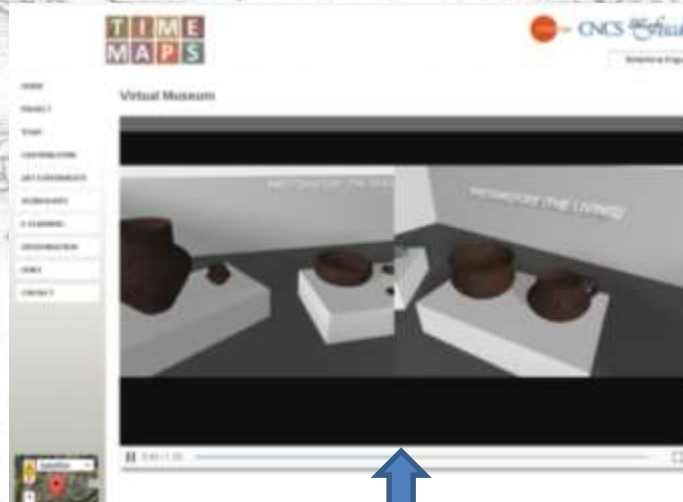


Tying materials to their contexts
in the museum

Use to study by specialists

TIMEMAPS PLATFORM

Mapping invisibles culture with
Virtual and Augmented reality



TIMEMAPS PLATFORM



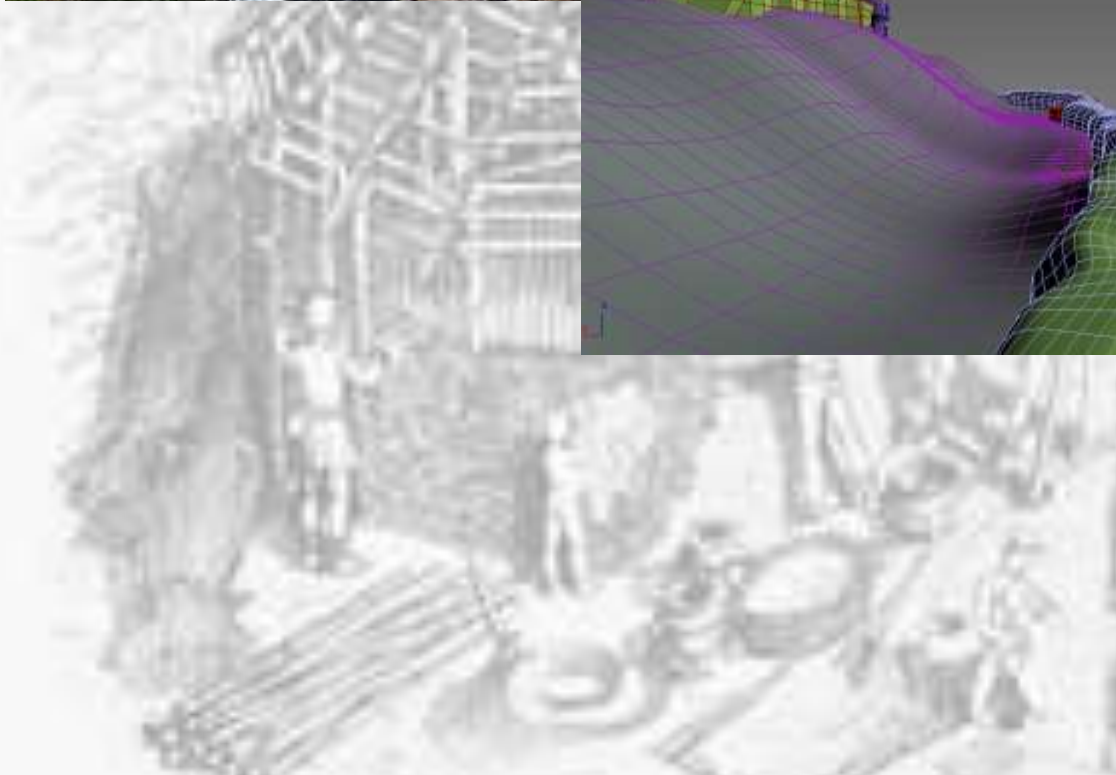
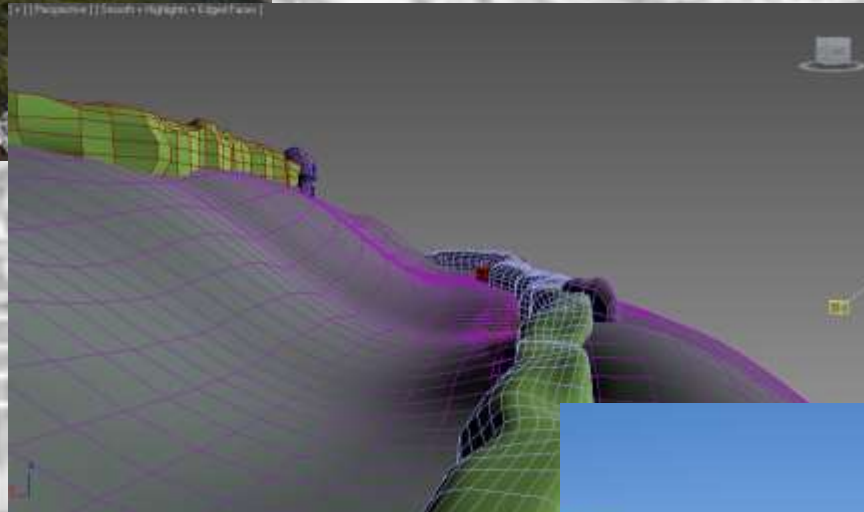
Alternatively, the Time4D Map can be used to access both prehistoric and Roman pastures



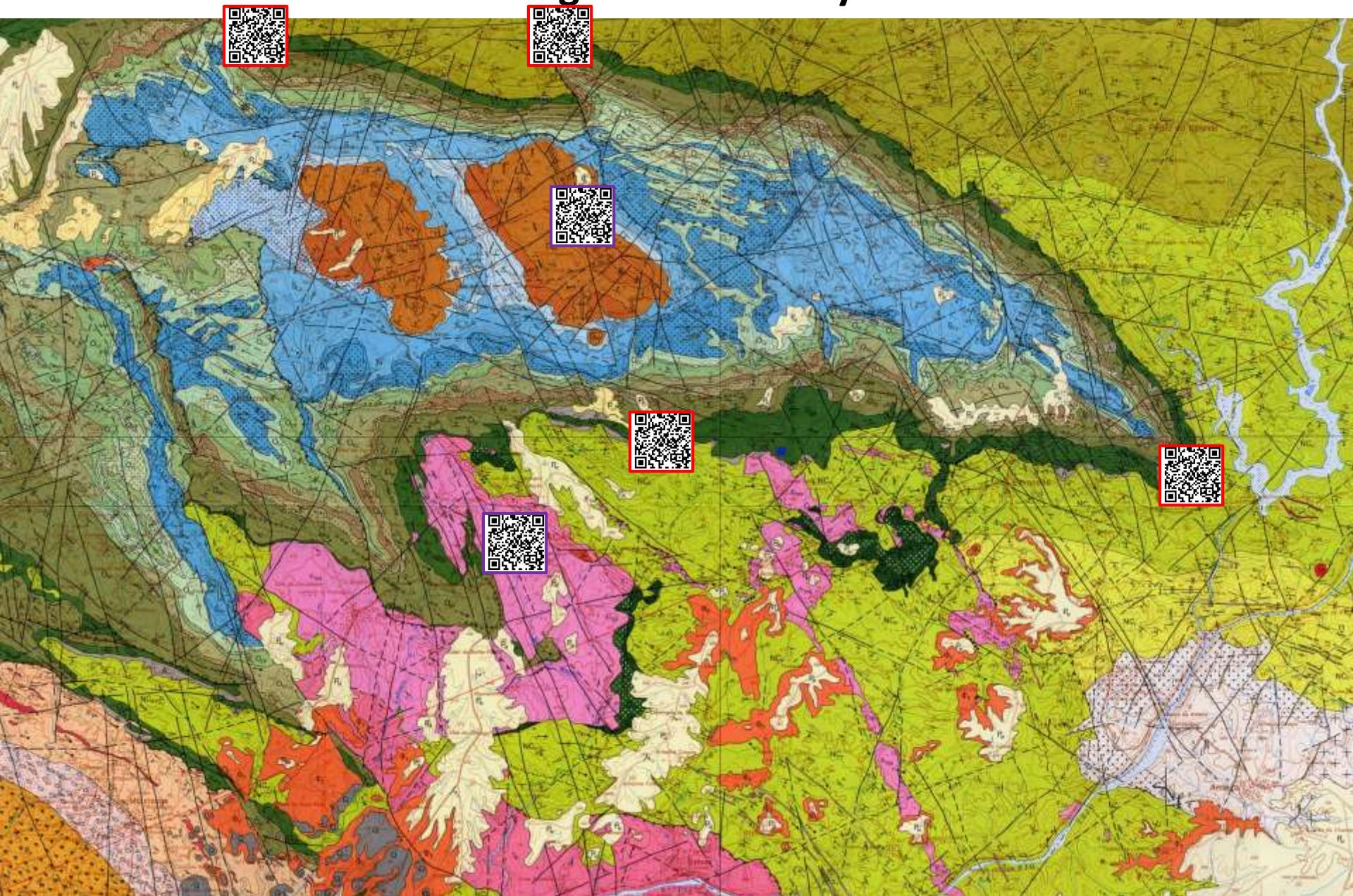
Mapping and showing invisibles
structures, contexts, artefacts

©TimeMaps, UNA, Dragos Gheorghiu and Livia Stefan

Final Bronze Age hillfort of Castelo Velho da Zimbreira (Mação- Portugal)



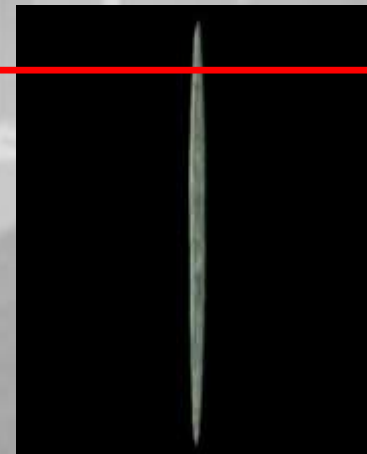
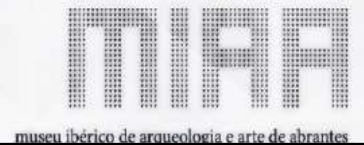
Bronze Age Hillfort network/Bronze landscape to visit in the future with augmented reality?



M.I.A.A. TEMPORARY EXPOSITION 2015 AND B.A. STAGE



Master in Photography





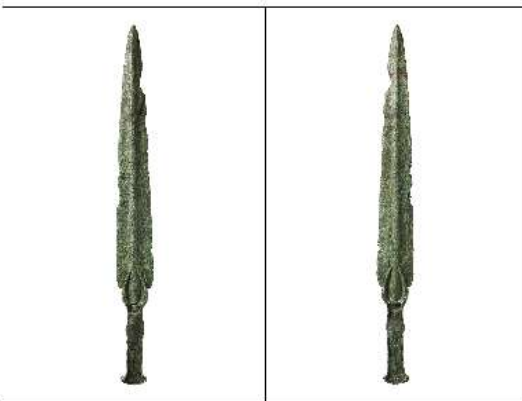
Oipe, bronze
Romano; séc. II d.C.
15,2 cm (A), 5,5 cm (L)



Pátera, bronze
Romano; séc. II d.C.
29,6 cm (C), 15,8 cm (L), 2,4 cm (A)



Capacete Apulo - Coríntio; bronze
Sul Itália; sécs. V-IV a.C.
31,2 cm (L), 26,5 cm (A), 23 cm (C)



Adaga; bronze
Luriatã; sécs. X-VII a.C.
38,6 cm (C), 4,5 cm (A), 3,6 cm (E)



Espada do Antones com bainha; ferro
Céltico; séc. IV a.C.
62,5 cm (C), 6,5 cm (A), 0,9 cm (L)



© Nuno Miguel Queiroz

AUGMENTED REALITY TO IMPROVE INFORMATION IN THE VITRINES



GO BEYOND THE OBJECTS, LINK TO HIS LIVE AND CONTEXTS

TO X-BRID Project

what are the contributions from these experiences?

1. Interaction between
virtual and augmented
Reality (theoretical)



Link museum/territory
and territory/museum



What is better for the
public (communication) vs
What the public wants



2. Possibility to Museological
and
Research experience

Creation, museums
and scientific research

THANK YOU

GRACIAS

OBRIGADO

Thanks to prof. Dragos Gheorghiu and Dr. Livia Stefan (TimeMaps)
Municipality of Abrantes (M.I.A.A. project)
&
Instituto Terra e Memória