

19 January 2004

ROCHESTER CATHEDRAL: CRYPT VAULT PAINTINGS CONSERVATION OF THE SPANDREL IN BAY 13

Introduction

The consolidation work to the area of painted plaster in the spandrel of the west wall of Bay 13 was carried out between 12 and 14 January 2004 by Mark Perry. The work was in accordance with the proposals in our survey of August 2002 and the area treated is illustrated in Graphic 9 of the survey.

Condition prior to treatment

There was severe delamination and detachment of the skim coat and of the intermediate plaster layer, from the substrate. This had created large voids (3-4cm depth) and, in places the painted plaster was hanging like a curtain.

The painted plaster had detached in a strip along the line of the voussoirs, splitting along the junction of stone and plaster. This had left an open crack and little attachment of the painted plaster to the underlying stone.

A large hollow-sounding area had been created at the top of the spandrel, to the right of the vertical crack. This moved slightly to the touch but was otherwise generally stable, albeit with a void behind. This section of plaster was not in imminent danger of falling, but was treated anyway, to ensure continuing stability.

There were several areas where the paint layer was delaminating from the lime ground, with obvious 'recent' losses. These areas of deterioration are brittle and distorted.

Treatment

- A light surface brushing removed loose accretions of dust, dirt and insect debris.
- Lime plaster fillet repairs were made to all available edges and cracks to improve adhesion. Plaster 'bridges' were gradually built up to catch hold of areas of detached painted plaster. This was necessary to retain the grout, which would otherwise pass straight through between plaster and support, such was the extent of the void. The plaster used for all repairs was lime putty and variously graded sand in a 1:3 ratio.
- A facing of Japanese tissue and Tylose MH300 was applied to the central, most fragile area to ensure stability during the consolidation processes.
- Preliminary consolidation of the underlying substrate was achieved using injections of Syton X300 (1:4 with water). This was followed by initial injections of thin lime putty to fill the least detached areas, as this mix travels further, without having the bulk that may cause unnecessary detachment.
- After pre-wetting with a solution of Industrial Methylated Spirit and water, further injections of grout were then carried out, the grout consisting of slaked lime putty; Trass; fine sand. The grout is introduced under pressure through existing holes and cracks, drilled where necessary to achieve access for the flexible tube.
- Thin lime putty or Plectol B500 (10%) was injected into areas of delaminating paint and ground layers. It was not possible to press these back because of the distortion and brittleness. The larger losses were filled with fine lime plaster to protect vulnerable edges.
- A large lump of white, crumbly inappropriate repair plaster was removed from the upper area, revealing the original painted surface. The repair had been very crudely applied and smeared over the surface. This repair continues into the adjoining vault.
- Some toning down of the plaster fillets in the lower south area was carried out; however, it was not possible to apply colour washes to all the new plaster, to make them less visually intrusive, as the plaster was not dry enough for the wash to be effective.