The wall paintings on the first state floor *Stella Boj, Giacomo Causa*

The state of preservation

It all started on the 30th May 2002, with a slight feeling of apprehension diluted by the stronger curiosity, the removal of the vault above the central room of the first state floor, as recorded directly on the worksite diary: "[...] today the operation of the demolition of part of the reed matting vault started, with cuts carefully carried out to take away small portions a bit at a time: when all the plaster had been removed, the woven matting which remained anchored to the central supporting structure was photographed and filmed; after this operation we started to manually strip away the plaster covering the part of the vault which was marked out, thus also uncovering the lunettes; the first of these showed the beams positioned to support the reed matting and the mortar, seen through some holes made in the plaster on the sides of the lunette: the pictorial film, which had no marking out, shows the figure of an animal which could represent a turkey; it was also noted that a section of the vault ends in the dressing room whilst another section was lost during the construction of the monumental staircase...".

In the days following, slowly but surely the view of the part of the painting preserved under the wooden structure grew larger (fig. 1), the scene that could be seen was covered in numerous spiders' webs and in small groups of splashes of mortar, due to the installation of the plaster on the irregular reed support: as it happens, the part concealed under the false vault was exactly the one depicting the protagonists of the story.

The gradual removal of the false ceiling also led to the understanding of how it was built: composed of a lime based plaster of a coarse grain, it was applied on to the almost orthogonal weaving of reeds, and anchored on to a wooden cambered structure, which itself was fastened to the ceiling using large iron hooks and other cramps through loops.

Excluding the parts missing due to these hooks, the painting especially in its central part, was in fairly good conditions of preservation, also because any lime covering, apart from the side section pertaining to the dressing room, has not been applied so as to affect it.

Completed the total removal of the wooden structure and then the plaster covering the painting, almost the whole work of Benardo Strozzi could be seen, especially its bright colours and cleverness of the markings and brushstrokes. Of the three rooms overlooking via Garibaldi, this one, that before the stratigraphical research had, like the other rooms, a vault without lunettes fitted on to a cornice, is the one which is the best preserved, if the changes made at the beginning of the eighteenth century are excluded: the room was reduced and, thus, also the vault was shortened to leave room for the monumental staircase. At this stage three lunettes and two pendentives on one side were lost for good, while on the opposite side the original size of the room can still be made out. In this space a store room was fitted afterwards for the use of the service stairs; thanks to this internal use parts of the sixteenth century decorated cornice have been maintained and the relative part of the vault: here, where the two lunettes and the two pendentive domes saved underwent continual re-paintings, the almost total adhesion of the pictorial film to the layer covered in lime base (dulling of the fresco) was noticed (fig. 2).

Below the plaster covering, some blocks in the wall had brought to the attention the presence of architectural decorations

Detail of
Bernardo
Strozzi's
frescoes,
portraying Faith,
under the reed
matting in
palazzo
Nicolosio
Lomellino in
Genoa.

- 2. Room of the Allegory of the Faith in palazzo Nicolosio Lomellino in Genoa, part interested by repeated dull layering to cover the fresco.
- 3.The restorer works on the lunette recently reappeared in the room of the Allegory of the Faith in palazzo Nicolosio Lomellino in Genoa.







carried out on a very compact and perfectly smooth "marmorino" base. There are countless cavities, covering the whole area that have been specifically designed for the adhesion of the mortar. Here too, as in the vault, black charcoal signs in the form of asterisks have been individualised, used to mark out the zone to knock down or to drill. In a monochrome painted background of the wall decoration, the removal of the mortar put on top has brought to light a charcoal drawing, which represents the plan of the wooden structure of the 'new' vault; in several places other drawings have been found, amongst which the profile of the new cornice: a type of on-site project, precious cultural documentation.

As also verified externally during contemporary restoration works of the prospect, the lights of the windows were raised, with the resulting cut of the lower part of the painted lunette: documentation also exists on the walls of this important change, where the point of the horizontal cut is documented by a clear and precise pencil line. The room which overlooks the gardens of palazzo Grimaldi (Tursi) now shows that the work was not completed by Strozzi, but it was probably covered by him halfway through the work, as a consequence of the well known arguments with the client Luigi Centurione (fig. 3). The removal of the woven reeds, which hid lunettes and skies, and the cleaning of around fourteen different layers, which hid the rest of the vault, allows us to see the area of the architectural system with the central frame and lunettes on the perimeter (figs. 4-5). This unfinished work represents a unique and unrepeatable occasion to appreciate the planning and executive qualities of the painter: it is in fact possible to notice on the painted area all the stages of the work, from the division into squares by the hammering of the threads to the preparatory design using a brush with red ochre, until the various layers and coatings of colour and lime. The painting under the lime coat used to hide the fresco is not in any better condition compared to those found under the original layer of plaster: in fact the latter has been almost protected (apart from the staking out) and "reinforced"; this mixed covering, being composed by layers of impermeable water paint, lime paints, tempera and scagliola shaves, has caused a progressive degradation of the surface laver.

In fact, with time, such levels of re-painting contaminates the undercoat, remarkably salifying it and making it a superficial crust containing marble powder and fixing material, this latter reduced to calcium sulphate, the whole resulting very fragile. A further factor for degradation is the lime glaze, applied during the carbonisation phase, for which it has been fixed to the relative painting colour once carried out.

The long and delicate phase of the removal of the lime dull covering allowed to bring to light very important details, in both the central panel and the contour motifs: especially a mask, studied more in depth by the artist, first it was sketched by pencil, then with a brush, finally shaded in the main shadows. The beating of the thread, still recognisable, was needed for the quick construction of the two specular halves (fig. 6).

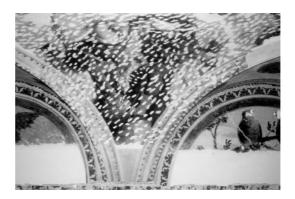
Contrary to this model, the other monochrome masks seem to have their simply main features quickly sketched.

The third room, which has a window looking on to via Garibaldi and two on to Vico Lurago, is the result of the union of two adjoining rooms: following the structural changes, it has kept a section painted by Strozzi, with an allegorical female figure on a marine background, and an area portraying other characters all concerning navigation, but with diverse stylistic and material characteristics (figs. 7-8).

On the other hand, the archeometric analyses have confirmed what the strong inflection at the centre of the vault, the measurements of the lunette so different and improbable and the obvious detachment of the wall decoration had led us to suppose: the structural foreignness of the two painted sections.

As results from the petrographic analyses, the mortar used in the plaster and the undercoat of the island with the tritons turns out to be same as that used for the lunettes: portraying inanimate vegetation, these therefore, would have been carried out at the same time as the second half of the painted section and during the extension of the room. Moreover, this painting is different in style and technique from the section attributed to Strozzi: the figures are constructed using volume and mass scansions, well defined in their composition and in the bodies themselves, they are placed obliquely with reference to the orthogonal axis of the area, thus creating notable movement, the opposite to the still poses of the overlooking figures. All of this full bodied painting, made with planes cut out from the light, is carried out in lime and supported by a rough plaster, which itself supports the colour: on the unpolished surface, tones shaded on one another, there is no sketching or juxtaposition of contrasting colours on the base background.

The layout of the room is enriched by a preying mantis which was added later, revealed during these recent restoration works; the pictorial quality is very simple, it preserves the ou-





4. Pendentives with fishing scenes and lunette with parrots in the Room of the Allegory of the Faith in palazzo Nicolosio Lomellino in Genoa during the restoration

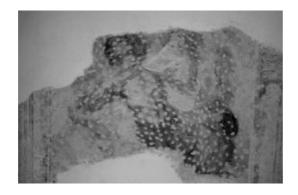
5. Detail of the vault of the Room of the Allegory of the Faith in palazzo Nicolosio Lomellino in Genoa.



6. Mask in the Astrology Room in palazzo Nicolosio Lomellino in Genoa during the restoration

7-8. Detail of the Room of fragments of Navigation and of the tritons in palazzo Nicolosio Lomellino in Genoa, during the restoration





tline of different styles altar, no longer in position, as the relative painting.

The oldest works can be found in the entrance room, going back to halfway through the XVI century, this has also been extended: such a change has sacrificed some lunettes and cancelled the central painting of the vault.

The stratigraphic investigations carried out on different points of the present ceiling show the superimposition of two layers of bricks juxtaposed and some layers of plaster, and confirm the lack of decorations on the vault.

The seven lunettes that remain on the three original sides have been cleaned of the layer of plaster on the reed matting which hid them, here, war episodes of the 'roman' sphere were sketched, and within them figures and scenery have been painted quickly with lime, in gaudy tones and strong characterisation.

The scenery and the characters were drawn alternately, some with quick strokes and in watercolours, others with less precise strokes and outlined heavily.

On the skies the use of the *stencil* can be noted, to define the areas, on which, the artist then painted the allegorical figures and the ornaments of the grotesque figures with cherubs and masks.

Where particular techniques of design transposition have not been found, the scenes are painted in lime on the very smooth undercoat, with marble powder: here, the colour creates a micro pictorial film, as if the pigment has been dissolved in water with little lime and put on in a very liquid state.

On the walls, the mirroring in "marmorino" are framed by a profile in *stencil* whose mould suggests a much sought after design with curved and carved branches; below, a socle formed by shaped partitions in false marble, a faded globe in the centre highlighted in yellow, closes the decorative display.

Working Techniques

"[...] quegli che cercan lavorar in muro, lavorino virilmente a fresco, e non ritocchino a secco; perché, oltre l'esser vilissima, rende più corta la vita alle pitture [...]" (...those who decorate walls have to work the fresco with energy and never make dry touch-ups, because apart from being a mean technique, it also compromise the lifetime of paintings...)
Thus said Giorgio Vasari in his famous text, "Le vite de' più eccellenti pittori, cultori et architettori", published in Florence in 1550.

In the pictorial cycle rediscovered on the first state floor of palazzo Lomellino, no confirmation can be found to what was said by Vasari: even dealing with lime paint and notwithstanding some problems linked to the use of specific pigments in such a technique, on the whole Bernardo Strozzi's wall paintings are in fairly good conditions of preservation.

During the works, the close-up view and the investigations carried out have allowed for the evaluation of the phases of the work and the materials used by the painter: both the undercoat and the pictorial film show how much Strozzi was interested in obtaining a perfect surface to be able to complete a wall painting using all the characteristic tricks and devices used by easel painters; on a completely smooth and compact surface, similar to the preparation of a canvas or table, he could superimpose the backgrounds, glazed or water coloured, full bodied and rich in materials; in both of these cases, the pigments, bonded with lime, create a real pictorial film rich with renewals, when almost dry; this is why the definition 'a buon fresco' (very fresh) is improper, and is therefore rejected.

SThe surfaces were so compact that it is almost impossible to make out the joins of each days work, perfectly smooth and refined right to the final layer of plaster so as not to upset the completion of the work. On such surfaces he painted with command of form and colour, he shaped the figures and the backgrounds with transparencies that glorify the picture using the tip of the brush and with layers of thick colours he trapped the light. Following the detachment of some pictorial film some brush marks emerged, in red ochre and in the tones of earth's natural shades and burnt siena, all signs attributed to the preparatory phase of the design; it is this design that witnesses the interest for an overall picture of the subject and its impact on the painted space, the artist sketches the dimensions, the forms and the composition, at times, superimposing the main shades.

The preparatory design has a basic division in to squares, created beating threads impregnated with colour, in order to construct a grill for the larger reproduction of a "matrix"; the beating of the thread could also be used as a centre line, to quickly build two mirror images of a figure as in the case of the mask in the drawing room looking towards the palazzo Grimaldi garden.

In some cases, dusts imprints are present used to propose new subjects on an already finished background.

Another method used is that of the stencil, found in the decorative corollary of lunettes and walls of all of the rooms, thanks to which repetitive forms can be reproduced, using half masks of cut out cardboard.

Once all the figures were in position in the frame, Strozzi



- 4. The rediscovery of a lunette, Genoa, palazzo Nicolosio Lomellino, first state floor
- 5. Central panel of the Astrology by Bernardo Strozzi, during the works. Genoa, palazzo Nicolosio Lomellino, first state floor





9. Bernardo Strozzi, Allegory of the Faith (detail), 1623-1624, Genoa, palazzo Nicolosio Lomellino, pendentive domes with retouching in brush lined strokes.

painted the background in base colours, dividing outlines and empty spaces. On the base colour, he then superimposed several layers of pigment in patches, to suggest the more important dimensions and shadows; on these, quickly, and with cursive strokes using the point of the brush, he would define the anatomical details, the depth of the looks, the movements of the drapery and the hair, moved by the wind, the refinement of the reflections of light on the objects, the transparencies of the stretches of water.

Before the final retouching, the painter often "mended" the profiles of the subjects correcting them with the background colour (angel's wing and profile of the Faith, central room). Finally, he would finish the main details with strokes of sharp light and dark shadow, adding with "rapid strokes" using a dry brush, some particularly forceful movements, for example, in the profile of the hair, carried out as the last phase, going from within the figure towards the background, in order to give the impression of movement and transparency. The use of colour is underlined by Strozzi in the distinct contrasts and the matching of tones; the pure colours are juxtaposed according to their complementary colour: purple and yellow (the great leader's garments, central room), red and green (sailors and the angels' wings, central room), light blue and orange (the boat's drapery and the Evangelist's clothes). The tones superimposed one of top of another (drapery, backgrounds etc), create changes that define the masses more than the shading; thus cloaks and hangings move, thanks to the colours painted in contrast and in superimposition: light blue on pink (Indian chief's cloak, central room), red on yellow (native with turban, central room), black on green or light blue (boat's hangings, central room) etc.

To obtain the particular pink-light blue shade (sample taken from the Indian's garments) a mixture of enamel and iron oxide was used, spread on a preparation background almost totally composed of calcium carbonate.

As well as being used as a fixing element and as the colour white, the lime itself was used much by the Genoese painter to obtain shades and consistent effects of the materials used.

The brown pigments are generally made with iron oxide and silicates; the sample taken from the head of the Mother (pendentive domes in the central room) shows the use of carbon, useful to bestow the particular dark hue which gives the effect of the figure in shadow in the distance.

In the reflections of the people on the boat on the water, the brushstrokes are liquid, water coloured and superimposed; the main features of the faces are lightly sketched and thus become mixed with the light blue-green of the water: this is obtained by using a special enamel, mixed with nickel salts and arsenic to obtain a touch of yellow that, when mixed with blue cobalt, gives the effect of change; in other backgrounds it is exploited at the most for its brilliant light blue, for example in the skies (fig. 8). As well as the enamel, the artist made use of red lead and red mercuric sulphide, usually not compatible due to the alkalinity of the lime, as they change colour and go dark when they come into contact with it: in some areas (pendentives, lunettes, skies, sailors' garments etc.; central room), these gaudy backgrounds have remained intact, without any trace of chromatic change, but they have a high level of decohesion. The greens used seem to be green earth containing iron calcium and silicon and an organic copper salt: to achieve a darker coloration, as in the case of the black-green sailors' clothes, the pigment was ground with bone carbon. The anatomical details and the more distinct dimensions were made with quick brush strokes, sometimes full bodied, sometimes liquid and imperceptible, and sketches, moved according to the "solid" to be constructed, in one way, crossed, curved, almost concentric. These techniques that have just been described, normal ones for canvas paintings, are uncommon for a wall painting, as they presuppose the complete drying of a layer before being able to re-paint on it; in this case, Strozzi used them often, making vivid and brilliant, to say the least, with much skill, details, refinements and highlights.

Interventions for the preservation

The restoration operations started after a long period of stratigraphic investigations on the vault and the walls, with the aim of having a perfectly monitored framework of the definite presence of works by Bernardo Strozzi in all the rooms of the first state floor.

A few problems linked to the cleaning of the paintings in this place only came to light when the whole area had been finally freed of all the extra layers and structures put there. The ring of lime, left by the spurts of mortar of the reed matting was difficult to remove only using the wishab rubber: it was therefore necessary to proceed using scalpels and to apply decarbonating resins drop by drop on the interested zones, being careful not to damage the original colour, which in some cases was too weak to support it. The extremely numerous gaps made on the painted surface to help the eighteenth century plaster attach itself, demonstrate the tendency of some portions of the plaster to disintegrate, often the adhesion to the wall support was also missing; this disattachment can

be ascribed to the mechanical action of the stakes, also to the extremeness "smoothness" of the plaster which being polished, brings a large quantity of lime to the surface caused by the crushing made by the probably metal instrument used: this "compacting" action, takes away the fixing agent from the bottom layer, making the support weak (fig 9).

After the removal of the plaster layer, it was therefore immediately necessary to see to the re-adhesion of the two layers and to the consolidation of the plaster by means of a mixture of silica, calcium oxide and aluminium, suitable for being injected. All the holes were carefully cleaned of all the mortar residue used to fill them, were treated with lime water and stuccoed in three coats, the final coat was slaked lime and very fine marble powder, which had the role regularising the surface and preparing it for the pictorial renewal (figs. 2-3). In the worksite diary it was repeatedly pointed out how the close staking out was so invasive that it was practically impossible to see large zones of the painting: the long work "weaving" of the polychrome, carried out by scratching in lines and the chromatic selection with water colours, has given back the comprehension of the designs of some pendentives, especially that of the fishing scene, keeping the evidence of the retouching.

Where the painting had been hidden under layers of colouring, as in the vault of the room facing palazzo Grimaldi, the difficulty in bringing back to the light the work by Strozzi appeared immediately clear: here the layers of covering the fresco needed to be removed, whose last level was stuck to the painting and made of an extremely fine lime glaze, was carbonated together to the colour, and to add to that it was an incomplete wall painting.

The operation to clean these dulling layers was extremely delicate: the removal work proceeded in phases and was continually monitored and attently examined by the works management; it dealt with fourteen layers, to lighten the first thick layers a small hammer was used, followed by the scalpel; the more resistant dull layer, completely stuck to the painting, was eliminated using a resin of cationic exchange, in deionised water, in special doses so as not to damage the colour.

In such an "incomplete" context, the pictorial restitution, conducted using glazes and the brush tips with water colours, has indemnified the colour tones with the aim of making more understandable the architectural order of the vault, maintaining the vision of the construction of the design and the fresh work of the painting itself