# BANGANARTI 2004: CONSERVATION REPORT

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The main task of the season was the transfer of two paintings (from Chapels 5 and 6 of the Upper Church) and uncovering of earlier paintings on the underlying plaster.

Other uncovered paintings were also subjected to preservation treatment, paralleling to some extent work carried out in earlier seasons.<sup>1</sup>



Fig. 1. Chapel 5. Later painting with complete facing, suspended from the ceiling (Photo C. Calaforra-Rzepka)

The environmental conditions inside the church of Banganarti were improved after the building had been partly roofed in the previous season. Nonetheless, several problems still remain to be solved.

In many places the supporting walls are cracked due to earth subsidence; there are pockets between the plaster and supporting wall, the paint layer is flaked and powdered. The holes in the mural surface are due to termite action inside the plaster, and wasp nest were found adhering to the painted surfaces. Salt efflorescence appeared also on pillars of the Upper Church rebuilt later and also on the plaster of the Lower Church. Damage caused by wiping occurred often in the past and can be observed in many places of the church.

#### CONSERVATION TREATMENT

The two transferred paintings were first cleaned carefully with soft brushes, scalpels and cotton swabs with acetone. The surface was consolidated with a 2% gum arabic solution in water with a small addition of ethanol for better penetration of the consolidator. Flaking parts of the paint layer were consolidated with PRIMAL AC 33 solution (1:3 in water) [Figs. 2,7].

The facing (two layers of Japanese tissue, two layers of cotton gauze and a layer of linen canvas) was attached with a 20% solution of MOWILITH 30/60 in ethanol. It was provided with a wooden frame support and suspended from the metal bars of the ceiling [Fig. 1]. The bricks of the supporting walls were dismantled to provide access [Fig. 6].

Parts of the painting still adhering to the wall were cut with saws and detached onto a wooden table prepared earlier for this purpose. One of the murals was transferred in three pieces, the division imposed by a cracking of the supporting wall in the past. The paintings were then transported to workshop facilities for further treatment.

After the murals were transferred, the walls that once supported the paintings were dismantled down to the ground, exposing the earlier paintings in the niche

behind them [Fig. 3]. Unfortunately both layers of paintings were poorly preserved. The mud mortar joining the bricks was attached to the paint layer and it had even dissolved it in some parts. Its firm attachment to the original mud plaster made it impossible to rescue the original paint layer [Fig. 4].

The surfaces of both paintings were cleaned carefully with soft brushes, Wishab sponges, scalpels and cotton swabs soaked in acetone and consolidated with a 2% gum arabic solution in water with a small addition of ethanol for better penetration of the consolidator. The gum arabic solution consolidated the powdered fragments well, but increased the flaking of the delaminated paint layer. Consequently, the flaking parts were consolidated with a PRIMAL AC 33 solution (1:3 in water) with better result. To fill in the pockets in the plaster, kaolinsand mortar was used with a small addition of gum arabic for better adhesion to the original support [Figs. 5, 8-9]. The new paintings that had been unearthed on the walls of the Lower Church were first cleaned carefully with soft brushes, Wishab sponges, scalpels and cotton swabs with acetone and consolidated with a 2%

For the results of fieldwork in 2004, see report by B. Żurawski in this volume, pp. 297-308; for previous conservation activities, cf. PAM XIV, Reports 2002 (2003), 251-252; PAM XV, Reports 2003 (2004) 242-243.



Fig. 2. Chapel 5. Later painting in situ (Photo C. Calaforra-Rzepka)



Fig. 3. Chapel 5. Earlier painting after uncovering (Photo C. Calaforra-Rzepka)



Fig. 4. Chapel 5. Earlier painting after uncovering detail (Photo C. Calaforra-Rzepka)



Fig. 5. Chapel 5. Earlier painting after cleaning and infilling of the gaps (Photo C. Calaforra-Rzepka)



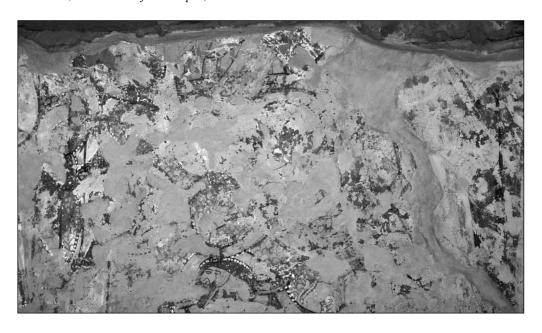
Fig. 6. Chapel 6. During the dismantling of the blocking wall: later painting with partial facing and the earlier painting uncovered (Photo C. Calaforra-Rzepka)



Fig. 7. Chapel 6. Later painting in situ (Photo C. Calaforra-Rzepka)



Fig. 8-9. Chapel 6. Earlier painting after cleaning and infilling of the gaps and detail (below) (Photo C. Calaforra-Rzepka)



PARALOID B72 solution in toluene. Flaking parts of the paint layer were consolidated with PRIMAL AC 33 solution (1:3 in water). For infillings, kaolin-sand mortar was used with a small addition of gum arabic for

better adhesion to the original support. Salt crystals were dry cleaned from the surface without desalinization compresses, as the risk of damage from water use is very high in this part of the Lower Church.