Patrimalp, Science of Heritage: perspectives on cultural artworks

To cite this version:

HAL Id: hal-02416129
https://hal.archives-ouvertes.fr/hal-02416129
Submitted on 17 Dec 2019

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L’archive ouverte pluridisciplinaire HAL, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d’enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.
Development of an integrated and interdisciplinary heritage science

Patrimalp aims to:
- Develop an interdisciplinary scientific community at the heart of Univ. Grenoble Alpes
- Create innovative heritage research methods
- Initiate an interdisciplinary academic course on heritage
- Support heritage and culture policies

Carrying out these goals will strongly contribute to the attractiveness and international outreach of Univ. Grenoble Alpes.

A cross-disciplinary project
- history of art
- archaeology
- material sciences
- geosciences
- restoration and conservation
- computing sciences
- geography

Challenges

Purpose of the project: to support the cultural and scientific heritage policies at the heart of Univ. Grenoble Alpes. Patrimalp will carry out research on key heritage and culture strategies and will document the creative and innovative scientific and academic courses. The task is to develop an interdisciplinary approach on heritage science ( realised through the case studies).

Case studies

- Antic Theater of Lyon
- Epigraphical stone of Vaison-la-Romaine
- Saint-Michel de Connexe Priory
- Costumes and Jewelleries in the Alps
- Brocades transposed
- Neolithic rock art sites (Rocher du Château, Trou de la Fécâlaz)

WP1 - Raw matter ressources and contextualisation

- Identification of raw materials used in the processing of artefacts
- Socio-ecosystemic contextualization of raw material strategies and rock art production

WP2 - Materials, manufacturing process and alteration

- Identification of « clues » inside the matter
- Understanding their manufacturing and alteration

WP3: History, life and trajectories of artefacts

- Identification of « artefacts » and their specificities
- Interoperability between concept and vocabularies
- Identification of past activities

WP4 - Modelling and interconnected visualisation of cultural heritage

- Modelling knowledge and reasoning about heritage artefacts, their components and context
- Geovisualisation
- Restitution and Rendering

Visualisations

Textures, spatial, chronological, upgradable, interactive, 2D, 3D, augmented reality...

Purpose: To reconstitute the different “states” of the artefact.
- Understanding artefact materials through a selective analysis method.
- Dealing with, organising and sustaining heterogeneous multidisciplinary data.
- Writing the history of artefacts.

Production of a common story of the artefact across the time in its environmental and cultural context.

Scientific bottlenecks

- Reconstitute the different “states” of the artefact
- Develop an ultimate integrated physico-chemical analysis of artefacts
- Understanding artefact materials through a selective analysis method
- Dealing with, organising and sustaining heterogeneous multidisciplinary data
- Writing the history of artefacts

Included in: 2018-2021

Univ. Grenoble Alpes