

THEMATIC UNIT Nº14

GOLD LEAF AND ITS TECHNIQUES.

- 14.1. DEFINITION AND FUNCTION OF GOLD.LEAF.**
- 14.2. A BRIEF HISTORY.**
- 14.3. AESTHETIC AND PLASTIC CHARACTERISTICS.**
- 14.4. GOLD LEAF APPLICATION.**
- 14.5. BIBLIOGRAPHY AND WEB LINKS.**

14.1. DEFINITION AND FUNCTION OF GOLD.

The technique of gold leaf consists basically on coating with gold the surface of an object. In our case would be mainly a painting. One of the most appreciated aspects of the technique of gold has been the interest of the color light value. It was used as a receptacle of light, often using gold and enameled tones to transmit images of celestial light. Glossy surfaces of the altarpieces, produced by the gold leaf as crisography, produced in believers a state of awe which mingled fear and amazement.

Gold was used as an amulet, coating of the liturgical objects and other materials originally poor. It was also very present in architecture decoration of churches and palaces. The triumph of Christianity codified an allegorical-symbolic iconology with fixed models in which there was always a figure silhouetted against a background of gold leaf, and became the cultural way of thinking for the Romanesque stylistic period.

14.2. A BRIEF HISTORY.

Gold is a decorative technique that is repeated in the various artistic periods throughout the history of our civilization and is performing for millennia the same way, regarding the essential elements of technique and execution.

Gold has been considered, from the most ancient cultures, a noble metal loaded with great symbolic value and always linked to the highest and noblest dignities.

The origin of the art of gold leaf goes back to the Sumerian and Egyptian civilizations, who discovered the ductility of gold and used it to cover less valuable objects such as wood, stone or low metals, after processing thin sheets of gold. Over time, this technique evolved, It was determined, through the numerous remains found, that during the first Egyptian dynasties used the technique of water gilding in the same form used today.

Later this technique reached Europe in the second century B.C. from Egypt and Greece to satisfy the Roman demand for luxury goods, but it was Charlemagne (742-814) who supported the art that took shape in

illuminated manuscripts and according Hills, was introduced in Tuscany from Byzantium by Coppo di Marcovaldo to mid-thirteenth century¹.

While in the pre-Carolingian period, painting just did not use gold and was translucent, which enabled us to see the bottom substrate, in the Carolingian and Ottoman period models become luxury and gold is used in writing and painting looking for the beauty and simulation.

Sacred objects were to be made with precious materials and colors are more ethereal, as being less contaminated by contact of matter, involved to a greater extent of the divine light.

Thus, the technique of gold leaf was picked up by the Byzantine Christian iconography, enduring in creating icons to the present, and remain current through the decoration of the current Greek and Russian icons. From the ancient empire of the East came to western civilization, then its use became widespread as a result of their application in creating all kinds of objects for sacred purposes by the Catholic Church, in frontals and tables during the Romanesque period and large buildings and Gothic altarpieces, being at this time began use in the field of carpentry and extended its application to various surfaces and materials such as iron, stone, furniture, ornaments and, of course, in imagery and painting.

The greatest splendor of the art of gilding is done in the Baroque and especially with Rococo of the mid XVIII century which is used not so much in paintings, but in the decoration of churches, palaces and all kinds of furniture.

In ninth century, the figure of Gustav Klimt Klimt as painter representative of the current Art Deco and developing a work for painting recovered the use of gold leaf. This issue was finalized in a very evident style called golden age that lasted four years, from 1904-1908, and that begins with the "Portrait of Fritza Riedler" where for the first time appears a defined with gold an area patterned with painted geometric. This style reached its peak in the "Portrait of Adele Bloch-Bauer", consisting of a gold background and ornamentation, where only poke the face and hands of the women, which is at once the last of its kind. Within that same philosophy include "The Kiss" another famous painting of this artist.

¹ HILLS,Paul. *The Light of Early Italian Painting*, Yale University Press: New Haven and London, 1987.

Along the twentieth century have emerged some technical innovations, but always determined by the objective of the reduction and minimization of production costs, mainly in time and materials, thereby trying to get the same results as were achieved by the original technique but adding to the process faster execution. New techniques besides the aforementioned time and feedstock saving, simplifying the process and thinning the gold leaf, have improved concerning the toxicity of the materials.

In that sense the current artist has fake gold leaf, which have a similar appearance to genuine gold but at a much lower cost, this fake gold is a metal alloy of copper, tin and zinc. On the other hand there are at present based paints including fine powder glitter of brass or white metal to give the painting a gold or silver tone. This glitter paint is also available in spray application the benefits involved in works that could have a pronounced relief. In any case, its inexorable degradation makes its appearance soon move to a green-brown, is also reversible so little that has not been able to replace the special gluing sheets of traditional procedures.

Contemporary artists have continued to work with real gold leaf and the traditional procedure of gold. Examples are the Monogold or MG of Yves Klein. Despite the cost of gold, Klein was able to produce between 1959 and 1961 forty-five "Monogold" of which 10 are large format. He officially first presented their gold monochromes in February 1960 in the group show "Antagonismes" the Musee des Arts Decoratifs in Paris. Technically Klein uses both water gilding and gilding mixtion. The waater gilding works are usually perfectly polished, presenting a smooth, reflective like a mirror. However, other "Monogold" as "Resonance. MG 16 "(1960)," Silence is golden. MG 10 "(1960), show slight distortions, shaped craters or uneven creating severe strains on the surface, creating a contrast between "of gold and" imperfection "of the surface.

Other authors that in the current situation have come with different plastical intentions to the universe of gold leaf are James Lee Byars, Louise Nevelson and Jannis Lounellis.

Finally, the search for alternatives to purpurins has resulted in commercialization of iridescent or pearlescent pigments and paints and composed of a metal oxide coating, usually titanium or iron on a mica flake. These compounds do not undergo any alteration provided they are used in works or objects that are to be exposed indoors.

It can be purchased in powder but is more common to use as metallic paints already available in the market as Golden, Liquitex or Hyplar. In particular the Liquitex composed of mica flakes coated with titanium and acrylic emulsion is readily reversible and does not change color.

Despite all the innovations mentioned above, we can say that classical procedures and techniques are still valid today, reaching with them results that have yet to be surpassed by any modern substitute procedure.

14.3. PLASTIC AND AESTHETIC CHARACTERISTICS.

Although in principle, the gold backgrounds seem not to have in paints a figurative function, its use with representative character is common in the sense of reproducing or representing a visual reality beyond its own and intrinsic value. These surfaces also highlights certain symbolic values attributed to them.

On the other hand, gold used in the painting funds is problematic in relation to the representation of space, since it does not refer to a measurable depth or extension, or a distinctive pictorial plane, visible and unambiguous. In that sense its design would be very close to that of contemporary collage since there is a clear contrast between the nature of the gold plates and the surfaces of the painting have not been covered.

The gold inside a paint can also refer to more specific aspects when used for objects such as crowns, robes of bishops, or patterns of sleeves and collars brocades, for example, however, lose this specification in their application in halos and nimbus.

In Gothic art paintings contained polychrome areas or processed on the metal (punched, sgraffito, glazes or enamels) that gave rise to transition areas between these decorations. The gold as sgraffito substrate, of glazes and enamel, approaches the role of color and is constituted as an expansion of the painter's palette.

Although you can set as unalterable rule of intent, the symbolic value of gold and ornaments can also assume a particular meaning. The alternation between the figures painted and decorated with engraved marks, indicates two levels of reality, the divine and the earthly sphere.

The technique of gilding, despite its age, still today wonders and loves for its combination of art and alchemy. This is because, during the creative

process, requires the deployment, on the one hand, a constant discipline and mechanical skill in execution and, moreover, depends primarily on experience, practice and sensibility of the maker in the use and combination of elements and basic materials in the process.

However, at present, the lack of this ancient practice leads to its underestimation, often being relegated to a not inconsiderable craft, regardless of a varied number of important works produced over the history of mankind are decorated with fine gold coating following the traditional practice.

In any case gold in contemporary art remains the same meanings and processes that could be found in the past. Gold, contrary to what might seem, does not disappear with the baroque art scene but continues in the creations of today. Examples of these are the aforementioned Yves Klein's "Monogold" whose interest in gold responds to factors such as his stay in London, experiments with her friend the architect Bernadette Allain with gold leaf, or the use and respect for the material are in Japan, a culture that fascinated Klein.

14.4. APPLICATION OF GOLD LEAF.

The techniques usually used to decorate surfaces in order to give the appearance of gold are: fat techniques or golden to the mordant and the technique to the water or water gilding. The main difference between the two techniques lies in the processes and materials used prior to the accession of the sheet metal. The mordant gilding technique or fat is a proceeding faster and easier, but it can never be obtained with identical final results to those achieved by a decoration made with the technique of water gilding.

Understanding by mordant the characteristic certain fatty materials have and consists of a tacky quality manifested prior to complete drying. Currently, in the gold held by this procedure uses a type of varnish called mixtion, which is the medium by which metal pan fixing to the support.

The mixtion is a fatty varnish whose base is boiled linseed oil that incorporates some resins to obtain a suitable mordant and whose slowed drying time allows easy application of the gold on the object.

The mordant gilding technique presents some very useful qualities and advantageous in certain conditions. In this sense, allows its application to any surface (wood, metal, stone, glass ...) and the use of all types of

metal pan (fine gold, fine silver, bronze, aluminum ...) and work in outdoors, although the resulting metal surface does not support the honing, which gives it a matt appearance. The water gilding technique is the oldest. With it have been done, historically, the most important works of imagery, furniture, tables, altars, and so on. Its implementation is much slower, laborious and complex.

The technique of water gilding is an art that requires great practical and deep technical knowledge, since the quality of the final result is determined by the experience, the practice continued in its exercise, and not only by the application of an exact formula, since there are certain measures relating to the bowl and inert fillers, which can not be determined with accuracy in the preparation phase, whose calibration can only be performed using the knowledge derived from practical exercise to helps to develop an appropriate sensitivity capable of supplying the precision that gives a balance.

This technique is called water gilding because the "gilding glue" medium by wich the metal pan is adhered to the surface is composed mostly of water. This is a procedure usually reserved only for indoor environments, since, otherwise, may be altered by external atmospheric conditions, due to the hygroscopicity of the organic glue, which is necessary in the various stages of preparation prior to applying the metal foils.

With the technique to water can make the object you apply this process to obtain an appearance of solid gold or silver as the metal surface can be polished away with it by the boards of the loaves and thus obtaining the characteristic metal bright.

Gold leaf recipe: To the Mixtion.

1. Prepare the table with a crete or semi-crete priming. If the work is going to be mada with acrylic or oil procedure it is also posible to prime it with with acrylic / gesso base and finish giving it a final basis of red rust or ocher. Everything must be perfectly smoothed with sandpaper.
2. Apply water armhole brand "Pajarita". It looks similar to latex but dries a bit slower. Another possibility is the mixtion: resin to the oil wich also allows pasting the gold leaf but takes a long time to reach the mordant state, which is optimal to proceed pasting the sheets of gold leaf.
3. The fake gold sheets are 12cm.x12cm. and are made of tin alloy. The real ones are 8cm.x8cm. and much more expensive. To place

the thin slices without wrinkles should proceed with a sheet and go depositing smoothly. With a soft brush or your finger extend avoiding wrinkles. Since then we have overlapping sheets with sheets, the edges are mounted and without the armhole that unites them. That's why they are carefully removed.

4. To stop the oxidation of tin we proceed to apply the shellac or any transparent synthetic varnish, allowing in each case to paint over the fake gold both with acrylic and with oil. Also, after you can do scrapes in order to make the prime's color vibrate with the golden or silvered sheets (traditionally ochre for the golden leaf and black for the silvered leaf).

AN OTHER VARIATION CONSISTS ON USING SILVER WITH DARK AND BLUE BACKGROUND. You'll proceed exactly the same.

14.5. BIBLIOGRAPHY AND WEB LINKS.

BIBLIOGRAPHY

BERNSTEIN, Peter L. *The power of gold: The history of an obsession.* Published By John Wiley & Sons, Inc. USA 2000.

HILLS, Paul. *The Light of Early Italian Painting,* Yale University Press: New Haven and London, 1987.

WEB LINKS

Atelier Saint André. Dorado al agua. Última actualización: Fri, Jan 9, 2009, P. Grall © ASA 2000 - 2009 All rights reserved. [Fecha de consulta: 1 de febrero de 2012]. Available at: http://www.atelier-st-andre.net/es/paginas/tecnica/tecnica_icono/bol.html

Dorado de una tabla. Asignatura Procedimientos y Técnicas Pictóricas. Facultad de Bellas Artes de Sevilla, Prof. Carlos Ortiz de Villate (se trata de un vídeo que muestra la aplicación práctica del pan de oro). [Fecha de consulta: 2 de febrero de 2012]. Disponible en:

<http://laciudaddesnuda.tumovie.com/video/208/dorado-de-una-tabla>