

# MOVING FROM A CULTURE OF FRAGMENTS TOWARDS A FULL DIGITAL IMAGE; a critical analysis of virtual reality in the practice of conservation-restoration.

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## Introduction

This poster is aimed at understanding the role that virtual reconstruction plays in the study and conservation of artifacts presented in a fragmentary state, based on a critical analysis of the contents. The primary goal is to create a debate amongst those working in the field of cultural heritage regarding the need to apply digital technologies and visualization methods with scientific rigor. Investigations into the mechanisms that govern virtual reality, in the study and use of cultural heritage require an in-depth analysis not only in terms of its applications, but also from a speculative and epistemological point of view. Philosophical, semiological and psychological approaches must not be neglected, especially because of the emphasis they place on the contextual and cultural aspects of our experience of images. In particular from the philosophical point of view, *phenomenological aesthetics* places emphasis on the cultural dimensions and historicity of the images produced, as well as of those perceived. (See photo nr.3)

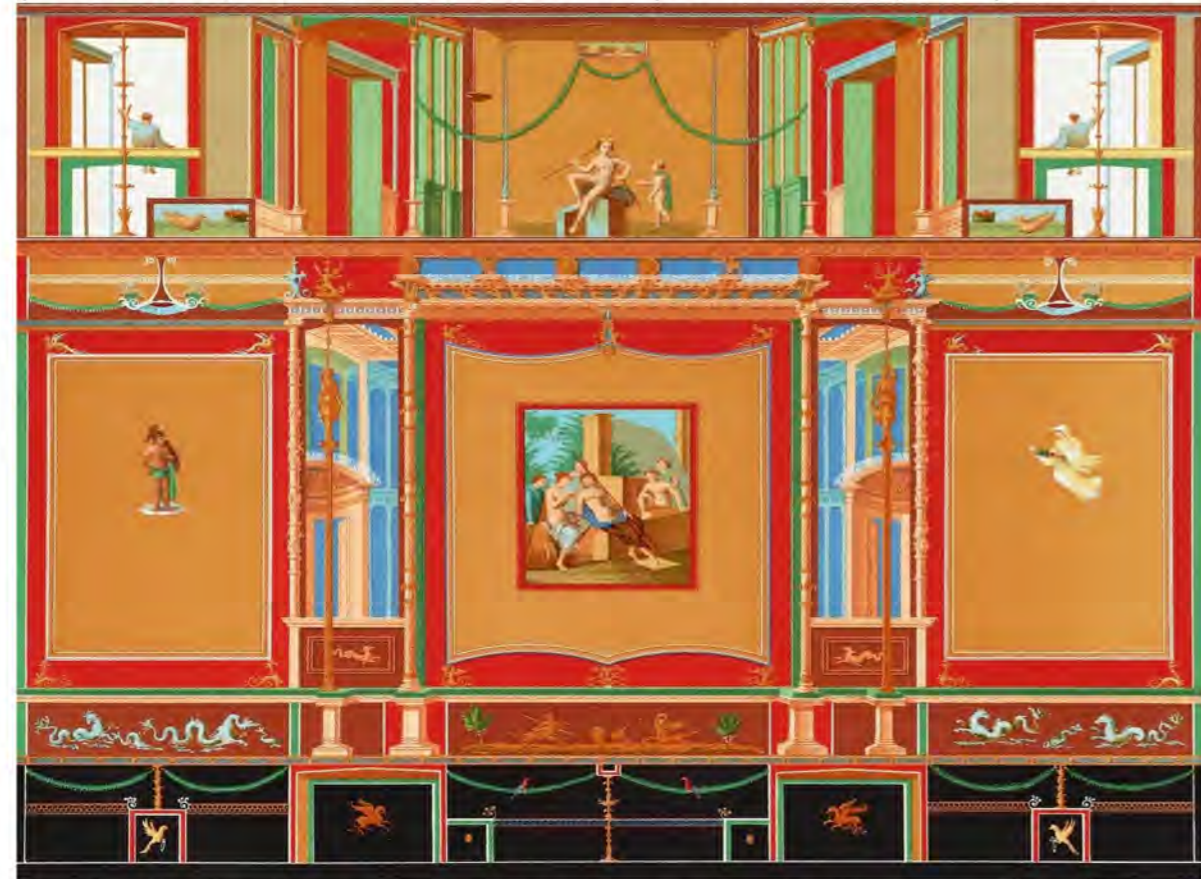


Photo nr. 1, reproduction of the frescoes in the domus of the "Tragic Poet", in "Dipinti scelti di Pompei", by Cerillo G., Loria V., 1887

Virtual reconstructions should also be analyzed according to *Gestalt psychology* which carries out an in-depth exploration of visual perception and the ordering processes that take place in our brain. The studies conducted on visual perception by Rudolf Arnheim (Arnheim 1954) and Ernest Gombrich (Gombrich 1982) exhaustively describe our inclination to prefer complete images because our brain perceives them as 'order', unlike fragmentary images which are perceived as 'disorder'. Virtual reconstructions have acquired such a pervasive role that a question arises spontaneously: what is the difference between the 18th and 19th century watercolor drawings of the Pompeian frescoes from today's renderings? (see photo nr. 1 and 2) Or again, in what are different the plaster models of ancient architecture, the replicas of the sculptures and plaster casts that scholars have used, from today's virtual 3D reconstructions? The only difference that exists, perhaps is in the medium employed.



Photo nr. 2, 3D in "Reconstructing the original splendour of the House of Caecilius Iucundus. A Complete Methodology for Virtual Archaeology Aimed at Digital Exhibition" by, Demetrescu E., et al.



Photo nr. 4, virtual reconstruction of the Baths of Caracalla in Rome, photo in "Caracala IVD: Un tufo nel passato. Come nasce un progetto di visita immersiva", by Cocheti F., et al, in Archeomatica, 2018

## Can Brandi's theory help us regards to virtual restoration-conservation?

Moreover, are the conservation and restoration theories that we have inherited capable of helping us to understand and orient ourselves in the technological world we live in? Surely all the theories on conservation that guide current conservation and restoration practice should have a "safety net" function, as they should guide our operational choices even when virtual hypotheses are made. One important element to consider is Brandi's concept of "materia". The virtual hypothesis "detritorializes" the work of art, placing it in an abstract reality, stripped of all materiality. In this way, the principle of matter as "structure" is absent, as the work of art is perceived only as a form or "aspect", deprived of its phenomenological contingency.



Photo nr. 4, in "The aurea in the age of digital materiality; rethinking preservation in the shadow of an uncertain future", p. 344, "The 'prosthetic' 3D-printed arm made to investigate restoration options for the figure of Christ in Amico Aspertini, Deposition of Christ, in San Petronio, Bologna"

The theoretical background that has guided us up to now and has imposed us some rules for direct interventions on the "matter" of the artefact, instead, when we use the virtual seem to be an optional. Not only that, when we work with interpretative hypotheses on the digital, we go beyond the limits imposed by theory and lately we notice the tendency to propose some solutions for interventions on the "matter" of the artefact that would have been unthinkable only a few years ago. 3D scans and 3D prints offer the possibility, without touching the fracture lines, to create high-precision reconstructive prostheses. (see photo nr. 4) But is this respect for the original material of the artifact sufficient to authorize us to push ourselves with the reconstructive inserts? What would be the difference between these reinstatements and those that Cavaceppi, Algardi or Pacetti proposed a few centuries ago? (see photo nr. 5)

## The evocative potential of virtual reconstructions rather than the self-sufficiency of fragments

The Romanticism and studies of philology at the end of the nineteenth century had determined a predilection for fragmentary works, so much so that the fragment had come to predict most knowledge by establishing itself as a self-sufficient aesthetic unit. No one has been able to leave a sharper and more poetic testimony of that culture, of that waiting horizon, than Shelly did in Ozymandias. This cultural horizon in which the culture of the fragment was exalted as a bearer of authenticity, tied to the progress of those studies of the disciplines that dealt with art and in particular, those of Philology, brought about the practice of de-restoration in which many re-integrations were removed in the major European collections, with an almost "iconoclastic" fury.

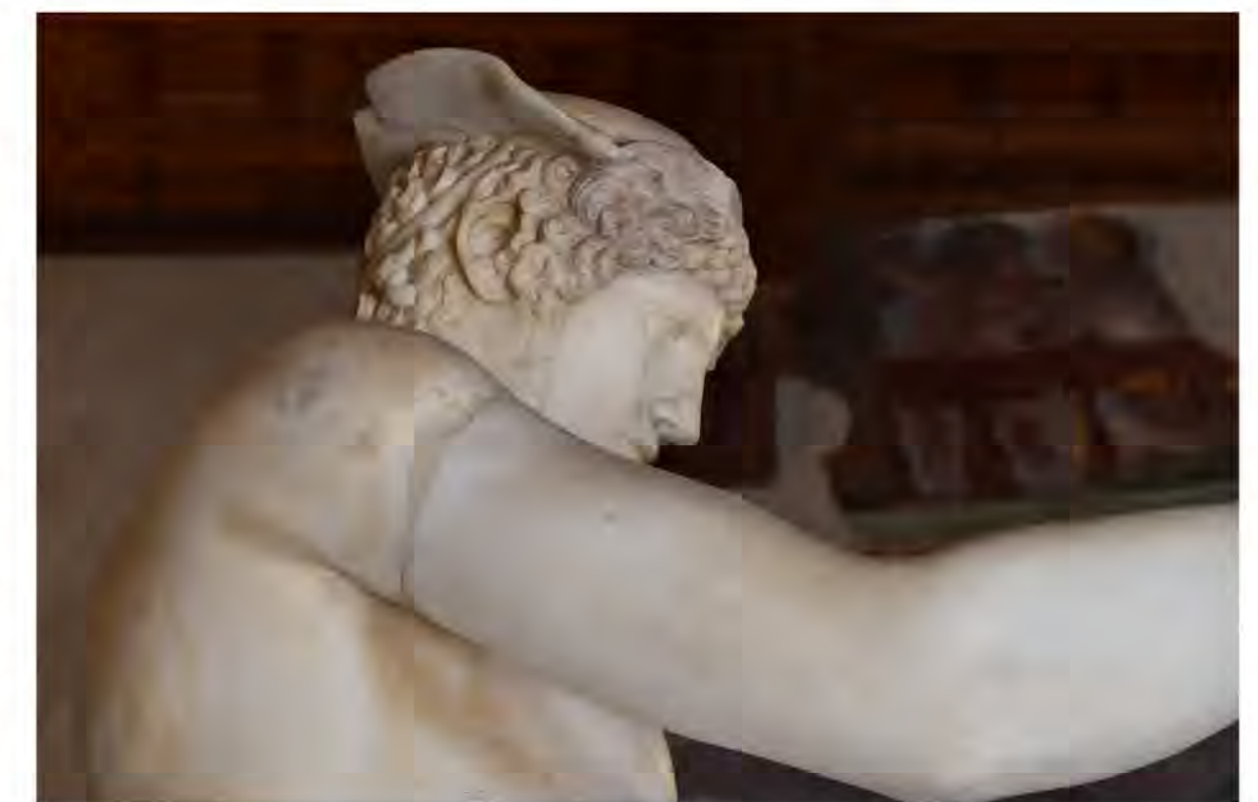


Photo nr. 5, Hermes Logios, restored by Algardi in 1631, Museo Nazionale Romano Palazzo Altemps, Roma

The de-restoration practice continues from the end of the Nineteenth century to the first half of the last century. (See photo nr. 6) The culture of the fragment and the practice of de-restoration had become so pervasive that Yourcenar gives a clear testimony of this practice in his "That Mighty Sculptor, Time", (Yourcenar M., 1983). However, it would be necessary to trace those cultural paradigms, that from the end of the nineties of the last century have helped to define the coordinates of Visual Culture and the effects it has had in today's practice of conservation and restoration. Certainly, the visual culture and the mental paradigms of the public have been solidly predisposed to tune to the whole images of contemporaneity, typical of advertising. This predisposition has led today to a radical search for complete and spectacular images. Therefore, today we are witnessing the tendency to privilege the evocative potential of whole rather than the self-sufficiency of the fragments. (Rossi Pinelli O. 2005)



Photo nr. 6, Fauno Barberini, 1) restoration by Pacetti 1799 and 2) de-restoration 1963, Munich Glyptothek, in "La cultura del restauro", p. 176, 2013.  
3) in Kermes 103, Istanze di rinnovamento nel restauro dell'antico intorno al 1675-1680, by Pierguidi S., 2016