

Challenges in the cleaning procedure of 1960's Pop Art. Mixed gouache and egg tempera on plywood.



Introduction

In the 1960s, Pop artist Francesc Artigau (Barcelona, 1940), painted a series of 9 works on plywood panels using a traditional ground layer, commercial gouache, egg yolk and color pencils. After more than 30 years exposed to rubbish amidst an indeterminate number of dogs, the paintings show a deplorable state of conservation.

The birch plywood supports had undergone a process of tremendous deterioration due to humidity from the ground and dog urine as well as from non-professional attempts at cleaning the works. The paint and ground layers also suffered from the effects of paint loss, damp spots, loss of cohesion of materials, fungi, grime imbedded into all levels, erosions, and traces from cleaning tools.

Case study

In the paint and ground layers of each of the works, pH tests have been executed on different colors and in different areas. A total of 171 points have been measured using the surface method with a CRISON® pH25 pHmeter, and 297 samples have been analysed using the cold extraction method with a HACH® pHmeter with a stainless steel micro probe. The pH measurements are carried out to detect whether changes in the pH of materials correspond with differences in the solubility of the areas analysed due to the ionization of binder proteins (rabbit-skin glue and egg yolk). Also colorimetric measurements have been performed using a KONICA MINOLTA® CM-2500c



Cleaning process

Cleaning of the paintings has been carried out using a combination of dry systems (eraser dust lightly spread over the paint surface and gently suctioned off) in the areas where the material has good cohesion and a wet system applying **rigid agar gel** to all the paint surface. So as not to ionize the proteins during the cleaning process we have prepared the agar with buffered water at a pH of 5,5.



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