Angular Momentum of Switzerland Camaieu Rouge

camaieu, (Ca·ma'ieu) plural camaieux, painting technique by which an image is executed either entirely in shades or tints of a single colour or in several hues unnatural to the object, figure, or scene represented. When a picture is monochromatically rendered in gray, it is called grisaille; when in yellow, cirage. Originating in the ancient world, camaieu was used in miniature painting to simulate cameos and in architectural decoration to simulate relief sculpture.

- Red, the color of power, passion and love -

Carmine Red Lake pigment

derived from the cochineal insect

The cochineal (Dactylopius coccus) is a scale insect in the suborder Sternorrhyncha, from which the crimson-coloured dye carmine is derived. A primarily sessile parasite native to tropical and subtropical South America and Mexico, this insect lives on cacti from the genus Opuntia, feeding on plant moisture and nutrients.

The insect produces carminic acid that deters predation by other insects. Carminic acid, which occurs as 17-24% of the weight of the dry insects, can be extracted from the insect's body and eggs and mixed with aluminum or calcium salts to make carmine dye (also known as cochineal). Carmine is today primarily used as a food colouring and for cosmetics.

l America in the 15th century for coloring fabrics and became an important export good during the colonial period. After synthetic pigments and dyes such as alizarin were invented in the late 19th century, natural-dye production gradually diminished. Health fears over artificial food additives, however, have renewed the popularity of cochineal dyes, and the increased demand has made cultivation of the insect profitable again, with Peru being the largest exporter.

There are other species in the genus Dactylopius that can be used to produce cochineal extract, but they are extremely difficult to distinguish from D. coccus, even for expert taxonomists, and the latter scientific name (and the vernacular "cochineal insect") is therefore commonly used when one is actually referring to other biological species. The primary biological distinctions between species are minor differences in host plant preferences, in addition to very different geographic distributions.

Cochineal dye was used by the Aztec and Maya peoples of Central and North America. Eleven cities conquered by Moctezuma in the 15th century paid a yearly tribute of 2000 decorated cotton blankets and 40 bags of cochineal dye each.

During the colonial period the production of cochineal (grana fina) grew rapidly. Produced almost exclusively in Oaxaca by indigenous producers, cochineal became Mexico's second most valued export after silver. Soon after the Spanish conquest of the Aztec Empire it began to be exported to Spain, and by the seventeenth century was a commodity traded as far away as India.

The red dyestuff was consumed throughout Europe and was so highly prized that its price was regularly quoted

on the London and Amsterdam Commodity Exchanges. In 1777 the French botanist Nicolas-Joseph Thiéry de Menonville, presenting himself as a botanizing physician, smuggled the insects and pads of the Opuntia cactus to Saint Domingue.

This particular insect was not able to propagate, however, and was instead replaced by a different, equivalent one used for dye production. After the Mexican War of Independence in 1810–1821, the Mexican monopoly on cochineal came to an end. Large scale production of cochineal emerged, especially in Guatemala and the Canary Islands; it was also cultivated in Spain and North Africa.

The demand for cochineal fell sharply with the appearance on the market of alizarin crimson and many other artificial dyes discovered in Europe in the middle of the 19th century, causing a significant financial shock in Spain as a major industry almost ceased to exist. The delicate manual labour required for the breeding of the insect could not compete with the modern methods of the new industry, and even less so with the lowering of production costs.

The "tuna blood" dye (from the Mexican name for the Opuntia fruit) stopped being used and trade in cochineal almost totally disappeared in the course of the 20th century. The breeding of the cochineal insect has been done mainly for the purposes of maintaining the tradition rather than to satisfy any sort of demand.

It has become commercially valuable again, although most consumers are unaware that the phrases "cochineal extract", "carmine", "crimson lake", "natural red 4", "C.I. 75470", "E120", or even "natural colouring" refer to a dye that is derived from an insect. One reason for its popularity is that many commercial synthetic red dyes were found to be carcinogenic. The dye can, however, induce an anaphylactic shock reaction in rare cases.

Angular Momentum's "Camaieu Rouge" miniature paintings are monochromatically executed in organic carmine red lake pigments, natural Ivory black and gold leaf

Camaieu Rouge

"Allegory of Music" - After an oil painting of François Boucher, 1764.

Two-body 18 Kt, red gold case, 38 mm with centered round lugs, mechanical hand-winding movement, 8.00 mm handwinding crown with cabochon Onix, a Verre Eglomisè miniature on the reverse of the 32,400 ct. sapphire crystal, aper-



Camaieu Rouge

"Allegory of Music" - After an oil painting of François Boucher, 1765.

Two-body 18 Kt, red gold case, 38 mm with centered round lugs, mechanical hand-winding movement, 8.00 mm handwinding crown with cabochon Onix, a Verre Èglomisè miniature on the reverse of the 32,400 ct. sapphire crystal, aper-



Camaieu Rouge "Allegory of Time" - After an oil painting of Simon Vouet, 1627. (Father time overcome by Hope, Love) Two-body 18 Kt, red gold case, 38 mm with centered round lugs, mechanical hand-winding movement, 8.00 mm handwinding crown with cabochon Onix, a Verre Eglomisè miniature on the reverse of the 32,400 ct. sapphire crystal, aperture for digital hours at o'clock