

Perceptive Enhanced Realities of Colored collEctions through artificial Intelligence and Virtual Experiences

The PERCEIVE PROJECT IN BRIEF

PERCEIVE aims at creating a new way to perceive, preserve, curate, exhibit, understand and access coloured Cultural Heritage collections and Digital Artworks, promoting their re-appropriation. These collections are a priority because of their high fragility that requires shared methods to preserve and exhibit them, because of the complexity of their study and because of the significance of being able to properly communicate these to future generations. PERCEIVE supports the shaping of a European common identity around the concepts of "care" and "diversity" and at the same time strengthen the digital market for the creative industries.

The PERCEIVE project starts from the twofold needs of better preserving and communicating coloured artworks and, at the same time, improving and speeding up scientific process results, which could be employed to maximize visitors' experience with a variety of digital-coloured collections.

PERCEIVE is developed around 5 key scenarios:

- 1- Lost Polychromy of Classical Sculpture;
- 2- Fading colours in Paintings;
- 3- Fading colours in Textiles;
- 4- Historical Photos;
- 5- Digital Art.

PERCEIVE aims at advancing the digital capability of scientists and cultural institutions, through a service-based Al architecture and toolkit; and by developing a new design theory for on-site and remote XR experiences, based on "Care" "Accessibility" and "Authenticity" concepts, with and for the creative industries, expanding the access to Cultural Heritage and Art also outside museums for a wider integration with the society.

The project methodology is focused on reconstructing the original perception of the coloured artworks obtaining new images to be applied to the digital artworks, predicting the future development of colour changes, using the results of the reconstruction and prediction in interactive prototypes (the PERCEIVE experiences) and in the definition of methodological guidelines for exhibiting the coloured collections.

PARTNERS

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