

2011-2012



THE CHINESE TEMPLE
IN CAMBRIA

RESTORATION
OF THE
INTERIOR PAINT

FOR
GREENSPACE
THE CAMBRIA LAND TRUST



ETHOS
CONSERVATION
OF ANCIENT ART



INITIAL CONDITION ASSESSMENT

Removal of the white overpaint from the walls and ceiling permitted a more thorough examination than had previously been possible, revealing a consistent original color scheme. None of the original paint has been analyzed to identify the binder (oil, casein, egg, etc.), nor has there been any scientific determination of the presence or absence of lacquer / varnish. Formal testing can of course be pursued, but will require additional time and expense. The following observations are based on our close examination and in situ tests.

Walls and Ceiling

The beaded tongue-and-groove redwood boards are painted with a blue-green color paint (which, for ease of description, may generally be termed “teal”) that exhibits numerous variations in tone and shade. Within the teal areas there are also several distinct, primarily rectangular, patches with clearly defined edges. These patches are markedly lighter and less green than the surrounding paint and are more appropriately classified as light blue in color (“robin’s egg- blue”.)

The difference in hue between the teal areas and robin’s-egg blue patches could be explained by either a yellowed coating in the teal areas and/or application of an additional layer(s) of differently colored paint. However, physical examination under magnification and solvent tests of selected sample sites produced no evidence of any varnish, coating or other paint. We have concluded that both the teal and blue areas are actually the same original paint that has simply weathered differently. The shapes and positions of the blue patches indicate that these areas were covered for a long period of time by furniture, signage or hardware and were thus relatively more protected from direct light. The areas of the robin’s egg-blue paint appear to have undergone less change in color than the more exposed teal areas and thus presumably remain closest to the shade as it was originally applied. The color appears to have been applied only in one coat and there is no evidence of repainting or partial repairs.

The weathering of the teal was not uniform and has resulted in a wide range of color variation, including tones of yellow-green, olive and dark green. In addition, there is mechanical damage that was sustained over the years — scratches, holes, worn paint, water infiltration, application and removal of the white overpaint. All these variations of shade and tone, both subtle and pronounced, contribute to a richly patinated

surface that emphasizes the building's long life.

During the latest structural intervention portions of the south and north walls were reconstructed using planks original to the building, but not to the specific location. Many of the boards were either unpainted or weathered to a shade that does not correspond precisely to the adjacent areas.

Molding

The crown molding at the ceiling is of the same profile as that which surrounds the altar niche and the colors are consistent in all areas. The paneling beneath the molding is unpainted; the teal color stops at the molding edge (both on ceiling and wall) and, in some places, was unintentionally brushed onto the molding. Teal paint can be seen over the gold color in a number of instances, particularly where the molding closely adjoins the ceiling and over the red paint on the molding surrounding the altar and a portion of the south window. In the main, the gold appears to have been painted over raw wood and generally occurs above traces of teal or the red paint. Because the gold color in several cases underlies the teal, and the teal covers the red, it is to be supposed the red (which matches that used for the altar shelf and panel) is also contemporaneous with the other original paint. The places where red paint has been observed over gold and teal paint appear to be the result of the red having been 'refreshed' at a later date. These repairs/restorations were made with relatively well-matched colors. We accepted these interventions as part of the building's history and did not attempt to remove them.

Door/casing

Teal paint was applied to the sides of the casing surrounding the main entrance door (and what appear to be inadvertent traces also can be seen on the face), indicating that the casing is original to the structure. The red paint of the door itself has been covered with a varnish, although the casing was not. The casing face has been heavily washed and it is difficult to tell at this point whether there is original red (matching the door and molding) or whether all remaining paint, including what appears to be mixtures of gold and red, can be attributed to later applications or alterations from cleaning.

Floor

The floorboards extend beneath the walls and evidently were installed prior to the wall paneling. Drips of red, yellow and blue-green paint can be observed on original flooring. The planks are heavily stained and soiled.

RESTORATION

Preparation

The walls were fine cleaned to remove as much as possible the remaining semi-dissolved white overpaint and dust.

In order to preserve the historic character, only those holes, chips, gouges, etc. large enough to aesthetically or physically disrupt the wall integrity were filled. Fills consist of foamed colored epoxy paste (modified with glass microspheres to achieve strength compatible with the wood), covered in some areas by acrylic modeling paste.

All bare wood was prepared with an application of fully reversible matte transparent acrylic emulsion to prevent the wood from becoming infused with modern colors applied during restoration.

Inpainting

Inpainting of damaged surfaces proceeded according to the following principles:

1. Any remaining original paint was left in its present state in order to preserve the patina and variations in color, avoiding overpainting the original wherever possible.
2. Areas where the original paint is missing were inpainted with a base color that generally approximates that of the immediately adjacent original. Only fully reversible colors (i.e., solvents appropriate for the removal of restoration colors are inert to the original paint) with the most stable pigments and binders currently available were used in order to insure that they will not change over time and can be removed without harming the original paint. Le Franc & Bourgeois vinyl acrylic colors with the highest degrees of colorfastness were chosen to satisfy these criteria.

3. Additional semi-transparent acrylic washes were applied over the base inpaint color in selected sections. While it is impossible to duplicate the original patina, the washes achieve a better aesthetic integration of the inpainted areas by more closely approximating the variations in the surrounding original surface. The glazing was applied as well in selected over-cleaned areas to achieve a more harmonious whole.
4. There are areas on the red and gold molding that at first glance appear to be bare wood, but in fact still have traces of remaining original paint. We chose to leave the pieces with weathered sections and thinned paint unaltered so that no original paint was covered and because sufficient color remains to allow the experience of the original aesthetic intent.
5. The panel below the altar shelf is in relatively good condition. However, the horizontal shelf (the altar itself) is particularly worn. There are still minute traces of modern light yellow overpaint within the crevices of the numerous scratches and abrasions. It was decided to leave this surface untreated at present in order to facilitate future restoration. Inpainting will be an undertaking requiring more time than was feasible at this stage in order to do it properly and we would rather not see this important area covered with overpaint. The unpainted boards at the top and sides of the niche appear to have been placed when the temple was originally built and never painted. Since there is no certainty regarding the original function of these boards (possibly support for a curtain, screen, etc.) the decision was made to leave these areas as found to facilitate future examination.
6. The door was left untouched because the varnish cannot be removed without endangering the underlying paint. The casing was also left untreated until analysis determines whether original paint remains on the face.

Protective Coating

All painted surfaces – original and restoration – were covered with an acrylic varnish containing a UV filter to protect from direct environmental exposure and prevent further photochemical alterations. The varnish is completely transparent, non-yellowing and will remain totally reversible.

Treatment of the Floor

Cleaning of the floor with oxygen bleach produced the most satisfactory result in test areas and was chosen for treatment of the entire floor. It allows sufficient removal of modern dirt and stains for the older planks to blend with the newer restoration planks while still retaining an appearance compatible with that at the time of original installation. If it is deemed desirable, the new planks can be colored to match the original floorboards but they are likely to weather sufficiently over time. No varnish was applied to the floor since future foot traffic will be relatively light and the cleaning process can be more easily repeated if needed.

MAINTENANCE

The materials used for the restoration are in general quite resistant. Chemical pollutants, high humidity, temperature fluctuation and even occasional wetting will not substantially affect the ground, the new paint or the varnish. The old paint is also protected by the application of the new varnish. However, prolonged (2–3 days) exposure to water will cause damage to the new materials and the original paint. An effort should be made to prevent leaks and any spills or water infiltration should be promptly addressed.

Dust will accumulate on the surfaces over time. It should be removed by dry vacuuming with a soft brush attachment.



The west wall prior to restoration

Upper left corner of the altar niche



Panel at lower left front of the altar niche



Custom-fabricated new beadboard at back of altar niche prior to painting



The west wall after restoration



The east wall prior to restoration



Area above the door before inpainting

Detail of the entrance door showing the original blue paint on the side of the casing



The east wall after restoration



The north wall prior to restoration



Area on west wall with patch of 'robin's egg-blue' blue paint surrounded by the more visibly aged 'teal' color.



Detail of the upper left corner of patch of blue paint. This is presumed to be closest to the color as originally applied. As no evidence of an additional coat of paint, varnish or glaze can be observed, it is thought the teal or green variations in tone have occurred as the result of exposure from which the blue areas were protected.



Damaged wooden plank by the NW corner



The north wall after restoration



The south wall prior to restoration



Unpainted wood beneath a temporarily removed section of molding on upper left side of the south wall

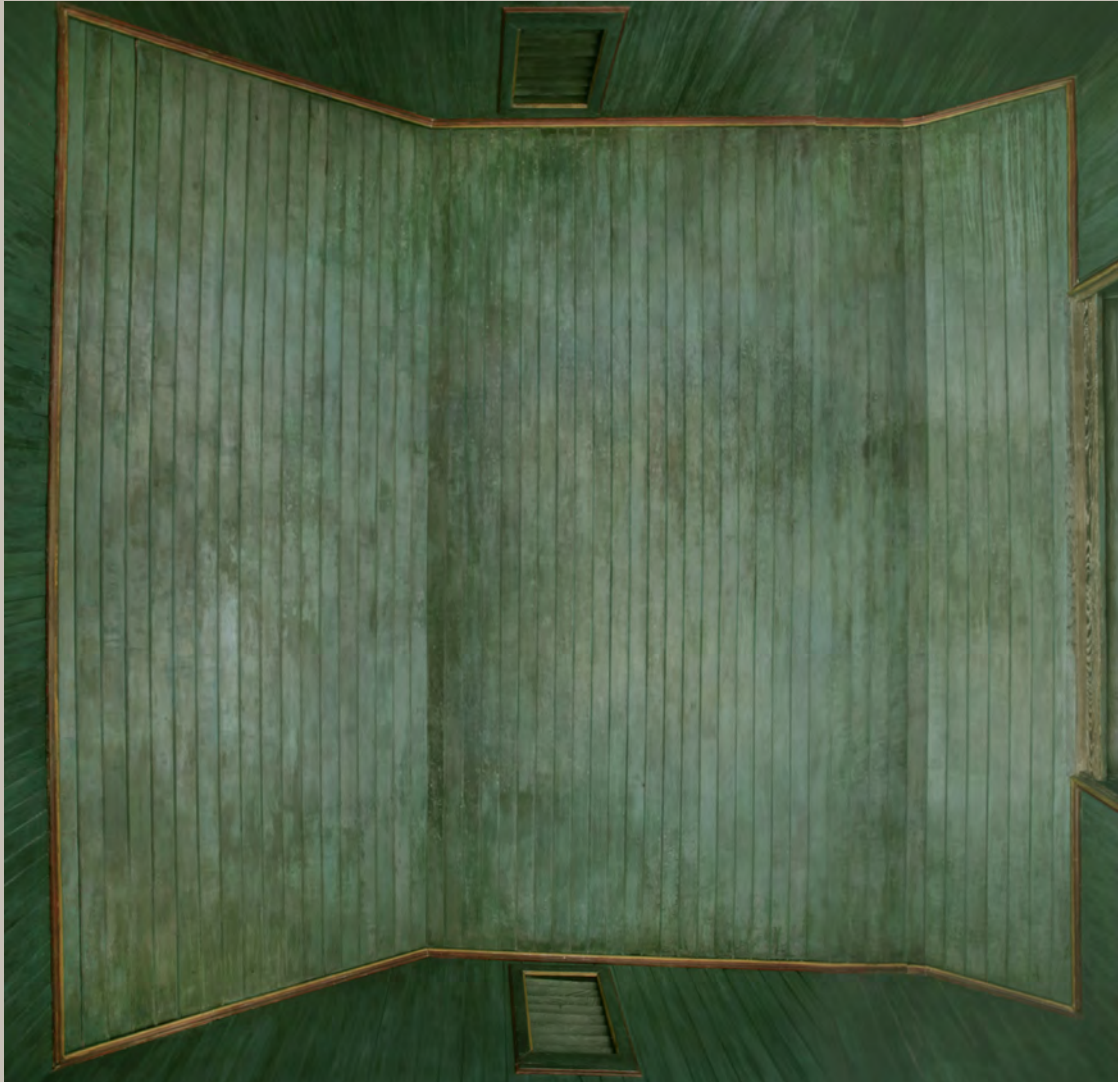
Large hole on the south wall prior to restoration



The south wall after restoration



Composite photograph of the ceiling before restoration



Composite photograph of the ceiling after restoration