
KEYWORDS

Roman fresco techniques, arriciato and intonaco, pigments, sensorial learning experience, Roman artisans

ABSTRACT (English)

“The Roman Fresco Experience” was a workshop offered to undergraduate Classical Civilisation students at the University of Roehampton (London). The workshop consisted of a lecture and a practice on Roman fresco techniques led by the artist Rayda Guzmán. During the session, the students learned the whole process of fresco-making step by step, from the preparation of the layers to the application of pigments. Every participant reproduced on a tablet a fragment of a famous Roman painting (The Garden Room Fresco from Livia’s House in Rome). The aim of the workshop was not only to familiarize the students with this complex technique, but also to provide them with the unique sensorial experience of re-enacting the working day of a Roman artisan.
ABSTRACT (Español)

“The Roman Fresco Experience” es el nombre de un workshop ofrecido a estudiantes del grado de Civilizaciones Clásicas de la Universidad de Roehampton (Londres). El workshop, conducido por la artista Rayda Guzmán, consistió en una clase magistral y una práctica sobre técnicas de pintura a fresco en época romana. Durante la sesión, los estudiantes aprendieron, paso a paso, todo el proceso de realización de un fresco, desde la preparación de las capas hasta la aplicación de pigmentos. Cada participante reprodujo en una tablilla un fragmento de una famosa pintura romana (el fresco de la estancia del jardín de la Villa de Livia en Roma). El objetivo del workshop era no solo familiarizar a los estudiantes con esta compleja técnica, sino también proporcionarles la experiencia sensorial única de recrear la jornada de trabajo de un artesano romano.
The Roman Fresco Experience: Report

Rayda Guzmán, Marta García Morcillo & Ryan William Cooper (London)

Introduction

“The Roman Fresco Experience” was a workshop held in November of 2016 at the University of Roehampton (London) as part of an undergraduate module on ancient Pompeii (Classical Civilisation degree). The workshop was run by the philosopher and artist Rayda Guzmán (Barcelona) and Marta García Morcillo, coordinator of the module, with the support of Ryan W. Cooper and in collaboration with Imagines Project1. The session aimed to explore the everyday work of a Roman fresco painter. The class group learned the ancient technical process of fresco-making step by step, while they were also introduced to the cultural and social context in which these works were made. We visually documented the workshop and created a series of didactical videos that are available on YouTube (see link at the bottom of this article). (Fig. 1)

Paul Ricoeur used to say that history is built upon intrigues, meaning that the sense of what we know today as past is something artificial that has been created in the present as a convenient interpretation of facts2. The choice of a particular moment, event or aspect from the past is just a point of departure towards complex and rich narratives that try to make sense of fragmentary information. The famous fresco we chose as a case study for our workshop meets, as we will see, this idea.

When we try to approach the past as historians – both from a theoretical and from a practical angle – we need to take into account the prejudices that inexorably influence any backward-looking from the present. This hermeneutical effort implies distancing ourselves – as far as possible – from our own cultural and social context. But the gaps of knowledge that often silence practices from the past and that find no or scarce echo in primary sources, can only be approached – more or less hypothetically – through comparative

1 On Rayda’s profile and work, see: www.raydaguzman.net. On Imagines, see: www.imagines-project.org. (last access 14.08.17).
2 Ricoeur (1985).
Rayda Guzmán’s starting point for our workshop was to combine the philosophical proposals of the Annales School and Gadamérm’s hermeneutical theory of comprehension with the aim of familiarising students with some everyday practices of Roman antiquity. This means, basically, a process of learning based on the updating of ancient techniques that contribute to the recreation – as accurate as possible – of past experiences, whilst it also considers the obstacles of the temporal and cultural distance: the different contexts, language, materials and circumstances that determined the work of Roman artists. The project aimed thus to approach the student to the hypothetical point of view of the ancient practitioner, in order to gain a deeper understanding of the activity of fresco-making. This process involved facing challenges, solving more or less unexpected problems, testing different hypotheses and making new personal and collective discoveries. All of them come to the light when knowledge, usually transmitted via text, is processed through empirical experience.

Wall fresco painting involves a quite labour-intensive process of execution. Fresco is a decorative art linked with other visual arts, with literary traditions, and with a specific architectonic context: usually, but not exclusively, the domestic space. The contextual framework is important to understand frescoes as forms of expressions of social relationships, of dynamics of power, of mnemonic experiences, as well as the outcomes of the display of cultural taste and symbolic capital3. Frescoes are thus witnesses of very complex realities.

Rayda’s previous experiences with fresco technique made it possible to design a one-day lecture and a practical session integrated within a 2nd year undergraduate module on Ancient Pompeii and its Modern reception (degree Classical Civilisation). A total of 13 students plus 3 members of the staff participated in the session. The workshop offered students the opportunity to strengthen their previous knowledge in Roman material culture and art. The main aim of the session was to sensitize students to the difficulties of learning the fresco-technique and its methodologies from both a theoreti-

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3 On Roman wall painting and its social contextualisation, see most recently Lorenz (2015).
The Roman Fresco Experience

cal and a practical perspective, not only to gain a better understanding on how Romans did it, but also to feel themselves closer to them⁴.

Developing the idea

Fresco is a common and well-known painting technique today, as it was in ancient Rome when this method became a sophisticated and skilful popular industry. Essentially, fresco painting is a technique that consists of the application of pigments on a wall covered with fresh plaster. The plaster was usually made of a paste composed of lime and sand. Timing, planning and precision are very important for the successful completion of a fresco since only very small corrections can be done after the pigments are applied to the surface. Authors like Vitruvius and Pliny the Elder describe the use and application of pigments on frescoes and the creation of colours in Ancient Rome⁵.

The extraordinary durability of frescoes makes it possible for us to admire today magnificent oeuvres that once decorated ancient domestic and public spaces. Some of them tell us stories that were popular and that shaped collective memories and identities, such as scenes from ancient myths and cultic rituals. The starting question of our project was to find out more about the clues and secrets of this ancient technique, which was highly popular in the private and the domestic sphere, of the materials and the process followed by Roman artisans and artists. “The Roman Fresco Experience” aimed to invite the students into a full experience that married theory and practice, knowledge and creativity, past and present.

The way an artist like Rayda experiments with fresco is certainly very different to that of those who approach this technique and the manipulation of slaked lime and pigments for the first time. Ancient techniques were also different from modern ones, and were subjected to different conditional factors (instruments, materials, time, context, etc.). In order to overcome such obstacles, Rayda chose a very specific technique, the so-called buon fresco. The buon fresco technique permitted to re-enact how Roman artisans

⁴ This approach is in line with current innovative works on sensory studies and Classical Antiquity; see for instance the network sensorystudiesinantiquity.com, and the project synaesthes.hypotheses.org (last access 14.08.17).
⁵ Vitruv. 7.3.6-9 (on wall plastering); 7.7-14; Plin. NH 35.5; 35.12-32.
organised the work, given the impossibility to make any corrections to the painting, through a meticulous one-day planning of the work (*giornata*). (Fig. 2)

The participants learned thus about the exact measures and the tempo needed for the mixing and the application of the pigments, about the consequences of the chemical reaction involved in their mixture, and about the size, forms and environmental conditions of the surface on which the painting was applied. The preparation of a painting was thus as important as its application. In addition to these technical considerations, the practice needed to be adapted to the context – also physical – of an ordinary classroom. The task should also combine individual and team-work experience.

In order to engage the students in the practice, we searched for a popular and not too complex case study; a painting that did not require high technical skills to be reproduced. It needed to be work that could be decomposed but still make sense in its fragmentary stage. It was also important to choose a real, ancient fresco. In view of the level of complexity that the reproduction of most of well-known Pompeian figurative frescoes would have required, we decided to select a painting with no central motive and dominated by natural landscapes. The chosen model was the famous three-panel fresco of the garden room from Livia’s Villa at Prima Porta, on the Via Flaminia, in Rome, popularly known as *ad gallinas albas*. This work is today preserved at the national Museum of Palazzo Massimo alle Terme. Rayda had already made a successful test with a detail of this extraordinary work (Fig. 3).

The entire composition presents a framed natural scenery, in which several layers of arboreal species harmoniously alternate with finely executed birds, some of them shown in static position and others captured while flying or in the very moment of spreading their wings. The choice of this masterpiece of Roman naturalist style was not accidental. The aesthetic and symbolic virtues of the work, which decorated a subterranean room of Livia’s estate, discovered in 1863, encapsulates some of the clues of the celebration of prosperity, fertility and peace that shaped the Augustan age and its

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6 On the distinction between the *buon fresco* technique and other forms of mural painting which did not need to plan and divide the surface on a daily basis, see Tsuji (1983).
future dynastic project\footnote{The composition and the emphatic importance of laurel in the fresco suggest a link to the famous \textit{miraculum} that gave name to the Villa. According to Pliny (\textit{NH} 15.136-7), around the year 39 BC, when Livia was pregnant with her youngest son and about to leave his first husband for the young Octavian, an eagle flying over the Villa dropped a white hen holding a laurel in its beak in front of her. This was interpreted as a positive dynastic sign about Livia’s own future as Empress and Emperor’s mother.}. The precise encoded information of the panels contributes to generate a multilayered spatial illusion in which the civilised, fenced garden of the foreground progressively merges with the wild beauty of the background. The marriage between the wild and the cultivated, and the punctuation of particular arboreal species, like laurel myrtle, oak and pine, evokes in a condensed form typical elements of an Italic landscape. It further projects Rome’s and Italy’s triumphal rebirth under Augustus, as evoked in the Fourth book of Virgil’s \textit{Georgics}, as well as by contemporary literature and poetry, notably by Horace and Ovid\footnote{On the encoded political and symbolic interpretation of the Garden Room fresco and the links with other Augustan art imageries and literature, see Kellum (1994); Messineo (2001).}. In the Garden Room fresco every single detail is important by itself, nothing is left to chance, but at the same time, every floral and bird species contributes to create a persuasive and comprehensive, overall message. This powerful idea guided our choice and practice. Every student chose a fragment of the work, which, once assembled with the rest, helped to understand the possible messages transmitted by the recomposed picture.

\section*{The workshop}

The workshop’s final goal was to create an enjoyable full learning experience for every participant, including those without any previous knowledge and not particularly skilful in the creative arts. The aim of the session was thus not to obtain the best possible outcomes, but to experience and feel the challenges, obstacles, the satisfactory steps-forwards, but also the steps-backs, that the different phases of this complex process involve. We wished to put the participants – at least for a few hours – into the skin of a Roman artist.

One of the most troublesome challenges was to design the workshop in order to fit properly within the three hours timeframe allocated to the ses-
sion and within the limited space of the classroom. The materials we used included marble dust, slaked lime, water and natural pigments, as well as appropriate tools such as scrapers and brushes of different sizes and hardness. (Fig. 4)

The session was divided in two parts: the first one, lasting around one hour, consisted of an introduction to the chemical process that was pivotal for the _buon fresco_ technique, as well as a short insight into the creation of pigments in Antiquity. We also introduced the students to the particular case study of Livia’s Garden Room fresco and its importance, not only for the history of this technique, best known in the Vesuvian cities, but also for the history of art, culture and ideologies of the Augustan Principate and the Roman Empire.

As mentioned before, the Garden Room fresco as a whole is a complex composition that paradoxically permits to isolate single elements and reproduce them relatively easily. The colours used originally on the panels were also quite simple and the drawing tended to follow clear and uncomplicated lines. Rayda introduced the students to the technical details of the _oeuvre_. She insisted specifically on the importance of the chemical process, which is the key for the longevity of frescoes (Fig. 5, 6, 7). She carefully explained how the quicklime (calcium oxide) reacts with water to form calcium hydroxide (slaked lime), and how the latter, when put in contact with air, acts as a fixative to the pigment, which, without any additive, would dissolve in water. The lecture was illustrated by a series of pictures showing the single steps of the process starting by the preparation of the wall on three levels (Fig. 8): the wall (slaked lime 1 x 3 marble dust coarse 0.47 inches), _arriciato_ (slaked lime 1 x 2 marble dust coarse 0.23 inches), _intonaco_ (slaked lime + marble dust fine 1x1, 0.11 inches). Following the application of the _intonaco_, the drawing was stencilled to the still wet surface of the wall; the pigments, dissolved in water, were ready to be used.

Rayda managed to simplify this complex process in a manageable and easily understandable way. She prepared a piece of MDF (Medium Density Fibreboard) previously sealed with glue to avoid humidity. A glued sackcloth on one side replaced the wall surface. The _arriciato_ was also prepared and applied in advance, in order to save time, as it needs twenty-four hours to properly dry. During the workshop, Rayda prepared the _intonaco_ (Fig. 9), and then the participants were asked to spread the mix with scrapers on the surface of their tablets (c. 10 x 20 cms).
While the fine intonaco layer was drying on the tablets, Rayda handed to the participants an equal-sized colour photocopy with detailed motives from the Garden Room fresco (e.g. a flower, a leaf or branch, a bird, etc.). The participants traced the drawing with charcoal on a transparent tracing paper and pressed the side of the charcoal into the intonaco. Once fixed on the surface, the drawing became the model for the painting.

The painting process resulted into a very exciting experience, during which the participants tried different textures, mixtures and colour tonalities, and noticed the changing effects provoked by the contact between the pigments and the intonaco. (Fig. 10, 11, 12, 13).

When the painting was completed, we projected the whole panel on the wall and asked the students to identify their fragment. This was an interesting exercise of contextualisation that challenged the ability of the participants to compare their particular piece with the large-scale real picture. It also confronted them with any imagined scenery inspired by the fragmentary segment while they intensively worked on its reproduction. This exercise helped thus to understand not only the technique itself, but the multilayered functions and meanings of the Garden Room fresco ad gallinas albas.

**Outcomes**

Overall, “*The Roman Fresco Experience*” offered students a new perspective upon Roman art and a tool that enabled a much better and closer understanding of the hand-working process of fresco-making and the context of the practitioner. Aspects such as the choice and origins of the materials, the election of the theme, the careful consideration of the phases and times of execution no doubt contributed to enhance the knowledge and the interest in this professional activity, but also in ancient art as something dynamic and organic (Fig. 14 and 15).

Students were very enthusiastic about the workshop, which was also attended by members of the academic staff. At the end of the practice, we asked the participants to leave some feedback on the experience. We reproduce some of their thoughts below:

“I learnt a lot about how frescoes would have been painted in Ancient times. It was challenging to get the colour and technique work, (...) It was a fun experience and would love to do it again.”

“Even though I’m awful at art, it was interesting to understand through first-hand experience how frescoes were created.”
Guzmán, García & Cooper

“I enjoyed the session very much as it was exciting to have a ‘hands on’ lecture.”
“Absolutely loved this experience!!!”
“I learnt how they were made and done first-hand.”
“I will never look at frescoes in the same way”

We hope that the success of “The Roman Fresco Experience” will encourage open new, exciting avenues of collaboration between academics and art practitioners, as well as creative dialogues between the ancient and the modern world, between theory and practice, between scholarly and sensorial learning experiences (Fig. 16). We are looking forward to continuing this kind of fruitful collaborative projects in the future.

Online link to the workshop documentation
The Roman Fresco Experience, Roehampton (playlist, 11 videos):
https://www.youtube.com/playlist?list=PL4jxA3hoeh00BEYPlrYPN9MFrH0Cv0vm

Bibliography
**Figures**

**Fig. 1.** Preparation of the *intonaco* coat, general view

**Fig. 2.** Working on a Roman fresco, R. Ling, *Roman Painting*, Cambridge 1991, fig. 234.
Fig. 3. Detail of a fresco-test by Rayda Guzmán

Fig. 4. Materials used for the practice
**Fresco Terminology**

- *Fresco* means “fresh”  
  - *Painting is done on wet lime plaster*  
- Lime plaster is layered on a stone wall on different coats  
  - *Arriccio* — lime plaster and coarse sand  
  - *Intonaco* — lime plaster and fine sand  
- An stencil is applied to the wet plaster in order to copy the drawing.  
- Painting is done with pigments mixed with water before the plaster dries.

**Anatomy of a Fresco**

*Fig. 5 & 6. Slides explaining terminology and anatomy of fresco painting*
Fig. 7. Slide explaining technical process of fresco painting

Fig. 8. *The artist Manual*, 1980 QED Publishing limited
Fig. 9. Preparation of the *intonaco*, detail
Fig. 10. Painting process
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Fig. 11. Painting process

Fig. 12. Painting process
Fig. 13. Painting process
Fig. 14. Outcomes. Detail

Fig. 15. Outcomes. General view
Fig. 16. Overview collage