The Materiality in the Altar Screens of Pedro Alexandrino de Carvalho

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Introduction

Pedro Alexandrino de Carvalho (1729 - 1810) marked the Portuguese painting of the second half of the 18th century and the first decade of the following. To him resorted the great patrons, and its artistic production was closely bound to the reconstruction of Lisbon after the earthquake of 1755. Though he didn’t receive a direct influence in his artistic formation from the most relevant European production centres, he was considered an in vogue artist in Portugal, during the last quarter of the 18th century, and so he became the painter who most painted altar screens. Altar screen is a particular painting typology that is technologically unusual, as in some exhibition systems (characteristic of the Portuguese art) the paintings inserted in the altarpieces may be moved as a theatre curtain in order to show the Holy Sacrament or exhibit a sculpture. This type of exhibition systems imparts a more scenographic dynamism to the 18th century altarpieces on churches.

Case Studies

![Image of paintings](Image)

Experimental

In this communication, we present the material study of four paintings executed by Pedro Alexandrino de Carvalho in different stages of his career.

The research methodology, in this work, includes the study of micro-samples collected over the representing colours of each painting, which were submitted to optical microscopy (OM) examinations, scanning electron microscopy with energy dispersive X-ray spectrometry (SEM-EDS) and Fourier transform infrared micro-spectroscopy (micro-FTIR) analyses.

Results

<table>
<thead>
<tr>
<th>Pigments</th>
<th>Binder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Painting P5</td>
<td>Carbon black</td>
</tr>
<tr>
<td>Painting P6</td>
<td>Carbon black</td>
</tr>
<tr>
<td>Painting P3</td>
<td>Carbon black</td>
</tr>
<tr>
<td>Painting L-Sta. 1/6/A</td>
<td>Carbon black</td>
</tr>
</tbody>
</table>

Characterization of the sample P3-1 by MO, micro-FTIR and SEM-EDS

Conclusions

Results reveal that the execution technique is similar in the four paintings: 2 preparatory layers, followed by 1 or 2 paint layers in most samples. Micro-FTIR and SEM-EDS analyses allowed identifying the pigments and binders in samples, and some coherence in the use of pigments was observed in the 3 stages of Pedro Alexandrino’s artistic production. A differentiating factor, which may help us distinguishing the altar screens on the different stages, refers to the composition of the ground layers.

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