

Drugs, colors and aromatics

Tradition and innovation in the *materia medica*
of Italian Baroque: studies from the *spezieria*
of Santa Maria della Scala, Rome

Edited by Ma. Luisa Vázquez de Ágredos Pascual, Giovanni Cavallo, Rita Pagiotti



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Chapter 2

FROM THE SPICE SHOP TO THE PAINTER'S WORKSHOP: THE APOTHECARIES WHO SUPPLIED THE MATERIALS FOR MEDIEVAL PAINTING IN THE CROWN OF ARAGON

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There has been a lot of talk recently in the media, including *The New York Times*, about an article published at the beginning of 2019 (Radini, 2019). The article presented a multidisciplinary analysis of the discovery of a blue pigment, lapis lazuli, on the teeth of a nun who lived in the late 11th and early 12th centuries and was buried in the church of a German monastery in Dalheim. The answer to the question of how such a peculiar pigment, imported from what is now Afghanistan, came to be there, has given rise to various hypotheses. However, the authors of the study have accepted as the most plausible one that she was an illuminator of manuscripts, since this pigment was habitual in miniatures. At a time when studies about the presence of women in science, art, literature and other fields are proliferating, the find has aroused quite a lot of interest. Moreover, medical historians have hastened to point out that this mineral also had medical uses, an option also suggested by the people researching the find.²

This case is useful as an introduction to the study that we are presenting, because it allows us to link two perspectives, the artistic and the medi-

² See the tweets by the well-known medical historian Monica Green, at twitter.com/monica-MedHist/status/1083390786782126080 (Last accessed November 8, 2020).

cal-pharmaceutical, and to begin by pointing out that the suppliers of the raw materials necessary in both practices, working with pigments to obtain colours or preparing medicines, were to a large extent one and the same: apothecaries.

One of the functions carried out by the *spezieria* of Santa Maria della Scala of Rome, the main subject of this volume, was in fact that of supplying pigments and colours to craftsmen (Figs. 1, 2), as described in the first and ninth chapters of the book. However, in the Middle Ages, in the Mediterranean arc this function was not at all carried out by religious houses but by the workshops of versatile professionals, apothecaries. Pigments were in theory produced in monasteries and convents, but in actual fact, from the 13th century onwards, with the growth of cities painting workshops became more urban. The pigment trade was therefore redirected towards the cities and at least part of it was in the hands of apothecaries, spice merchants and shopkeepers. However, this connection between apothecaries and painters has barely been established in the writings of historians (Bénézet, 1999: 346; Herrero-Cortell and Puig, 2017; 32-50) Based on examples taken from the city of Valencia, and from the perspective of the Crown of Aragon, to which the capital of the kingdom belonged, here we shall make an interpretation of this part of apothecaries' activity related to art.



Figs. 1, 2. Two of the containers of Santa Maria della Scala in Rome that contain colouring materials used by painters and other artists: The Armenian bole (Fig.1) and cinnabar (Fig. 2). Photographs by Rafael Garay Peset; Photo Archive *Santa Maria della Scala Project*, Rome.

When talking about late medieval painters we must avoid both the standardized images of the artist schooled in a monastic environment, familiar with the texts and the illustrations, and also the image that we have of the Renaissance artist. From the 12th century onwards, a consequence of the growth of cities was the settlement of many professional artists in cities, including painters. It was in those years when the literary myth of the Romanesque painter who consecrated his work to the glory of God was broken. At the end of the Middle Ages, the myth and the social reality that painters experienced did not coincide (Muratova, 1983:53-72; Russo, 1983:353-358). This process can also be detected in the territories of the Crown of Aragon. Thus, although later, we find painters' workshops established in it from the early years of the 14th century. Barcelona was the first pole of attraction, followed by Valencia and Mallorca (Sabater, 2002; Lacarra, 2007; García, 2011; Alcoy, 2015: 135-148). This settlement, with the presence of workshops capable of taking on a greater workload, did not take place in Valencia until the final third of the 14th and the early 15th century, coinciding with the commercial growth of the city of Valencia.

Painting is an artisanal profession, done in a workshop after a period of apprenticeship and following precise rules for producing objects that were not very aesthetic, in the modern sense of the term. It was through repetitive everyday work that a late medieval painter became a well-known master. Antoni Peris, for example, a painter of altarpieces in late 14th and early 15th-century Valencia, clearly describes for us the aptitude of another painter, Jaume Mateu: "the art of the painter is such that if the apprentice does not have a keen understanding, no matter what the master does he will not make him a desirable disciple, and if the apprentice is keen he will learn the said profession properly even though the master is not very diligent".³

Diligence and keenness are values that, applied to the workshop, refer to the necessary attentiveness, sharpness and ingenuity that someone learning the profession had to have. They are mental and manual skills that in this case the painter had to have to be a good craftsman – attentiveness and skill when, among other things, covering boards with cloth, plastering or finely crushing the colours in order to illuminate a manuscript or paint an altarpiece.

3. *"L'art del pintor és tal que si lo que aprèn no ha subtil enteniment, per molt que faça lo mestre no'l farà univinent deixeble, et si lo aprenent és subtil aprendrà bé lo dit ofici encara que lo mestre no y haja gran diligència."* For a complete reading of the document. See: Aliaga, 1996: 163, 170-172. On Antoni Peris, see: Llanes, 2012: 95-110.

In this respect, Ximo Company defined painters as *artifex* (craftsmen), a term that reflected their social and professional status better than “artist”, at least until the 15th century (Company, 1998: 21-24). Craftsmen had to be skilled in the practice of their profession, a skilfulness that required technical rather than scientific expertise. Moreover, their professional profile, based on the use of colour, conceals many different uses of painting and a great variety of skills in techniques and finishes. The analysis of the procedures necessary to paint parchments, objects, walls or altarpieces may perhaps enlighten us better about the nature of the profession. In fact, one must distinguish between the versatility of the workshop and the necessary specialization of the profession. Encarna Montero speaks about the versatile nature of painting workshops between 1350 and 1450 (Montero, 2015:166), since they had to be prepared to respond to a varied demand, from everyday objects (boxes, candelabra, curtains, shields, lances) to luxury items (Miquel, 2008: 119-238; Llanes, 2014: 123-172). There are many examples of painters who did not paint as we understand it now, and they demonstrate the artisanal condition of the late medieval painter; they often decorated all kinds of objects (boxes, curtains, bedspreads, clogs, standards, tombs or floats) on different supports (fabrics, wood or stone). Indeed, altarpiece painting, the most studied and best known, only concerns a few workshops, while many more people appear working as painters.

To mention this diversity, the versatility of painters is pointed out as a characteristic of the profession in the late Middle Ages (Yarza, 1998:7-58), a trait that merely represents their adaptation to the demand and the tastes of the client. In 1416, the painter Joan Moreno was paid 2,000 *sous* for the *entremesos*⁴ that he had made for the Corpus Christi procession; this price was a fair bit higher than what a large altarpiece might have cost.⁵ Many other painters from Valencia, like Andreu Riera, Jaume Mateu, Nicolau Querol and the brothers Vicent and Joan Saera, worked painting all sorts of objects and not just altarpieces. This shows us a different side of the painter’s profession and the work done in the workshop, an activity more typical of craftsmen than artists, but closer to the social reality in which medieval painters lived. In fact, the predominance in the records of painting

4. An *entremès* refers to public theatrical performances on biblical or allegorical themes done on moving floats for Corpus Christi or royal entries. The *sou* is the basic accounting currency in the Crown of Aragon.

5. Arxiu del Reial-Col·legi Seminari Corpus Christi de València (ACCV), notary Lluís Guerau, 27.180 (Various payments: 6 Jul 1416 to 28 Jul 1416).

on wood corresponds more to the researcher's point of view than to the everyday reality of painters, occasionally occupied in work that had little to do with their profession (Rubio, 2015).

In relation to the demand, there is general consensus in pointing to the craftsman's dependence on his commissioner (Company, 1998: 24-26; Yarra, 1998:7-58; Miquel, 2008: 41-118; García, 2011: 17-70). This servitude affects not just the colours and the quality of the works, but also the firms, since, as the contracts show us, the client's choice depended on the samples and models that the commissioner of the work had previously viewed, and on other occasions – not always – procedures were specified and conditions were imposed on the process of production. In the 14th and 15th centuries, for the territory of the Crown of Aragon, it was a client, not so much a dealer, who ordered works from the workshops that were concentrated in the most important cities, Barcelona and Valencia successively, without overlooking other centres such as Zaragoza, Mallorca or the territories of the Maestrat (in the Kingdom of Valencia) and the banks of the river Ebre, which were occasionally notable. Besides being in cities they also belonged to the noble and ecclesiastical orders. Nevertheless, the commissioner par excellence was the monarchy, for the quantity, the quality and the diversity of its orders.

A new development in the closing stages of the Middle Ages was the presence of numerous commissioners from the bourgeoisie: municipal councillors, members of brotherhoods, merchants and distinguished citizens (*proboms*) (Miquel, 2008:41-118; García, 2011:21-43). In Valencia, we have found that there were also apothecaries among them, an aspect to point out for the interest of this study, in which we have detected that relationships between apothecaries and painters were very varied.⁶ Several factors therefore encouraged the purchasing of raw materials from apothecaries: the urban nature of the workshops, the type of products coming out of these workshops and the type of client who commissioned the work.

The materials used in painters' workshops were very varied, as was the kind of work that could come out of a workshop, oratories, altarpieces,

6. This view of the relationship between the two professions is suggested to us by the joint references, quite abundant in the documents, to financial transactions between apothecaries and painters. We might think that the most obvious one was that of the vendor, the supplier of raw materials, and that of the client. However, it is not always like this, and the notarial documents refer to less habitual activities. On the other hand, the more everyday ones rarely appear in them, such as the purchase of colours or materials, while we do find others referred to, such as credit relationships, and the commissioning of decorative work or altarpieces.

boxes, canvases, clogs, manuscripts or suits of armour. Each support required a different kind of procedure that the painter had to be familiar with. Nor was it the same if the order was for a short-lived work or for one in which the client demanded, above all, durability. The preparation of the colours was an aspect of artistic production that depended on the training and skills of painters. Training was acquired in the workshop; it was a slow learning process and it was gained with practice achieved inside the workshop. We have a record of the existence of *repertoris d'ofici* (Cennini, 2002: 56-57; Montero, 2015: 81-117, 159-170)⁷ in workshops or in the hands of clergymen. The existence of these texts was also one of the resources workshops had, an example of the versatile nature of the painters and an aid for learning the profession. Notwithstanding that, it was practice that ensured a painter was competent, practice that depended on the care of the master and the diligence of his student. For example, the painter Jaume Mateu worked for 13 or 14 years in Pere Nicolau's workshop (Llanes, 2011a: 446-525).

The painter's tasks included a series of procedures that led to the finished work of art ordered by the clients. They are tasks that we can summarize, as did the treatise writer Cennino Cennini, in two categories: drawing and painting (Cennini, 2002: 35-36). Nevertheless, the apparent simplicity conceals great complexity in both the treatment of the materials and the working processes. They are quite heavily specialized jobs that require expertise, ability and skill. A master, besides knowing how to draw, had to be able to crush, grind, glue, prepare, plaster, smooth, polish, apply bole, gild, burnish, blend the colours, cut the edges, dye and varnish. All that without taking into account the different techniques that he could use, painting on paper, wood, walls, canvases, and so on, and, moreover, he had to make sure it would last. Many works may have been lost due to the use of inadequate techniques.

The information we have about the materials and procedures involved in the preparation of colours has been gleaned from a host of medieval treatises and recipe books. Many of these have survived from the 14th and 15th centuries. Some have been known since the beginning of the Middle

7. This term refers to the *quaderns de mostres* (sample books), either of figures or details or of colours. It is quite common in inventories and was used by painters to show their clients what they could do. They could also have the function of examples for learning, although the majority of authors are inclined towards a more practical apprenticeship.

Ages and the practices described are very similar to those of Byzantine painting and the illumination of manuscripts (Clarke, 2001).⁸ Others, as we move towards the late Middle Ages, are more systematic and provide more consistent information. This would be true of *De arte illuminandi* (14th C); Alcherius, *De coloribus diversis modis* (14th C); *Liber de coloribus illuminatorum sive pictorum* (15th C); or Jean Le Bègue's *Compilation* (15th C). The manuscripts that perhaps best show us the variety of knowledge that a good painter had to acquire are *Il libro dell'arte* (1390), by Cennino Cennini, and the *Liber diversarum artium*, from the city of Montpellier (1430).⁹ However, the majority of the authors who have dealt with the subject insist on making a distinction between the treatises and the collections of recipes. The difference lies in their nature, theoretical or practical, and in the coherence of the exposition. In the Valencian documentation, except for the case of the priest Andreu Garcia, there are few references to painting treatises or recipe books in the inventories of painters (Montero, 2015: 160-170).¹⁰ In the sources consulted – basically inventories of goods – we have found no reference to treatises or professional books, apart from “two wooden boards with sheets of paper with samples; many various samples painted and figured on different sheets of paper”; and “many samples of the art of the illuminator and five paper books with some things of the illuminator's art”, in the inventories of Jaume del Port (1427), Bartomeu Avellà (1428) and Miquel Adsuara (1474).¹¹ Contracts did not usually refer very much to the colours; they only specified the most expensive ones, azur d'Acre or ultramarine blue, and the gilding, although they did

8. *Compositiones ad tigenda* (8th C); *Mappae clavicula* (9th C); *Compostiones-Mappae clavicula* Madrid, BN, MS 19, Ripoll; Montecassino, 11th C/ Ripoll, first half of the 12th C; Heraclio, *De coloribus et artibus romanorum*, (10-13th C); Teófilo, *Schedula diversarum artium* (12th C); Petrus de Sancto Audemaro, *De coloribus faciendis* (13-14th C).

9. For this study we have used Cennini, 2002: 5-25. Cennini's book differs from medieval recipe books insofar as it reflects the break with the techniques of Antiquity and is earlier than the Renaissance models. And for the Montpellier manuscript, see Clarke, 2011. This manuscript is a collection of painting techniques between 1300 and 1430, from northern Europe, to which those from Italy were gradually added.

10. Montero, 2015: 160-170 points out that throughout the late Middle Ages one can follow the trail of the use of recipe books and sample books, but that it is more difficult to record codified artisanal knowledge, knowledge that we must consider implicit and which in the specific environment of the painter had a quantifiable financial value. Thus, the researcher has to work on a framework of reference that would include a series of treatises known in the period although they do not appear in the inventories consulted. In fact, in the inventory of this clergyman there are *papers de pintura* owned by the painters Berenguer Mateu and Gonçal Sarrià.

11. “dues posts ab paper de mostres; moltes e diverses mostres pintades e figurades en diverses papers; i moltes de mostres de l'art d'il·luminador e cinch llibres de paper de algunes coses de art de il·luminador”. See: Sanchis, 1928: 33-40; Sanchis, 1929: 28-29; 64.

indicate the parts of the altarpiece where they had to be used and the most important parts of the process for ensuring the quality of the commission (Llanes, 2014: 193-195).¹²

On the other hand, if we compare the content of treatises and recipe books with the inventories of painters in Valencia we *can* confirm the procedures used, as they include the painter's implements and resources. In the said inventories, besides the stone for grinding colours, implements and materials are named, and we know thanks to the treatises that they were part of the process of artistic production. In the inventory of Bartomeu Salset (1418) we find: "Item, two gilding cushions, [...] one pair of combs; [...] a soft brush; [...] a copper cauldron of one and a half cànthers [11 litres]; ten pounds of linen and flax thread; [...] Item, a stone for grinding colours; [...] Item, many sheets of paper with images of little value drawn of the deceased; [...] Item, three burnishing stones and three teeth".¹³

Therefore, in the painter's workshop the brushes were made, the colours were ground, the paste was prepared, samples were drawn or they were conserved and polished. If we compare it to Cennini's account, there is a clear similarity, showing that painting techniques spread all over Europe during the 14th century. The differences that we find in them correspond to the possibilities for the supply of raw materials or a certain degree of specialization. Thus, while in the Italian republics the painters were noted for their mastery of fresco painting, in the Crown of Aragon it was rather the building of altarpieces (Berg, 1989: 1-12; Alcoy, 2015: 135-148). Throughout the 15th century some of these jobs began to become specialized, and so gold beaters, draughtsmen, illuminators and painters of boxes and altarpieces gradually became separate professions (Llanes 2011b: 2392-2404).¹⁴

On the other hand, the value of the sources is limited, the treatises were not always transcribed by people well versed in the art of colours, and the

12. The contract between Pere Nicolau and Gil Sánchez de las Vacas for an altarpiece dedicated to Saint John the Baptist, for Teruel (1404), is quite well known for its level of demands. Among other conditions, it mentions the plasterwork and the covering with cloth, besides specifying the durability of the materials and colours, which had to be *fines e perfectes*.

13. "Item, dos coixins de daurar; [...] un parell de pintes; [...] un bresch sotil; [...] una caldera d'aram de cànter e mig; deu lliures de fil de li e de estopa; [...] item, una pedra de moldre colós ab dues colents; [...] item, molts papers ab imatges deboixades del dit difunt, de poca valor; [...] item, tres pedres de bonyir e tres queixals [...]". See: Tolosa, *et al.*, 2011: 484.

14. The painter Joan Moreno (1396-1448) did decorative painting and became very famous; he worked in Valencia Cathedral with the great Gothic masters but on some occasions he was sub-contracted to do drawings for embroiderers.

technical terms can be confusing (Doener, 1998: 223-229). We must remember that the inventories were made post mortem and did not always show us a contemporary reality as they are samples of what has survived, and when assessing them one must bear in mind other circumstances, from the age of the deceased to the type of painting.

Before speaking about the materials that we would find in a painter's workshop some more general considerations have to be made. The palettes of painters in the Gothic period were not the same as they are now; not even the terms relating to the colour meant the same thing (Pastoureau and Simonet, 2006:20-34). Pastoureau, when talking about colours, insists on their symbolic nature and on the different meaning according to the moment in history to which we are referring. Besides, we do not perceive them in the same way since the conditions of the light have changed and in many cases there are also losses of pigment.

At the end of the Middle Ages we talk about six basic colours, but before the 13th century the treatises only mentioned a system based on three colours: white, red and black. On the other hand, in Cennini's *Libro dell'arte* seven natural colours are named, four of them earthy (black, red, yellow and green), and others that have to be artificially reinforced, such as white, ultramarine or German blue, and yellow (Cennini, 2002: 62). He also distinguishes between the methods of preparation and their suitability according to each painting technique. This warns us to be careful when handling concepts in order to avoid inconsistency.

It must be said that it is not always possible to identify the materials used by painters since the colours and colorants used do not correspond directly to the materials known these days (San Andrés *et al.*, 2010; Kroustallis, 2011). Moreover, as Clarke points out, a colour can be the product of a pigment or a combination of colours, according to the method of preparation (Clarke, 2011).¹⁵ For example, Cennini identified the colour we now call "red" as purple and it could be made from porphyry but also from cinnabar, minium, amethyst, or dragon's blood from *asparagace* family (Cennini, 2002:65-71). The result could be a different colour depending on the agglutinant used. The confusion due to the passage of time must

15. Mark Clarke has studied the medieval treatises, and many of his publications deal with the colours in medieval manuscripts. The differences in the use of colours can be seen in the procedure; if we except Cennini, we do not know if we are looking at a work done *ad hoc* or a compilation of recipes.

also be assessed, either because of errors in the translations or changes in the materials (Clarke, 2001: 26-31).

Another aspect that various researchers point out is the use we make of the term “colour”,¹⁶ especially in reference to the techniques used in medieval painting workshops, from both the conceptual point of view when distinguishing between colour, colorant or pigment, and their use in modern restoration work. A pigment may be more than one colour depending on both the preparation and colorants used and the workshop’s technique.

Differentiating between these three concepts is important as in practice only chemical analysis could establish the differences. To identify them it is necessary to examine the colours, the colorants used, the mixtures or imitations and the technique used to make up the colours, which could be changed through the superimposition of layers of transparent colour or by using the natural colours of plants (Clarke, 2001:140-143). It is for this reason that one must be very clear about aspects of terminology and composition when referring to the colours used in the Middle Ages, especially from the 14th century onwards.

Other materials used are *draps* (pieces of cloth), and *retalls de papers* (scraps of paper), which were necessary to make *aiguacuïta* (glue), a product that had many uses and could be purchased in sheets or dehydrated (Cennini, 2002:150; Herrero-Cortell and Puig, 2017:36). Among the agglutinants there is the use of egg white for tempera, and glues, including gum Arabic and linseed oil. Other examples of these materials are difficult to document due to their short lifespan. They do appear on many occasions in the accounts books of festivities and royal entries (Herrero-Cortell and Puig, 2017:36, 39-41), in *Llibres d’obres* (Books of works) or in municipal accounts. The rest of the materials used by painters depended on the procedures and the type of work done in the workshop. *Guix amortat* is noted down in inventories, used to plaster or give solidity to the shapes on altarpieces, shields or floats. Other products were mordants and varnishes. Mordants were adhesive and were used to make the *sisà* (base) for gilding.

The extent to which the materials used by painters were purchased or made by them depended on many factors, such as the procedures for obtaining the colours (whether pigments or colorants) and the glues and agglutinants, which were necessary depending on the supports to which

16. On colour, colorants and pigments see Doener, 1998: 223-229; Clarke, 2011:118; Kroustalis, 2011:783-784; Herrero-Cortell and Puig, 2017.

they were applied and which required different types of plaster, paste, gilt and paint determined by the degree of moulding or the agglutinant used. The painter could prepare these materials himself. Cennini, however, on the subject of making the colours, advises: "if you wish to tire yourself out you will find many recipes, especially if you make friends with friars. But my advice to you is that in order not to waste time with the multiple variations that such practices have, that you buy with your money what you will find already prepared by the spice merchants."¹⁷

From this advice by the author we can deduce two ideas about the practice of painting in the 14th century. Firstly, that the theoretical source could come essentially from clergymen as they had access to the recipe books and treatises on painting, and, secondly, that resorting to purchasing raw materials or semi-made-up colours for the preparation of the colours was a more habitual practice than is reflected in the sources. And on this last point the apothecary's workshop played a crucial role.

The apothecary or spice merchant (*especier*), as he was more often called in Catalan in the Middle Ages, was an individual who made and sold a large variety of products in a pure state that were grouped together under the name of drugs and spices, and a group that was made up from the mixing of these drugs and spices, called simples and compounds respectively (Vela, 2015:130-132). The way in which these products – many of them exotic – reached Valencia was complex; they often originated in the East and travelled long distances along the trade routes, which made them more expensive (García, 2011:71-115; Freedman, 2010). In others, on the other hand, the ingredients were obtained with herborizations and their own gardens. In reality, the uses a spice could have were very diverse.

Using the many *simples* apothecaries could make up a very large number of compound products according to certain formulations: medicines, sauces, perfumes, comfits and sweets made with sugar and honey, wines, oils and aromatic waters, products made with wax (lighting and votive offerings), writing instruments (ink, paper and sealing wax), gunpowder (weapons and fireworks) and, for what we are interested in here, different products for painters. We can certainly claim, to judge by the information provided by

17. "Si quieres fatigarte encontrarás muchas recetas, especialmente si te haces amigo de frailes. Pero te aconsejo que para no perder el tiempo con las múltiples variaciones que tales prácticas tienen, que compres con tu dinero el que encontrarás ya preparado por los especieros." See: Cennini, 2002: 68.

inventories and also by some surviving accounts and “invoices”, that some apothecaries could be specialized in some of these activities, and especially in the production of medicines (Ferragud and Vela, 2018).

Moreover, the multiplicity of practices in an apothecary’s workshop must have been the norm. Apothecary’s workshops after all complemented merchants and shopkeepers, becoming centres of redistribution of raw materials and goods, manufactured by them or not (Vela, 2017: 22-24). They often became a huge materials depot, divided into different rooms, and even different dwellings, which the inventories of goods clearly show us (Rodrigo, 1929: 110-153). We do in fact have a large number of inventories of apothecaries’ goods in the Crown of Aragon, which we can compare with those from the rest of the Mediterranean and even from northern Europe, leading us to the conclusion that these practices were common.¹⁸

Within this productive and commercial system, painters inevitably came into contact with apothecaries. It is quite true that painters could make up all the things that they needed to prepare their work. Indeed, they had servants, paid workers, apprentices or slaves who could do this kind of work. We see this in the case of Jaume del Port, who died on 19 October 1427 (Sanchis, 1929: 28-29) A few days after his death an inventory was made in which we find implements for painting shields, thus showing that it was in the workshop where the material was prepared: “Item, a bunch of feathers for making paintbrushes. Item, many sheets of paper with samples [...] Item, a box of colours. Item, two small jugs in which there are six roves (1 rova = 10.4 kg) of cheese for making paste [...] Item, four slabs for grinding colours. Item, a small box of stones for grinding colours. Item, two wooden boards with sheets of paper with samples. Item, a mould for making small paper baskets”.¹⁹

Notwithstanding this, we are unable to determine how often painters, who were familiar with the techniques for preparing all that was needed for doing their work, prepared materials themselves.

We would like to stress here that there was often a technical and financial

18. There are very many apothecaries’ inventories. We cite, as examples, some of those published for the Crown of Aragon, in particular Mallorca: Batlle, 1994; Sampietro, 2006; Morro, 2010. On the other hand, for Italy see: Aleati and Bianchi, 1953; Giuffrida, 1976; Santoro, 2006; Santoro, 2007.

19. “Ítem, un manoll de plomes per fer pinzells. Ítem, molts papers de mostres [...] Ítem, una capsa de colors. Ítem, dues gerres xiques en les quals ha tro a sis roves de formatges per a fer engrut [...] Ítem, quatre loses per a moldre colors. Ítem, una caxeta de moletes per a molre colors. Ítem, dues posts ab paper de mostres. Ítem, un molle per a fer tabachs de paper.”

commercial understanding, which took different forms. And so, the apothecary was a supplier of ingredients for painters. The latter, painters of boxes, lances, curtains or altarpieces, went to their workshops to buy vermilion, Armenian bole, kermes or orpiment. These products were sold ground or in blocks and cubes to be ground in the painter's workshop. The references to the materials in the contracts established between commissioners and painters are not very specific or only stress the most outstanding products: "Item, it is necessary to gild the carving and strips, as is the custom, with fine gold, and the images with good fine colours and azur d'Acre."²⁰ Also, in another case: "Item, they will make on the said altarpiece dust covers with images, gilded in fine gold leaf. Item, the painters promise, that they will paint the altarpiece with good and fine colours and good blue, they will gild it with fine gold leaf in the manner of other similar altarpieces, and the principal robes will be of fine azur d'Acre."²¹ And a third: "Item, that on the said altarpiece, tabernacle and bench be finished in wood to be covered with cloth and plastered and painted in good and fine colours, that is, in azure and fine gold leaf wherever it is needed."²²

In all the cases there is insistence on the quality of the products and on the grammage of the colours and the gold, which will be applied to every part of the altarpieces.

One activity in which apothecaries and painters worked together was preparing for the most special festivities in the city. We have detailed lists of purchases and payments made to apothecaries and painters in Corpus Christi festivities, and royal entries, weddings and funeral ceremonies. The majority of the materials were supplied by apothecaries, especially the most expensive ones, such as *azur d'Acre* (García, 2011:85-86). For King Martin's entry to Valencia in 1402, the spice merchant Jaume Roures stands out as the supplier, as do Bernat Andreu and Vicent Amalrich. In 1413, Vicent Amalrich took charge of supplying painters with the colorants – German

20. "Item, és tengut daurar la talla e campers, segons és acostumat, de fin or, e les ymages de bones e fines colors e atzur d'Acre." Contract between Miquel Alcanýs and Bartomeu Terol to build an altarpiece dedicated to Saint Michael, see: Sanchis, 1929: 30.

21. "Item, faran en lo dit retaule polseres ab ymatges daurades d'or fi. Ítem, prometem los dits pintors, que pintaran lo dit retaule ab bones e fines colors e bon atzur, el dauraran de fin or en manera de altres retaules semblants e les vestidures principals seran d'atzur d'Acre fi". Contract of General Peris and Guerau Gener for the altarpiece of Saints Dominic, Cosmas and Damian for the chapel of Saint Dominic in the convent of preachers in Valencia. See: Tolosa et al., 2011: 118-119.

22. "Item, que en lo dit retaule, tabernacle e banch sia acabat de fusta de endrapar e de engruixar e pintar de bones e fines colors, ço és, de adzur e de fin or llà on se requerrà." Contract of Jaume Roures for Cortes d'Arenós (16 November, 1430). See: Cerveró, 1963:126.

blue, scarlet, vermilion, verdigris and saffron – needed for the decoration of the floats. The painters grouped together in *colles* (groups) – carvers, brush painters – made one-off supplies of materials, but it seems that the bulk of the purchases were made from apothecaries (Aliaga *et al.*, 2007: 56-57, 81-82, 428; Cárceles and García, 2013:18-25, 498; Herrero-Cortell and Puig, 2017: 36, 39-41).

In November 1415, the municipal government of Castelló de la Plana, a small town 70 km north of the capital of the kingdom, made payments to two apothecaries who supplied colours to painters for the scenery that was to be used for the celebration of Corpus Christi. They were Bartomeu Martí and Bartomeu Palau. The documents specify that they were paid *for the colours you purchase from him*. It should also be pointed out that a sum was paid to a man *who helped Master Nadal, a painter, to grind the colours that were needed for the said representation* and for the eggs used as agglutinant for the colours.²³ Varnishes and mordants also appear in the expenses of the royal entries as materials purchased from apothecaries and spice merchants (Ceninni, 2002: 136-137, 148-152, 188-194; Herrero-Cortell and Puig, 2017: 41-42).

Some apothecaries, taking advantage of their social position, notable in some cases, acted as middlemen between a specific client and a painter. Llorenç Saragossà, a painter who worked between Barcelona and Valencia in the second half of the 14th century, signed a contract on 16 July 1364 with the eminent Barcelona apothecary Miquel Tosell to build an altarpiece dedicated to Saints Gabriel and Anthony (Company *et al.*, 2005: 196-199).²⁴ The altarpiece was for the high church in Cagliari (Sardinia, Italy) and was painted between July and December of that year. The conditions of the contract include the materials, the stories and the payment deadlines. Although the contract is signed between the painter and the apothecary, who was in charge of the payment deadlines until December 1365, when the painter had to deliver the finished altarpiece, we realize that the clients are in fact other people, as *quodque manumissores Michaelis de Villanova fieri mandarunt* is noted down [the executors of Miquel de Vilanova ordered him to do it]. That is, the apothecary acts in practice as

23. “per les colors que de aquell compràs; qui ajudà a molre les colors a maestre Nadal, pintor, qui eren necessàries al feyt de la dita representació.” See: Traver and Ferrer, 2004: 501.

24. On this apothecary of King Peter the Ceremonious see the index of personal names in Ferragud, 2005.

an intermediary and, in all likelihood, as the supplier of the materials: *azur d'Acre*, good colours, *German blue* for the dust covers, *gilded silver* for the predella, all of the finest quality.

Apothecaries were artisans who managed to amass considerable fortunes and played quite an important role in society. In this respect, the proper organization of funerals was accompanied by the ornamentation of the sepulchral elements, which could also entail the manufacturing of an altarpiece. It was a case, therefore, of achieving an element of social distinction: art at the service of the prestige of the urban patriciate.²⁵

When the apothecary Esteve Valença set sail, skippering a galley in 1388 with the squadron that was sailing against the Barbary Coast infidels, he made a will. His participation in all likelihood would have been associated with the supply of medicines to the soldiers. Accompanying the army had been a habitual task among apothecaries since the 13th century. One of his wishes in this will was the construction of a chapel in Valencia Cathedral, which he demanded had to be like the one that a canon had had built recently. The chapel would have to have an altarpiece with dedications to Saint Christopher, patron saint of travellers, and Saint Stephen, pope and martyr. It does not seem that this chapel was ever built, but it is a clear indication of the wish to endure in the memory in a notable place in the city (Ferragud, 2005: 611-612). This was to be expected given the man's social status: he was a great landowner, a merchant involved in companies in the timber business, a moneylender, slave owner, and one of the founders of the hospital of the Innocents, in the same city (Ferragud, 2005).

Some years later, the painter Pere Nicolau paid Esteve Valença a sum of money because of a loan (Llanes, 2014: 275). From the dates, 1399-1400, years when Pere Nicolau was working for the brotherhood of Saint James and for Valencia Cathedral, this suggests to us that the document might conceal the financing of Pere Nicolau's workshop, and that he turned to Jaime Valença for the money needed to pay for wood, pigments and other materials necessary for painting altarpieces. As we mentioned earlier, Valença was involved in the timber business through a company.

The will of Pere Torres, an apothecary from the city of Valencia, written in May 1438, gives us quite detailed information about his background and social status. We know that he appointed as executors his uncles Jaume,

²⁵ ACCV, notary Jaume Vinader, 9.531 (9 May 1438).

also an apothecary – who informs about the family’s inheritance of the profession – and Joan, a crossbow maker, whom he rewarded generously for this task, and his brother Jaume, a cellar keeper, whom he would also make his universal heir. He set aside 500 *sous* for the funeral expenses. As a parishioner of Sant Martí, he asked to be buried in that parish, “in that grave that I have there near the door that goes up to the bell tower and asking that over my grave they should build an altarpiece dedicated to Saint Onophrius and an altar on which Mass can be said”.²⁶

Quite a few years later, in 1461, Torres decided to make quite important changes to his will.²⁷ After cancelling the previous one – we have no record of any other wills being written – he appointed two new executors, who this time were not relatives. Torres, now an adult, had broken free of the influence of his uncles and now chose two merchants, fellow citizens, Antoni Roda and Andreu Oliver. Indeed, faced with the possibility that the latter might be away from Valencia when he died, he named Bernat Palleja, also a merchant, as substitute. His body would however have to rest in the parish of Sant Martí, “in that grave that I have there in front of my altar and retable of Saint Onophrius”.²⁸ This statement suggests to us that the preparations for his death had already begun, and that the altar and retable, his wish in the first will, had already been built before he died.

The apothecary Macià Martí ordered an altarpiece to be built for the church of Santa Caterina (Ferragud and Vela, 2018). On 14 July he hired the carpenter Jaume Espina – a regular maker of altarpieces – for this task. At Christmas, Espina would make an altarpiece of a similar nature – and even better if possible – to the ones that had been made for the bishop. From the dates, he was almost certainly referring to the one of Saint Martha and Saint Clement for the bishop of Barcelona, Francesc Climent. It would cost 24 florins.²⁹ Five days later, Martí reached an agreement with the famous painter Gonçal Peris for him to paint an altarpiece that would cost 1,200 *sous*. Gonçal Peris was already a well-known painter who since 1404 had been working with Marçal de Sas, and who had already manufactured at least 10 altarpieces. His clients included the Valencia cathedral chapter, the weavers’ guild, and he also worked for other municipalities

26. ACCV, notary Jaume Vinader, 9.531 (9 May 1438).

27. ACCV, notary Jaume Vinader, 9.039, s.f. (28 Feb 1461).

28. “en aquella fossa que yo tinc allí davant lo meu altar e retable de Senct Onofre.”

29. Arxiu del Regne de València (ARV), Notarial protocols (notary Vicent Saera), 2.419, ff. 402r-v (14 Jul 1418).

like Albarracín or Castellfabib (Aliaga, 1996:67-84; Aliaga, 2016:35-53). The demands made, namely, the reiteration of making a better altarpiece if possible than the one commissioned recently by the bishop, denote that Macià was in a position to demand a work of very high quality that would associate his name and his family with that of his parish, although we are unable to determine whether he acted as a middleman or he ordered it himself. In any case, he would have had to obtain permission and to have established a benefice, things we do not know. However, perhaps we should be inclined towards the second option. Unsurprisingly, the story that Peris would have to paint was that of *Sant Macià*, or Saint Matthias (Tolosa *et al.*, 2011: 493). Moreover, the size of the altarpiece, 15 by 10.5 handspans (3.45 x 2.4 metres) and the price tell us that it was like the usual family altarpieces: a central panel, three side panels, a bench and a central pinnacle with the Crucifixion scene, and compartments with images.

Finally, there was the case of the painters Antoni Peris and Gonçal Peris, who agreed to make an altarpiece – commissioned by Arnau de Conques, a doctor of laws, and his brother-in-law, the apothecary Vicent Amalrich, son of Ramon Amalrich, who was also an apothecary – dedicated to the Holy Trinity and which would be set in a chapel in the convent of Sant Agustí, owned by Arnau de Conques and the wife of Ramon Amalrich (Cerveró, 1963:146, 150; Aliaga, 1996: 621).

To end, we would like to point out that certain details seem to show that the connections that these professionals, painters and apothecaries, established could go beyond the merely professional and that the ties established between both groups led to even closer collaboration.

Some of these relationships could also have begun due to them being neighbours. The painter Bartomeu Avellà had a cellar next to the house of the apothecary Bernat Alpanyes, in carrer dels Trànsits.³⁰ It must be said that in medieval Valencia the professions were scattered much more than one might suspect, in contrast to what has often been believed about medieval cities. Thus, the apothecaries could be found in six streets (Especieria, Quart) and near gateways (Portal Nou) and squares in the city (plaça de Sant Bartomeu, plaça de les Cols), whereas the painters were concentrated much more around plaça dels Caixers and Frereria, attracted also by the connections with the carpenters, with whom they formed a brotherhood.

³⁰ *ABC* Notarial protocols (notary Vicent Saera), 2.426, XXII quinternus, s.f.

But they also appeared in other places in the city (García, 2010: 52-53; Llanes, 2014: 125-132).

It seems quite illustrative, moreover, that an apothecary from Valencia, Jaume Fuster, should have decided that his son Jeroni would train as a painter.³¹ The opposite also happened: the apothecary Lluís Alimbrot was the son of the painter Jordi Alimbrot (Montero, 2015: 30). These are merely two examples that do not point us towards any trends. Although some painters continued in their father's profession or in trades related to the art world, learning at home or elsewhere, others also learned other trades, quite different and of all kinds. Being a painter, after all, must only have been regarded as a lucrative profession in a few cases. What is very true is that in craftsmen's circles the choice was usually made to put their sons in a profession on the same level or higher with regard to advancement. Thus, apothecaries and painters had an idea of themselves that occasionally placed them close to one another on the social ladder, or they were at least considered good professional alternatives.

To sum up, this study aims to be an initial approach to this aspect of the work of apothecaries as suppliers of raw materials and manufactured goods to painters in the Middle Ages. A more in-depth study is necessary of pigments and colours, and their use on the different surfaces and on products in which painters intervened, as well as their association with the treatises in circulation. This also makes it necessary to study the use of these scholarly treatises, but also the possible circulation of recipe books for their use, like the ones for artisans, some of whom were also involved in the handling of colours, such as dyers (Cifuentes and Córdoba de la Llave, 2011) and eventually to study the link between the theory and practice of painting in the medieval period in greater detail.

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31. ARV, Notarial protocols (notary Andreu Julià), 1.272 (1 Feb 1441).

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