## **REVIEW:** Two books that describe pigments and dyes, in a different and complementary way.

Renata Pompas



La fabbrica dei Colori, pigmenti e coloranti nella pittura e nella tintoria. (The factory of colors, pigments and dyes in painting and dyeing). Il Bagatto, Roma, 1986. (pages 578)

This book, which was published with the CNR contribution, is the result of a group work, coordinated by the professors Corrado Maltese (chair of History of Modern Art) and Franco Salvetti (Chair of General and Inorganic Chemistry), from the "La Sapienza" University, of Rome.

It is a rich and complex text, divided into eight sections entrusted to different authors, who analysed pigments and dyes, described the materials, the production techniques, their history and application in painting and in textile dyeing. (Including numerous examples of overdyes, or mixing of dyeing colors, to obtain the desired gradation, which debunk the myth of only-one dye substance used at a time).

The sections

- Whites and Blacks, by Simona Rinaldi, is divided in four sub-chapters.
  - 1. From prehistoric times to the Middle Ages, the whites made from calcium carbonate.
  - 2. Rise and fall of lead white, from the Classical Age to the XIX century.
  - 3. The alternatives to lead white, from 1750 to today.
  - 4. The black pigments in the history of painting.

Among the about thirty whites taken into consideration from the Medieval ones, obtained from the shell of oysters and eggs, or marble, bones, etc..., to those of the XIX century – we can also find their presence in some very famous paintings. Of the black colors analysed it is described theirs processing technique starting from the prehistoric black carbon products.

- **Reds,** by Giuliana Quartullo, is divided into three sub-chapters.
  - 1. The origin, manufacture and use of the red colour, from its appearance in history, to the first half of the XVI century.
  - The red color processing technique in the 1550-1700 period.
  - 3. The red colour synthesized in the laboratory and in the painter's palettes, during the industrial Age.

The various reds colours and pigments are well described in their differences, including the best known, cited in\_various painting\_and dyeing treaties, such as: cinnabar, realgar, reds lands from madder, Turkish red (much envied by Napoleon), and kermes, also known as Venetian scarlet.

- Browns and Oranges, by Annamaria Milaneschi, is divided into three sub-chapters.
  - 1. Brown and orange pigments known since the antiquity.

- 2. Brown and orange pigments introduced between the XV and XVIII centuries.
- 3. Brown and orange pigments of industrial Age.

Among the about twenty colors described, there are also: the ochre lands of prehistoric times, the tannins from roots barks leaves and different fruits, the bitumen processing, the "mummy" pigment, the orange of chromium, cadmium and antimony, up to the dyes of synthesis.

In the part dedicated to the application of these products to painting, the author describes the damages suffered by some French paintings of the XIX century, in which bitumen altered their surface with cracks, similar to sores.

- **Yellows**, by Rita Pietropaoli and Annamaria Milaneschi, analyses about twenty colors, included in three sub-chapters.
  - 1. The origin, processing technique and use of yellow, starting from its presence in history, to the Greeks and Romans times.
  - 2. The yellow in the Middle Age and Renaissance Age.
  - 3. Yellow after 1700, synthesized in laboratory and present in the industrial Age palette.

Among the curiosities is interesting the history of the saffron and curcuma use, not just as fabric dyes, but also as pigments for miniatures and watercolours.

A sub-chapter is dedicated to gold, both as precious mineral reduced in thin laminae or powder, as well as artificial inorganic pigment used in mosaic, called "purpurine, porporin or Purpureus colour", perhaps because in the illuminated pages it was painted on a purple background.

- **Greens**, by Susanna Occorsio, is divided into three sub-chapters.
  - 1. The origin, processing technique and use of green, from its appearance in history, to the first half of the XVI century.
  - The green processing technique during the 1550-1700 period.
  - 3. The green synthesized in laboratory and present in the industrial Age palette.

Among the about thirty greens analysed, many of them are included in the "Verdigris" term; in addiction it is interesting to know that a green of synthesis was already produced in ancient Mesopotamia and Egypt.

- Ultramarine blue, by Federica Costantini Scala.
  - 1. The natural ultramarine blue.
  - 2. The artificial ultramarine blue.

Among the curiosities the news that the "Società di Sviluppo per l'Industria Nazionale" (Company of development for the National Industry) in 1824 offered 6000 francs to those who were able to develop an industrial system to produce the artificial ultramarine blue, at a cost not exceeding 300 francs per kilo.

- **Blue**, by Gabriella Minunno, is divided into two subchapters.
  - 1. From the origins to XVIII century. The grinding of azurite, so much used by painters, is at the origin of different changes of shades of its hue: it darkens or veers towards the green, transforming itself into malachite, as it happened in so many medieval frescoes and oil paintings. The same problem occurred in with the "enamel blue", composed by a potassium glass grounded and mixed with oil, which was produced in Venice with the name of "Sapphire Blue"; also this colour presents today important discolourations. A paragraph is dedicated to the "Egyptian blue" and an other to the "Maya Blue". Among the several names with which the woad dye was indicated, are mentioned recalled "vitrum, glastum, uvatum, guadum, guaro, pastello, falso indaco".
  - 2. Pigments and dyes of the industrial Age. Many are also the names with which the "Prussian blue" appeared on the market.
- Purple, by Cinzia Virno, is divided into five subchapters. This name is used to indicate a wide range of shades, from pink violet, to blue violet, including all intermediate passages.
  - 1. The purple of the Ancients. The paragraph analyses the extraction process from the different types of murex, and the falsifications obtained by the use of many colouring substances.
  - 2. The purple among the Classical Age, the Byzantines and the Renaissance Age.
  - 3. Other substances producing purple dyes.
  - 4. The purple of the Central America Indians. Of this sub-chapter is interesting the description of cotton hank dyeing process, respecting molluscs which weren't destroyed.
  - 5. The modern purple.

In addiction the book provides a rich documentation: each color is described with the different chemical compositions, terminologies and applications, and each chapter is concluded with a list of paintings, in which the colors analysed are present.



## Kassia St Clair, The secret Lives of Colour. John Murray / Pinguin Books, 2017. (pages 320).

Of this book I happened to buy first the original version, and then his translation into Italian: *Atlante sentimentale dei colori. Da amaranto a zafferano* 75 storie straordinarie. (Utet – DeA Planeta Libri S.r.I., Milano, 2018). The first surprise was when I compared the first three pages of the colours (the Pantone color wheels) of the two editions: they are dull and flat in the Italian edition, intense and three-dimensional in the English one, with obvious differences (see for example the brown).

The translator – Claudia Durasanti – writes in the note that she had to solve the problem of the cultural and linguistic differences in the names of colours, like for example the term "purple", that – she writes – for English people is a violet shade, but for Italians is "red" (*N.d.R.*? *Red the definition: jakubmarian.com/difference-betweenviolet-and-purple "Purple occupies the space between red and blu more closer to red, instead Violet is more closer to blue"*). She also mentions the case of the Whitby's "jet Black" used in English jewellery, that in Italian she translates as "gaietto": a term now in disuse.

But let's come back to the book: the author describes 75 colors , corresponding to 75 headings monthly written by the author for the Elle Decoration magazine, in each of which the author describes a colour nuance. In addition to six introductory chapters: Perception- as we see the colours. An arithmetic matter – the light. The palette – artists and their pigments. Vintage colours – a map to the nuances.

Chromophilia, Chromophobia – The colour is political. Colour in reality – does the language create the nuances that we see?

The choice of the colors made by the author, seems to depend on their name, sometimes of scientific derivation (Alizarin, Cobalt, crocus sativus, etc...), sometimes of industrial derivation (Prussian blue, fuchsia, etc...), other timeS historical (Isabel, shocking pink, Dutch orange, flea, etc...), or according to the name of the different materials (ivory, chalk, woad, etc...), or even imaginary name as Italian name "buio" (N.d.R.?) in English "dark".

This is a book that has been very successful, it has been translated into 12 languages, including: Spanish, German, Chinese, Russian, Korean, Dutch and Romanian. It is treated also as a pleasant editorial "object", rich in anecdotes, curiosities and historical references, written in a fluid and pleasant way, that left me... a little confused.