Are There Rules in Art?

How useful are rules in art? If it were a science, there would be fixed laws, as in physics and mathematics. If not, is it possible to set rules? Leonardo da Vinci says yes: “Truly this is science, the legitimate daughter of nature, because painting is born of (that) nature. “ And Leonardo gives us a lot of instructions and advice.

But before we take them literally, we should consider what the meanings of the words art and science were at the time of Renaissance. The definition of art may have included any skill; those of science any kind of generalized knowledge. Leonardo speaks mainly of the physical and physiological aspects of painting, of perspective, color, light and shade, of anatomy and botanic, of proportions and movement, rather than of esthetic theory he talks of art as imitating nature Yet Leonardo, obviously, does not merely imitate nature. Neither should we. The concept of Nature, and of art as its imitation, was a novelty in his time. There was no concept of the freedom of the artist and of the diverse paths art can take.

Science, as we define it now, gives unique but provisional answers to problems. Unique because a physical phenomenon has, in principle, only one correct explanation; Provisional, because in physics, chemistry or biology new theories are continuously formed that replace previous ones. Art, instead of a single explanation, offers a selection of solutions for an esthetic problem. There is not one way only of doing things. Tradition and invention alter our ways of painting, but no one is forced to accept any precept or to join any movement. Suggestions can be given, but no absolute rules or canons. Art is, ultimately, a testimony to man’s freedom. Yet, there exists a common ground for the appreciation of art, beyond time and space. We are able to enjoy the beauty of the cave paintings of Lascaux and Altamira (Fig.1), of Egyptian sculpture, of the works of Leonardo, Rembrandt and Corot. How, if at all, we can approach beauty (excuse the obsolete concept) in our own work cannot be explained with simple words. As Cézanne said to an inquisitive visitor: “If I could say it, I would not have to paint it.”

Color:

Light is the part of electromagnetic radiation that is visible to our eyes. It covers a range of wavelengths, from violet to red, orange, yellow, green and blue. Black and white are not real colors in the physical sense. Black is the absence of light, and white a mixture of colored lights. Colors that when added produce white (e.g., green and red, yellow and violet, blue and orange) are called complementary.

Fig.1. Altamira cave painting.

The characteristics of a color are hue, saturation and brightness. Hue is the type of color: red, blue, etc. The saturation is the purity of the color, diminishing from the pure color to gray.

Light can come from objects that emit it, such as flames, the filaments of electric lamps, fluorescent bulbs, the stars or the sun, and from objects that receive light from another source and reflect it (including the sky and the moon). The colors of pigments result mainly from the absorption of certain components of the white light and reflection of the colors that were not absorbed.

Fig. 2 illustrates the effect of mixing colored lights (not pigments!). On the edge of the figure are the spectral colors from red to violet. A line between any two points on the edge shows the colors observed when mixing the pure colors. The lines between complementary colors pass through the white center. Given the shape of the color field, we can inscribe a triangle red-green-blue (Fig.3) that covers most (but not all) of the possible hues and saturations. The end points of this triangle indicate what we call the primary colors. By adding these three we can obtain practically all colors of the spectrum. We can verify this by looking with a magnifying glass at a TV screen in action. The graph represents hue (along the borders of the figure) and saturation (diminishing towards the figure center). To also include brightness, we have to create a three-dimensional figure, with an axis from white through gray to black (Fig. 4)

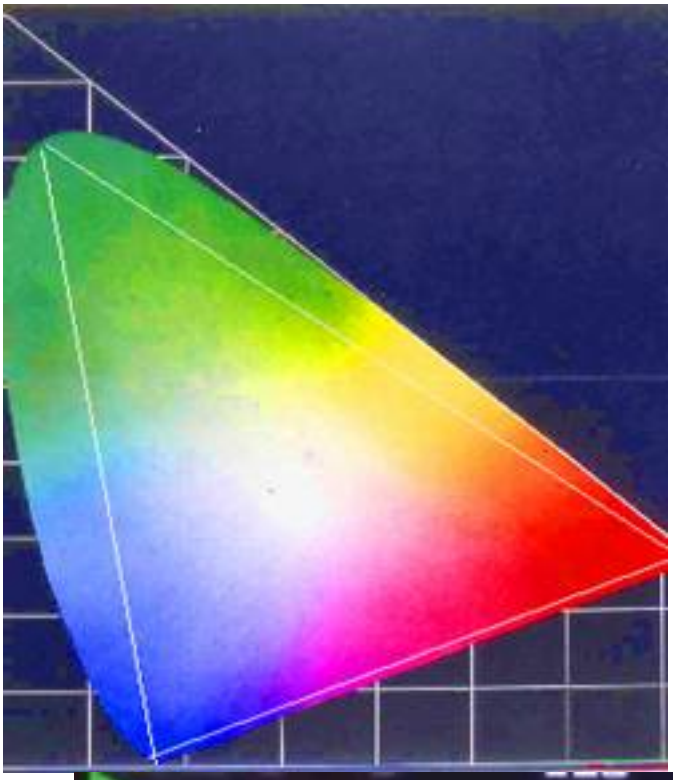

Fig. 2

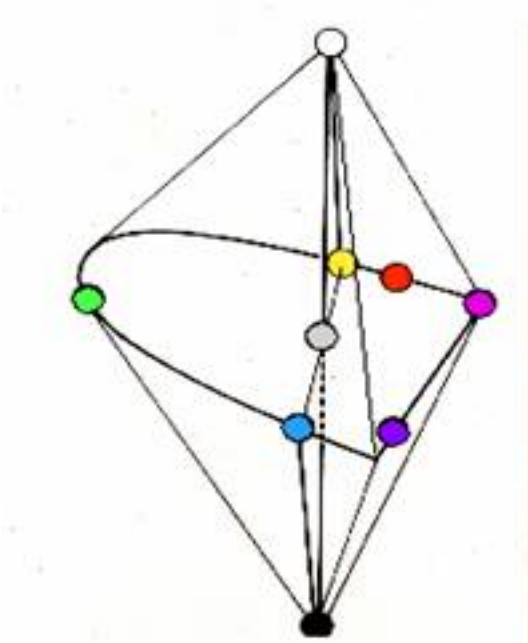

Fig. 3

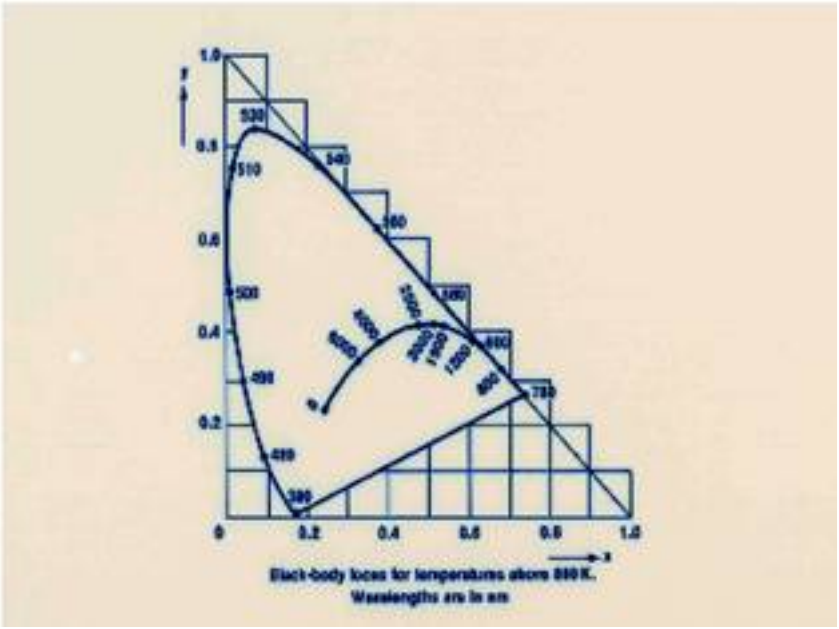

Fig. 4

Fig. 5

Given the continuity of the color spectrum, the choice of primaries is somewhat arbitrary. From the point of view of color perception, there are four basic colors, red, yellow, green and blue. Black and white are usually added, and other colors (e.g. orange, brown, purple) are mixtures of these six.

The curve inside the diagram of Fig. 5 shows the location of the colors of hot objects, starting with red and moving towards white with increasing temperature. For this reason we call them warm, and this analogy is very good. A painting, with its border and frame, is like a room; although parts of it may hotter or colder, it has usually a predominant temperature, related to the color of the illumination (and the mood of the painter). See figs. 6 and 7.

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Fig. 6 (Degas)

The landscape by Degas (Fig. 6) is limited in the range of hues and brightness; yet is has beautiful colors and a warm atmosphere. The Cézanne landscape (Fig. 7) in turn, is painted in cool tones.

The perceived hue, saturation and brightness of a color are affected by adjacent colors. If surrounded by dark it appears to be brighter, if by warm colors, cooler, etc. Rudolf Arnheim (*Art and Visual Perception*, U. of Cal. Press, 1974, p.369) believes that the pure colors are neither warm or cold, but that warm or cold colors result from adding other colors to the primaries: red plus a bit of yellow is warm, with a bit of blue it is cool. One could also argue that the concept of warm/cold is due to deviations from an expected local color, which can be attributed to the source of light.

(Or the painter's mood).

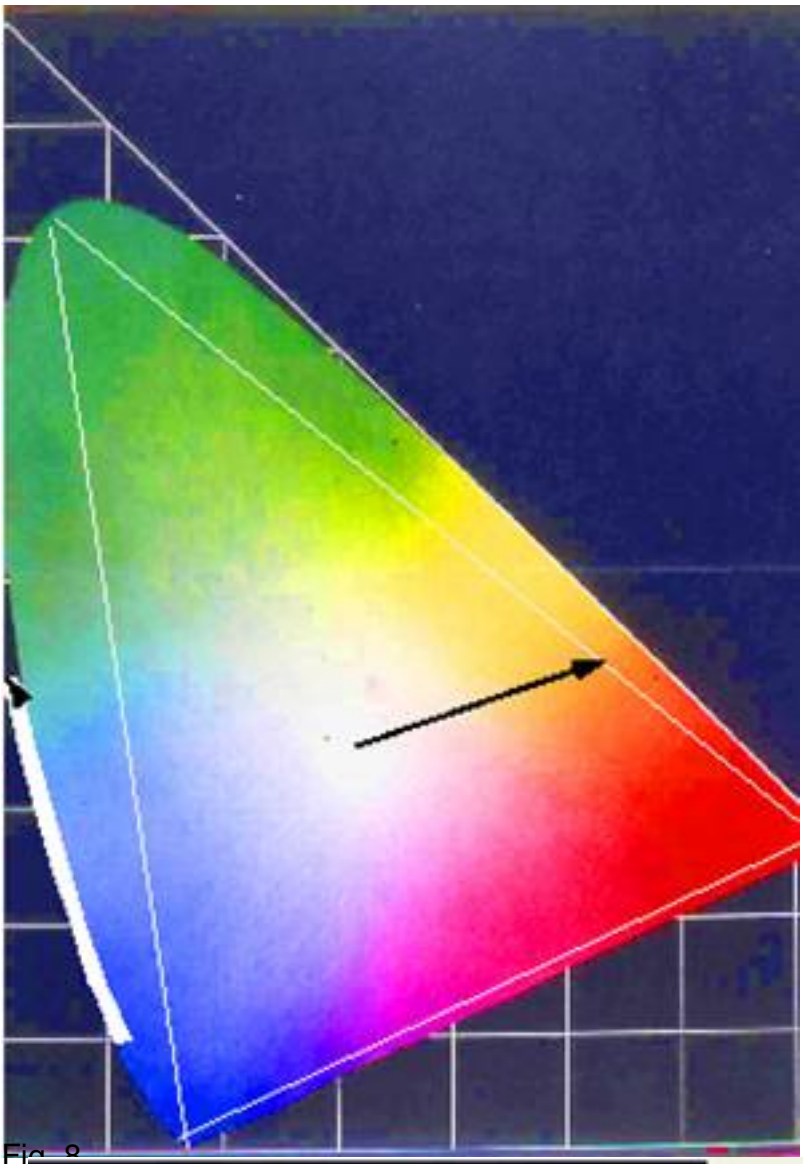
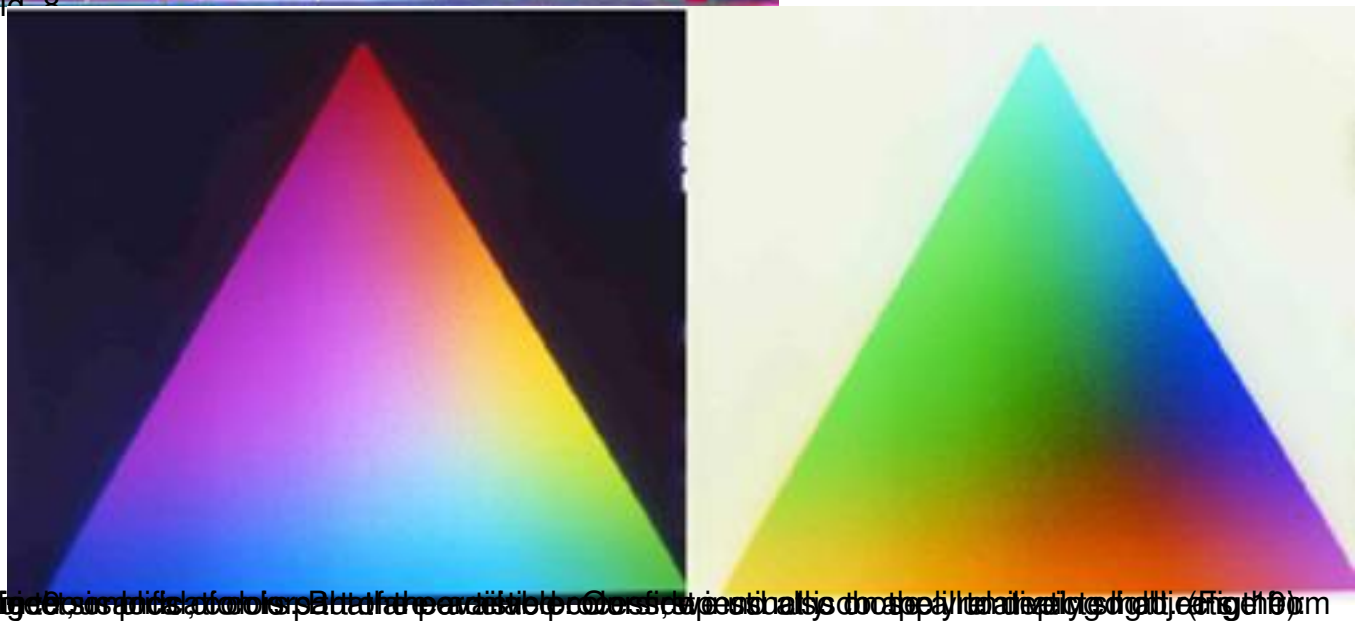
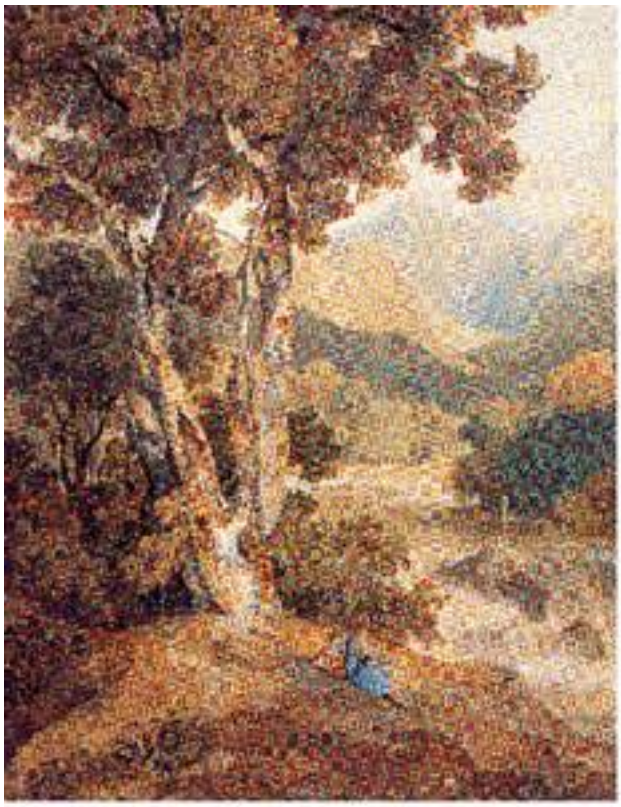


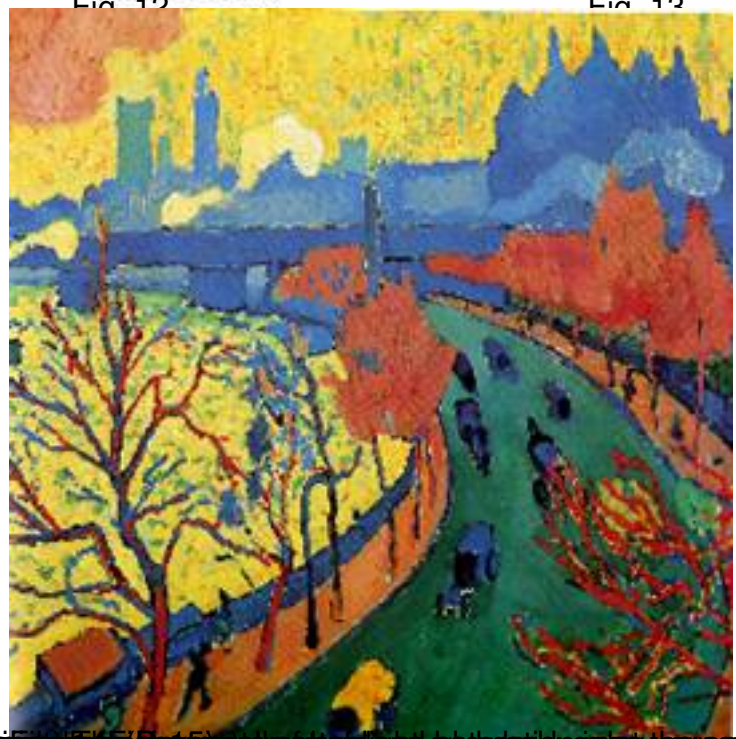
Fig. 8

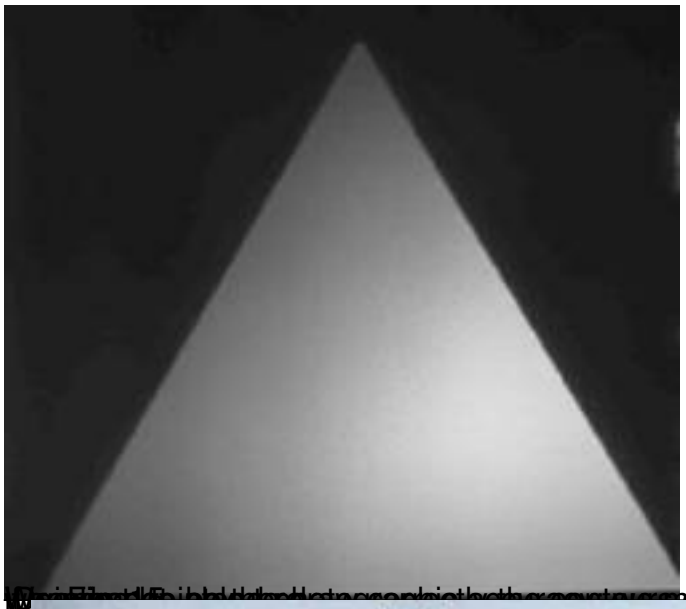


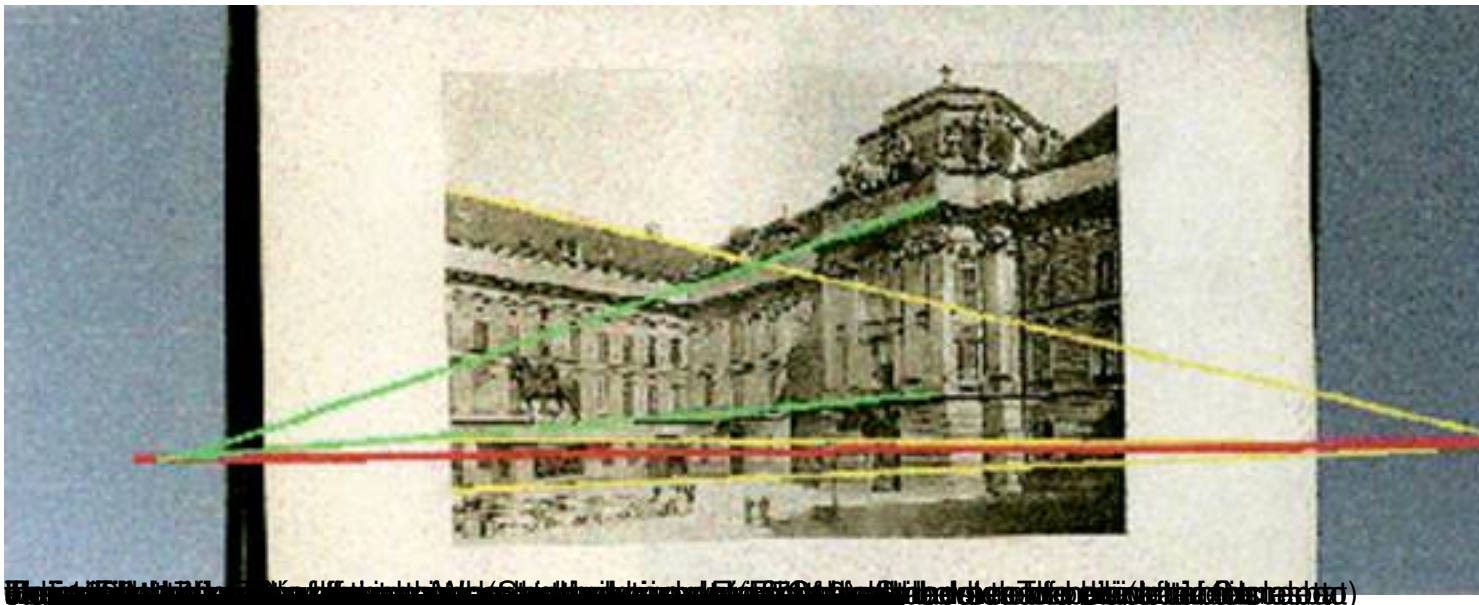


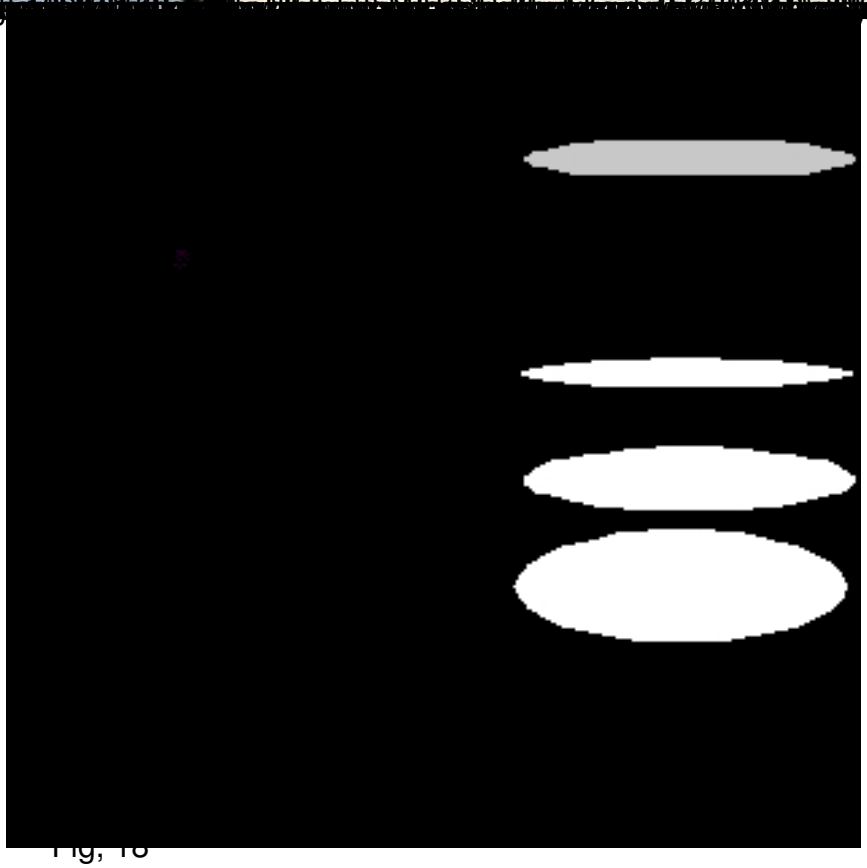
Kokoschka

Miro









Fig, 18

Fig 20 (fragments from a painting of Canaletto).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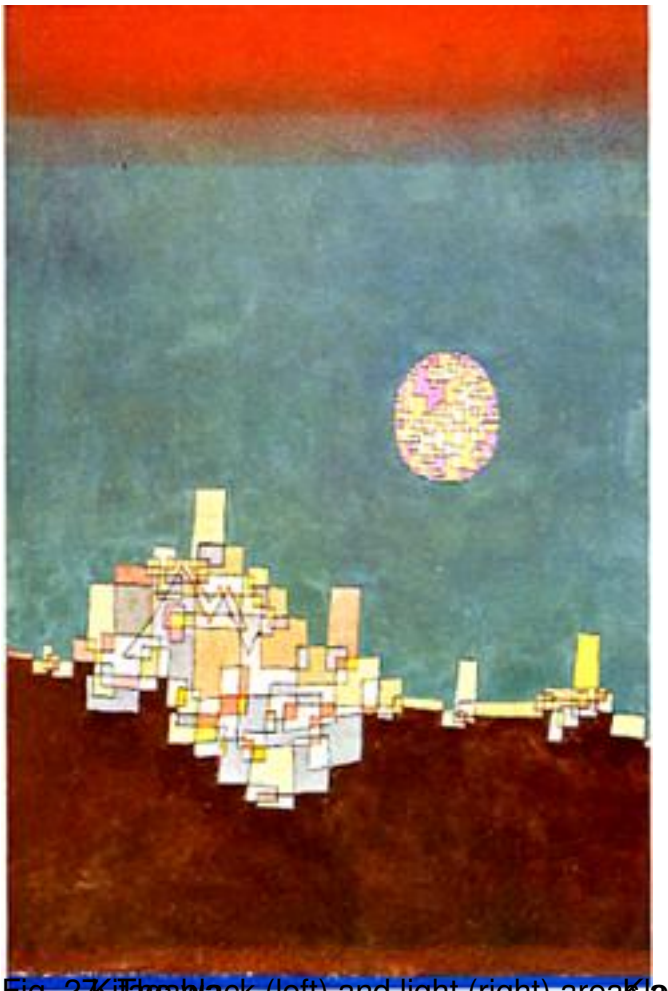


Fig. 27 (Kirchner) Dark (left) and light (right) areas are carefully balanced

Fig. 28 (Degas)

Fig. 29 (Chi Pai-shih)

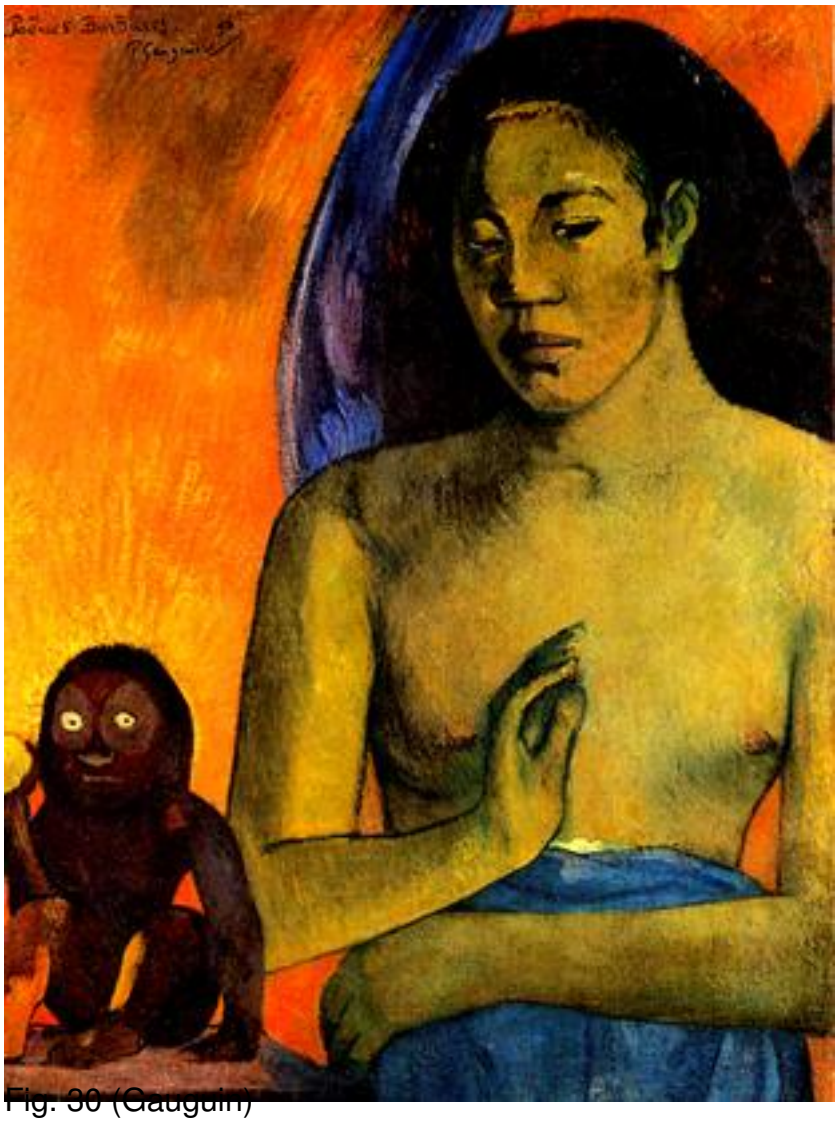
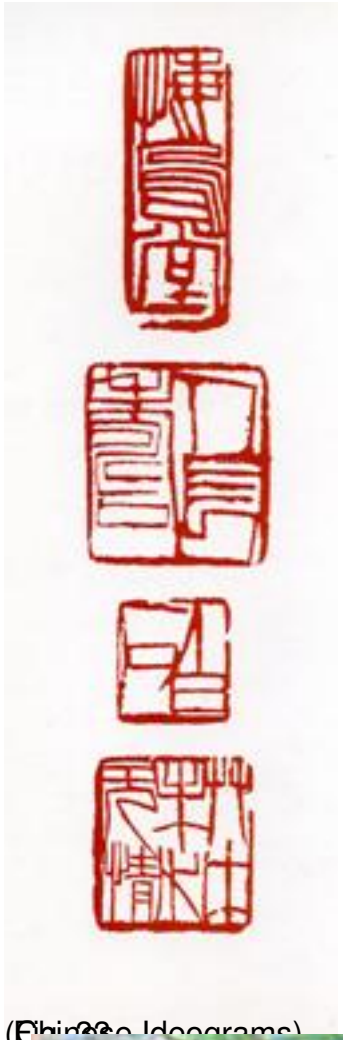


Fig. 30 (Gauguin)

Fig. 31 (Giotto)

Fig. 32 (KH)

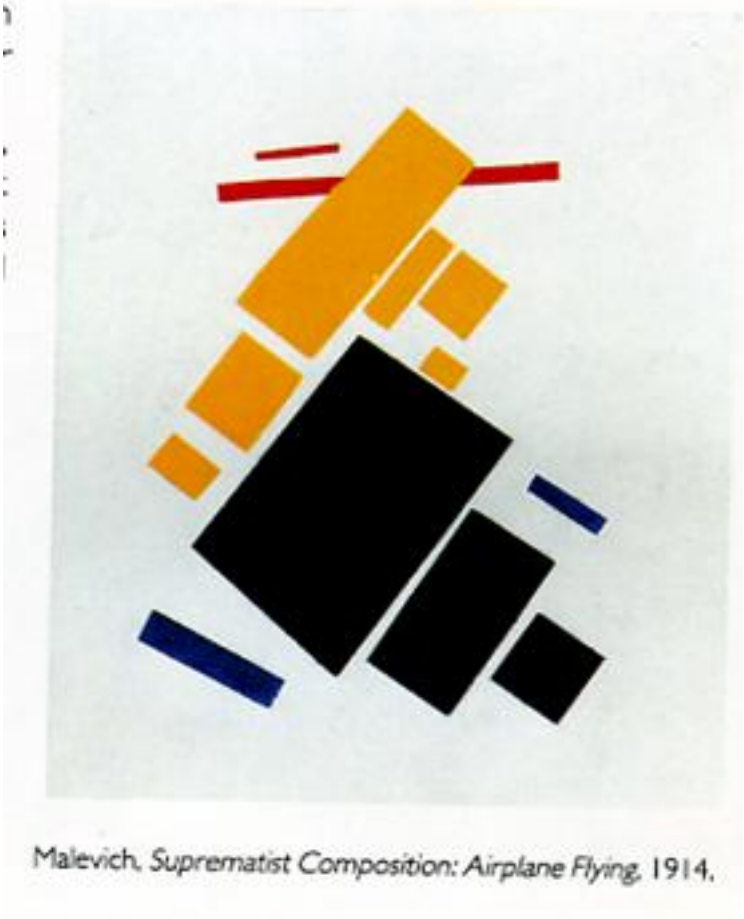


(Chinese Ideograms)

Fig. 36 (Picasso)

Fig. 37 (Gorky)

Fig. 38 (Hundertwasser)



Malevich, *Suprematist Composition: Airplane Flying*, 1914.

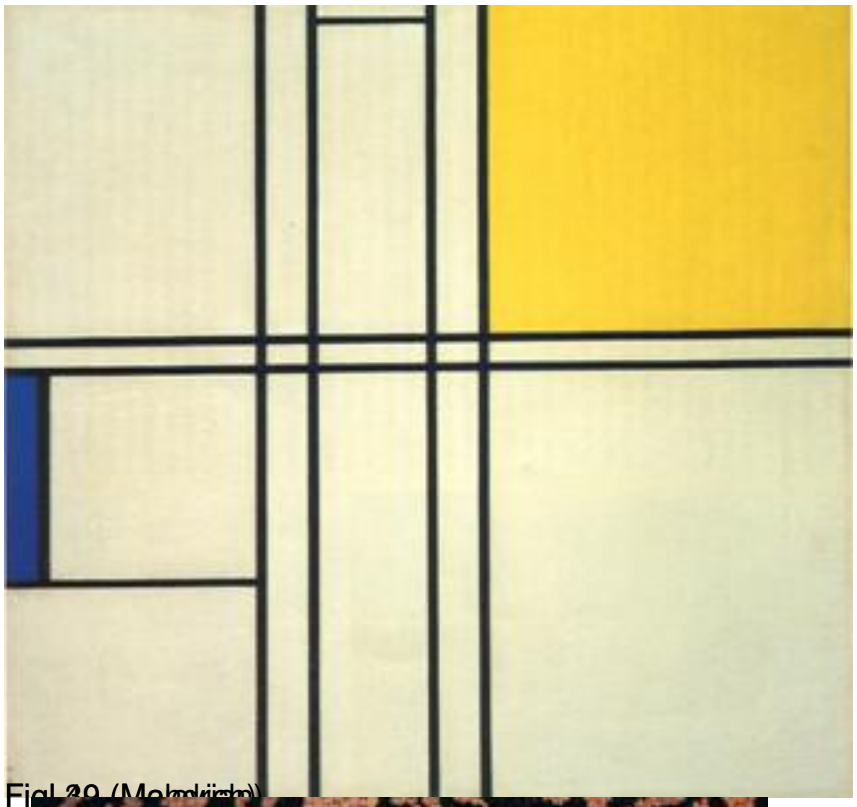


Fig. 29 (Mondrian)