

SPECIFIC ILLUSTRATIONS OF DEFINITE PROGRESSIVE STEPS IN THE  
DEVELOPMENT OF THE USE OF COLOR IN OCCIDENTAL PAINTING IN  
EUROPE BEGINNING WITH GIOTTO

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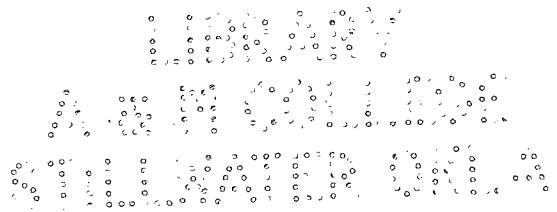
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## PREFACE

The purpose of this thesis is to analyze some of the progressive stages of color development as they relate and contribute to the growth and understanding of color use in Occidental painting in Europe from the close of the Byzantine period to the early part of the twentieth century.



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## PAINTING OUTLINE

HOLLAND	FRANCE	GERMANY	ITALY	CENTURY
			Cimabue Giotto	1300
			Fra Angelico J. Bellini G. Bellini Botticelli	1400
		Durer	Da Vinci Michelangelo Titian Giorgione Raphael	1500
		Holbein	Correggio Tintoretto Veronese	1600
Hals				1600
Rembrandt De Hooch Vermeer	Poussin Lorrain			1700
	Watteau Chardin Fragonard			1800
	David			1800
	Corot Delacroix			1900
	Rousseau Millet Daumier Pissarro Manet Degas Cezanne Sisley Monet Renoir Gauguin Seurat			1900
Van Gogh				2000
	Matisse Picasso Braque			2000

## PAINTING OUTLINE

FLANDERS	SPAIN	ENGLAND	RUSSIA	CENTURY
				1300
Van Eyck				1400
				1500
Rubens Van Dyke	El Greco Velasquez			1600
				1700
	Goya	Turner Constable		1800
				1900
			Kandinsky	2000

## INTRODUCTION

The purpose of this study is to elucidate some of the more definite, progressive stages of color use and development as it has been related to the art of Occidental painting in Europe. The close of the Byzantine period, with its precursory tendencies of the Italian Renaissance, will serve as a starting point in this survey.

An analysis of the use of color during the thirteenth, fourteenth, and fifteenth centuries indicates a very arbitrary approach to the subject. During this period, science had made no definite contributions toward a greater knowledge and understanding of color phenomena. This greater understanding came with the discoveries of Sir Isaac Newton, English philosopher and mathematician, who, in 1666, observed that a beam of white light when refracted by a glass prism, revealed the six definite spectral hues--red, orange, yellow, green, blue, and violet. This discovery resulted in the development of the physicists' theory of color. This theory, briefly stated, defines color as the residue following selective absorption and reflection of the refracted beam of white light.

Following Newton's discoveries, artists began experimenting with color, studying its infinite and varied possibilities for intelligent individual expression. Color now ceased to



be incidental and subordinate to line. It developed a functionalism that combined the two elements, color and line, into one process--Cezanne being the chief exponent of this phase of color expressiveness.

Out of Cezanne's contribution to the understanding of color grew the Modernists' abstract conceptions, color expressing the non-objective, abstract harmonies.

## PRE-RENAISSANCE PAINTING IN ITALY

## CIMABUE (1240-1302)

Previous to the time of Giotto, color in painting was chiefly concerned with the arrangement of colors on a gold background. The traditions of painting having been derived from illuminated manuscripts and mosaics, the colors were applied in juxtaposition with a line between them as in the mosaic method.

Figure 1, Madonna Enthroned, by Cimabue, is an example of the use of color in the painting of the Byzantine tradition. The gradation of color was almost unknown at this time, and the colors used were orange, green, deep crimson, purple, blues, and heavy blue-blacks. These colors were laid on a gold ground, variously ornamented with chased designs. The greater portion of the pictorial art executed during the Byzantine era preceding Giotto was done in this manner.

Cimabue was one of the outstanding workers in mosaic, and with him vanished the sharp contrasts of hard lights, half-tones, and shadows.

## PROTO-RENAISSANCE PAINTING IN ITALY

## GIOTTO (1266-1336)

One of the first changes that Giotto made in his artistic



Madonna Enthroned, Cimabue, 1240-1302, Italian

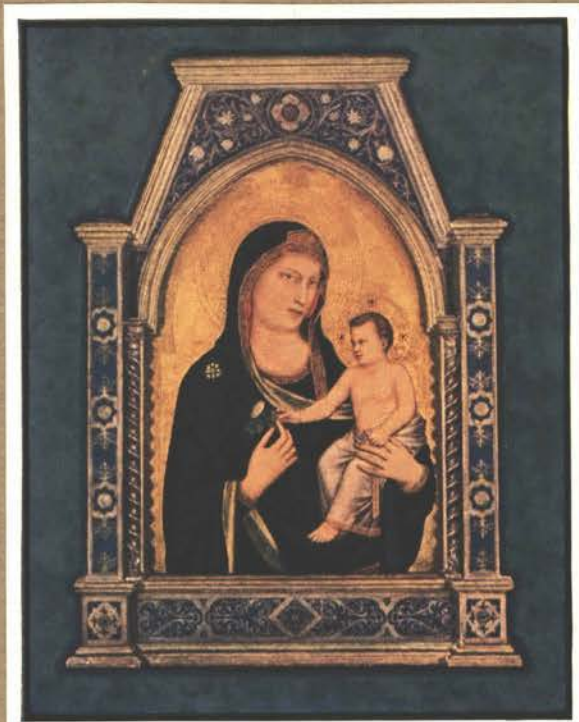
Figure 1





No. 94—St. Francis Preaching to the Birds      Assisi  
Giotto (1266-1336)      Italian School

Figure 2



MADONNA AND CHILD  
GIOTTO DI BONDONE (1266-1336)

ITALIAN  
NATIONAL GALLERY

Figure 3





Figure 4





ANNUNCIATION  
FRA ANGELICO (1387-1455)

ITALIAN  
ST. MARKS, FLORENCE

Figure 5





Madonna and Angels      Fra Angelico, 1387-1455, Italian

Figure 6



methods, as a student of Cimabue, was to abandon the gold background of the Byzantine period and to substitute the blue sky of nature. This resulted in the introduction of lightened tones into the picture which wrought a relative increase in the amount of light portrayed in his compositions.

Giotto did not advance much further than his predecessors in the use of color gradation. His paint was usually applied in broad flat washes, dependent upon carefully selected combinations and arrangements for the greatest degree of beauty of color, but without regard to the science of light relative to color. He introduced sculpturally rounded figures and a certain amount of natural detail into his compositions. He also substituted the portraits of actual men and women for the imaginary characters that had formerly been used in Byzantine compositions.

Figure 2, Saint Francis Preaching to the Birds, and figure 3, Madonna and Child, are two examples of his work in which a greater variety and purity of color and tones than was in use by Cimabue and his predecessors is observed.

#### FRA ANGELICO (1387-1455)

Fra Angelico worked with a restricted range of colors that included the three pigment primaries, red, yellow, and blue--the yellow being grayed. In the early part of the Italian Renaissance much of the painting was little more than

tonal drawing with paint. Variety of hue was expressed only through its application as the local color of various objects. Each form was modeled in tones of its local color.

Figure 5, Annunciation, and figure 6, Madonna and Angels, by Fra Angelico, are examples of his realistic subject matter wherein he achieved form by monochromatic modeling. The result is a sculpturesque effect.

#### GIOVANNI BELLINI (1428-1516)

Giovanni Bellini was a painter of portraits and of religious and allegorical subjects. Giovanni, with his father Jacopo, his brother Gentile, and his brother-in-law Mantegna, exerted a great influence in the development of the Venetian style of painting.

The Bellinis discovered that reflex lights cast by objects outside the pictures might even throw color into the shadows. In the drapery of some of Giovanni's Madonnas, one even finds the technique known as 'pointillism.' This consists of placing tiny spots of color next to one another so that at some distance from the canvas they appear to blend, giving a third color. Red and blue, for example, at some distance give purple. This technique, discovered by 13th-century Gothic glass painters of France, contrary to opinion, never influenced mosaic makers to any great extent. The Bellinis seem to have rediscovered the technique. They used it sparingly, however, and unlike the 19th-century French Impressionists did not make it the specialty of an entire school.<sup>1</sup>

Figure 7, Madonna, by Jacopo Bellini, figure 8,

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<sup>1</sup> Raymond S. Stites, The Arts and Man, p. 574.



Madonna Jacopo Bellini, 1390-1470, Italian

Figure 7

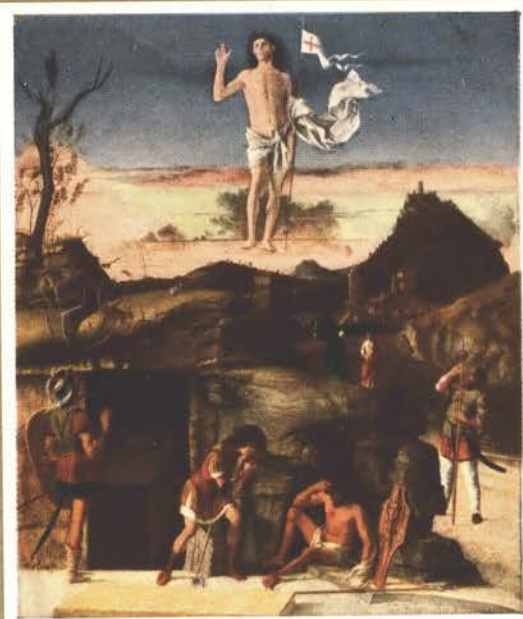




No. 31—Madonna and Saints  
Bellini (1428-1516)

Venice  
Italian School

Figure 8



No. 137—Resurrection of Christ  
Bellini (1428-1516)

Berlin Gallery  
Italian School

Figure 9





Figure 10

Madonna and Saints, figure 9, Resurrection of Christ, and figure 10, Madonna and Sleeping Child, by Giovanni Bellini, are examples of the early Venetians' use of color.

#### FIFTEENTH CENTURY FLEMISH REALISM

##### JAN VAN EYCK (1385-1440)

Fifteenth century Flemish realism was expressed by Van Eyck in figure painting. With absolute fidelity to nature he portrayed the dress, ornaments, and physical characteristics of the men and women of his time in their natural environment. He was a precursor of the realism in painting that was to follow. He expressed a mastery of atmospheric and linear perspective which was far in advance of the understanding in Italy at the time. In his paintings he united the elements of the outdoors with those of interiors, combining the Madonna and Child theme with a distant sunlit landscape background. He sometimes combined the colorful sunlit landscape with the effect of the cathedral interior lighted by stained glass windows. Figure 4, The Annunciation, is an example of his use of color in painting.

#### ITALIAN RENAISSANCE

##### BOTTICELLI (1444-1510)

Italian painters of the fourteenth and fifteenth centuries also achieved a variety of hue in their compositions,





No. 22—Magnificat  
Botticelli (1444-1510)

Uffizi Gal.  
Italian School

Figure 11





MADONNA, CHILD AND ST. JOHN ITALIAN  
SANDRO BOTTICELLI (1446-1510) LOUVRE, PARIS

Figure 12



Spring

Botticelli, 1444-1510, Italian

Figure 13



only as it was applied to individual objects. Form was indicated by monochromatic modeling. Botticelli used blues, yellows, pale greens, and grays.

Figure 11, Magnificat, figure 12, Madonna, Child and St. John, and figure 13, Spring, by Botticelli are illustrative of this artist's method of modeling form by monochromatic sequences of tone which emphasized the linear rhythms of his figures.

In general, the environment of the Florentine painters was not as conducive to color study as that of the Venetians. They first sought understanding through the study of the effects of light on curved surfaces. Da Vinci observed that hue in the lighter planes had a different intensity from the hue in shadow. However, the generally accepted manner was to paint the high lights white, the shadows brown or black, and the half-tones the local color of the objects.

#### MICHELANGELO (1475-1564)

Michelangelo employed large areas of red and blue tones without any particular regard for the juxtaposition of color combinations. The paintings of Michelangelo and Botticelli expressed a sculptural effect due to the fact that one was essentially a draftsman and the other a sculptor. Their color was expressed in sequences of tonal modeling.

Figure 17, Creation of Adam, by Michelangelo, is

expressive of the sculptural manner of modeling form by monochromatic sequences.

#### DA VINCI (1452-1519)

Da Vinci's paintings are expressive of the Florentine intellectual search for beauty, in which is to be found the harmonic relationship of science and art. He observed that the greatest beauty of hue was to be achieved by contrast. He was of the opinion also, that color harmony was entirely dependent upon visual phenomena. In this field of thought he was one of the first exponents of the psychologists' theory of color, advocating the necessity of four visual primaries, red, yellow, blue, and green.

Figure 14, Madonna of the Rocks, and figure 15, Beatrice d'Este, are examples of Da Vinci's color expression in painting.

His so-called "elementary" colors Leonardo listed in their proper tone values from white through yellow, green, blue, red, and black. He noticed that a glaze of red light upon blue would create purple; yellow on blue, green; and red and yellow, a new color for which he had no name, but which we know as orange. Leonardo also discovered that red and yellow have their greatest luminosity in light, and that green and blue appear most pleasing in the shadow.....  
 Among his experiments, one picture now in Vienna, actually shows the use of points of color to give the effect of greater luminosity, much as they were employed by the Impressionists.....  
 Leonardo observed the tonal and color effects in atmospheric perspective. He noticed that the outlines of opaque bodies appear proportionately less distinct as those bodies move farther from the eye.<sup>2</sup>

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<sup>2</sup> Ibid., pp. 603-604.

Da Vinci believed that the world of art should be put in an order by beginning with the scientific observation of nature's details and continuing on toward the divine moment of inspiration.

#### TITIAN (1477-1576)

Titian, of the Venetian school in Italy, achieved a warm but subdued effect in his canvases. His shadows are brown, and the whole effect is one of golden illumination. Although the colors are individually of low intensity, they are made to appear much purer and brighter by their contrasting relationships. He introduced yellow instead of white into highlights.

Figure 18, Lavinia, figure 19, Danae, and figure 20, Assumption of the Virgin, by Titian show how he achieved the effect of illumination and greater range of intensity and hue by juxtaposing whites, blues and blacks in contrasting relationships with areas of yellow, orange, and red. Titian also used color to express atmospheric perspective in his compositions by using cool, grayed colors in the distance and warm colors in the foreground.

#### GIORGIONE (1478-1510)

Giorgione expressed a delicate lyricism in his paintings which was congenial to the Venetian spirit of luxurious languor and holiday relaxation. He used color with a new degree of emotional expressiveness and was one of the first





Madonna of the Rocks Da Vinci, 1452-1519, Italian

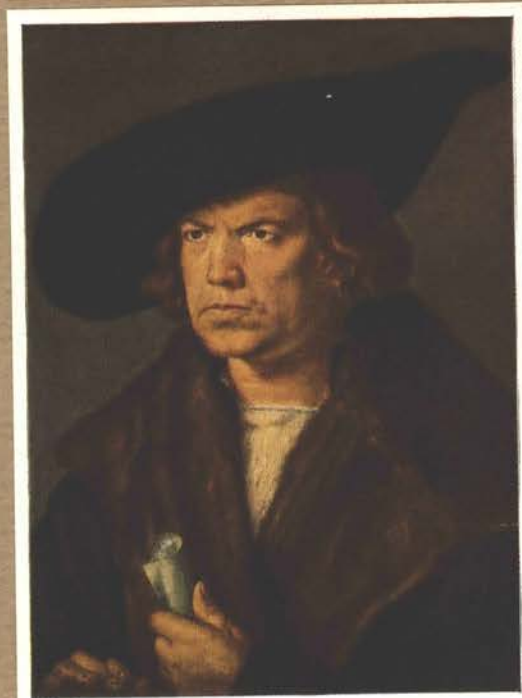
Figure 14



Beatrice d'Este da Vinci, 1452-1519, Italian

Figure 15





No. 83—Hans Imhoff  
Albrecht Dürer (1471-1528)

Prado, Madrid  
German School

Figure 16





No. 145—Creation of Adam  
Michelangelo (1475-1564)

Sistine Chapel, Rome  
Italian School

Figure 17



No. 28—Lavinia  
Titian (1477-1576)

Berlin Gal.  
Italian School

Figure 18



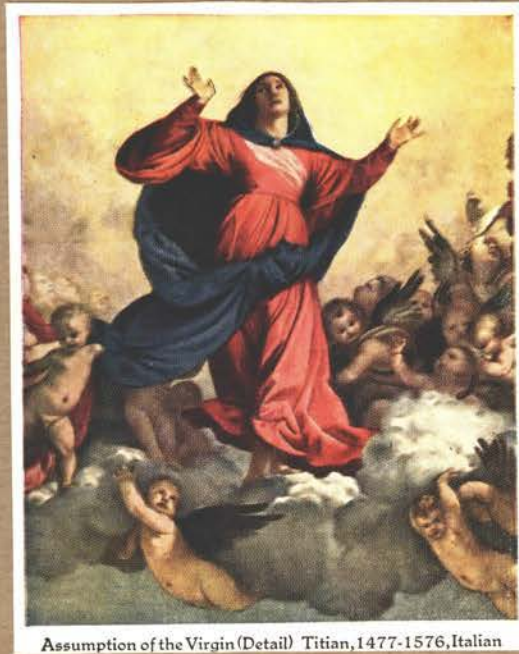


Danae

Titian, 1477-1576, Italian

Figure 19





Assumption of the Virgin (Detail) Titian, 1477-1576, Italian

Figure 20





ADORATION OF THE SHEPHERDS  
GIORGIONE (BARBARELLI) (1478-1510)

ITALIAN  
NATIONAL GALLERY

Figure 21



The Concert

Giorgione, 1478-1510, Italian

Figure 22



Venetians to employ color to build the forms within his compositions. Differing greatly from the Byzantine use of color, Giorgione organized volumes and planes in space, using color to build each part. This was later a fundamental thought in color use by the Post-Impressionists.

Previous to Giorgione, most painters had employed light and shade as a means of representation and considered it a technical resource unrelated to color. They painted the lighted areas of an object with its local color, but the darker areas were usually painted a grey-brown. Giorgione observed that within shadows is a variety of hues. His canvases depict a range of colors, both in the lighted and shaded planes of forms. A warmth and glow is expressed in his pictures with a colorfulness quite in harmony with his environment and in advance of the general understanding of color in his time, as may be seen in figure 21, Adoration of the Shepherds, and figure 22, The Concert.

#### RAPHAEL (1483-1520)

Raphael used color, not with the thought of variety of hue, but as a means of monochromatic modeling of form. Color variety was introduced only as it was applicable to individual objects. He mixed white or yellow with pure hue to attain tints, and black was added to hue to achieve shades.

In order to give expression to some of his more dramatic

themes, he used a concentrated light effect which necessitated a greater range of close value sequences and gave the impression of differently lighted areas.

Figure 23, Sistine Madonna, and figure 24, The Transfiguration, by Raphael express his use of color. The Transfiguration, and figure 25, The Holy Night, by Correggio are expressive of concentrated light effect, achieving a dramatic feeling in thought and color. They have expressed roundness of form by realistic modeling in monochromatic sequences. The tonal range within the canvas is from blue and yellow-whites to off-blacks.

#### TINTORETTO (1518-1594)

In Venice, the art of sail painting attracted the interest of such artists as Titian and Tintoretto for a time. The gaily decorated galleons furnished the first mural canvases on which were composed the glorious histories of a splendid past. Besides sail painting, the mosaic art offered a further opportunity for the Venetians to indulge in color.

Tintoretto recognized the significance of black and white pigments and the necessity of their presence on his palette. With them he attained a variety of shades and tints necessary for modeling form. He preferred sombre colors. His compositions appear gray and retiring compared with the actual glow in nature, as may be observed in figure 27, Venus and

Mars with the Three Graces, and figure 28, Music.

#### VERONESE (1528-1588)

The subject matter of Veronese was usually ceremonial occasions or historical episodes within halls filled with richly costumed people. His canvases portray an atmosphere of artificial stage-setting--a contrived grandeur, as in figure 29, Captain of Capernaum, and figure 30, Feast of Levi.

Veronese achieved a brilliant effect of color by variety and apposition, even though his hues are seldom bright. He used primary tints and highlights sparingly. Within his compositions his figures are enveloped in atmosphere, bathed in light. His paintings charm and delight the eye, but rarely do they appeal to the intellect. The shadows are transparent and colorful, as expressed later in the paintings of the English landscape group and the French Impressionists. He used the method of juxtaposition of various intensities of contrast in hue. In this respect he was in advance of his time.

#### SIXTEENTH CENTURY GERMAN REALISM

##### DURER (1471-1528)

Durer, the German engraver and painter, was influenced in his painting by the Italians. He journeyed to Italy a number of times during the course of his career where he came



in contact with Giovanni Bellini.

Sidney Colvin has written regarding Durer's painting, The Adoration of the Virgin, which now exists in a greatly injured state:

Of all Durer's works, it is the one in which he most deliberately rivalled the combined splendour and playfulness of certain phases of Italian art. The Venetian painters assured him, he says, that they had never seen finer colours. They were doubtless too courteous to add that fine colours do not make fine colouring. Even in its present ruined state, it is apparent that in spite of the masterly treatment of particular passages, such as the robe of the pope, Durer still lacked a true sense of harmony and tone-relations, and that the effect of his work must have been restless and garish beside that of a master like the aged Bellini.<sup>3</sup>

Figure 16, Hans Imhoff, is an example of his realistic manner in portraiture.

#### HOLBEIN (1497-1533)

No painter was ever quicker at noting peculiarities of physiognomy, and it may be observed that in none of his faces, as indeed in none of the faces one sees in nature, are the two sides alike. Yet he was not a child of the 16th century, as the Venetians were, in substituting touch for line. We must not look in his works for modulations of surface or subtle contrasts of colour in juxtaposition. His method was to the very last delicate, finished and smooth, as became a painter of the old school.<sup>4</sup>

Holbein's subject matter was chiefly portraiture, in which he had a scrupulous regard for truth of detail and

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<sup>3</sup> Sidney Colvin, "Durer," The Encyclopaedia Britannica, 11th edition, VIII, p. 700.

<sup>4</sup> Sir Joseph Archer Crowe, "Holbein," The Encyclopaedia Britannica, 11th edition, XIII, p. 586.

and accessory in drawing, as in the painting, figure 26, The Merchant of Gize.

## SEVENTEENTH CENTURY PAINTING IN HOLLAND

### REMBRANDT (1606-1669)

Rembrandt's use of color was very much like that of the Italians, non-structural monochromatic modeling plus the effect of concentrated light. In this manner of color use he achieved dramatic expression with a range of values crowded toward the light or toward the dark as his necessary effect demanded. His paintings express the appearance of a greater range of pigments than he really possessed as compared to the range found in nature. His palette consisted of light, cool yellows, through warmer reds, and a range of grayed oranges, into black, as may be observed in figure 41, A Polish Nobleman, and figure 42, The Night Watch.

Scholars differentiate between four phases of Rembrandt's use of color. In the first period, before 1635, the artist used naturalistic local colors like those of the Italians in the school of the Carracci. Between 1636 and 1650, he subdued the brilliant local colors of objects by throwing over them a haze of gray or brown tones and developing the shadows of his pictures. In the third period, after 1650, he reached the greatest dramatic heights, painting up great areas of brown or gray with some brilliant tone caught in a ray of sunlight. In the final period, broken and scintillating color like that in the works of the nineteenth century French Impressionists dominated his light and shade in such a way that it seems as though the master must have lost himself in a mystical adoration of light. In respect to color, the mature Rembrandt was no naturalist. He distilled from the colors of nature their essence and



SISTINE MADONNA  
SANZIO RAPHAEL (1483-1520) ITALIAN  
DRESDEN GALLERY

Figure 23





No. 133—The Transfiguration  
Raphael (1483-1520)

Vatican, Rome  
Italian School

Figure 24

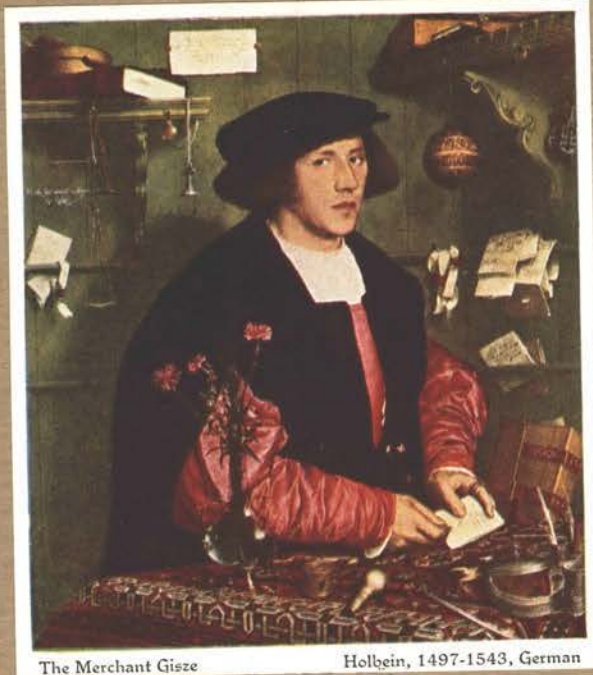


The Holy Night

Correggio, 1494-1534, Italian

Figure 25





The Merchant Gisz

Holbein, 1497-1543, German

Figure 26





Figure 27





Music

Tintoretto, 1518-1594, Italian

Figure 28





No. 131—Captain of Capernaum  
Veronese (1528-1588)

Madrid, Prado  
Italian School

Figure 29



No. 130—Feast of Levi  
Veronese (1528-1588)

Venice, Academy  
Italian School

Figure 30



chose the warm golden tones to suggest the good life. He does not move far from brown earth pigments, which form his backgrounds even in the sky, where a cool gray takes the place of the usual blue. In this gray-brown atmosphere brilliant flashes of red, yellow, purple, or green emerge to thrill the senses. The essential color scheme is that of the cathedral interior, with its stained-glass windows. The depth of the shadows arises in great part from the contrast afforded in the flashes of brilliant hues.<sup>5</sup>

#### DE HOOCH (1629-1677)

The work of De Hooch, a painter of Dutch genre subjects, is recognized by a richer and more intense range of hues and the effect of clearer sunlight in his compositions than is to be seen in the compositions of Rembrandt. De Hooch, unlike Rembrandt, who concentrated the light in his compositions to illuminate and give dominance to a face, used the effect of sunlight to illuminate courtyards and room interiors, bathing them in a rich golden glow. He used yellow to express sunlight but did not introduce its complementary hue into the shadows, as may be observed in his figure 43, The Pantry.

#### VERMEER (1632-1675)

Vermeer also was a painter of the effect of light. This effect was achieved by concentrating the light and keeping the darker areas in their right relationship in hue, value, and intensity. As the lighter areas were increased in intensity, the local color of a form was used nearer the

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<sup>5</sup> Stites, op. cit., p. 636.



dark, limiting his value scales.

His palette included pale lemon yellow, cobalt and ultramarine blues, whites, delicate grays, black, reds, and Naples yellow.

Vermeer's lights are silvery in tone and his shadows pearl-color. There is no absolute darkness in his pictures--no slurring, no juggling. Light is everywhere, and even the chair, table, or spinet in shadow, stands as clearly revealed as if beside a window. But at the same time, each object has its just amount of shade, and its reflections merge into the surrounding luminous atmosphere. It is to this faithful portrayal of light that the harmony of Vermeer's colors is attributable. In his pictures, as in nature, antipathic colors, for example his favorite blues and yellows, never jar. He harmonizes tones which are in themselves discordant, passing from the tenderest minor key to the richness of a full major chord.<sup>6</sup>

Vermeer evidently had an inkling of what the modern impressionists have discovered; namely, that there is less luminosity in white than in blue. White is dead, flat, opaque; while blue, thinly laid, is transparent, vibrant, scintillating. There was certainly no painter of the time, not even Rembrandt with his sharp contrasts, who gained greater height of light than Vermeer; and something of it was due to his use of blue.<sup>7</sup>

Figure 44, Young Woman with a Water Jug, is expressive of Vermeer's use of color.

#### SEVENTEENTH CENTURY PAINTING IN FRANCE

##### POUSSIN (1594-1665)

Poussin was a painter of imaginative landscapes and

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<sup>6</sup> W. Burger, "Vermeer," *Masters in Art.* part 54. Vol. 5, (June), pp. 26-7.

<sup>7</sup> John C. Van Dyke, "Old Dutch and Flemish Masters," *Masters in Art.* part 54. Vol. 5, (June), p. 32.

figure compositions, the inspiration for which came from the Italian landscape, Biblical stories, battles, bacchanalian subjects, and classical mythology. The figures in his paintings have been subordinated to the dominant theme of the landscape. He was a student of the high and low relief sculpture in Rome and was influenced by the paintings of Raphael and Titian. Although living in the age when most French artists spent much time in Italy, Poussin is considered the father of French landscape and was the founder of the French classical school. His painting is expressive of coldness, grandeur, formalism, academic in fineness of sensibilities and definite form, whether expressing a Biblical or bacchanalian theme, and was original in expression. He used color arbitrarily, and without regard to its functional possibilities in the modeling of form.

#### LORRAIN (1600-1682)

Lorrain was greatly influenced by Italian painting, using the classical architecture and landscape as backgrounds for his figures. The landscapes are reputed to be the better part of his works, often expressing a fine sense of sunlight. Throughout his paintings there is too much concern for detail and a feeling of static pose against a stage-set background. The qualities are more applicable to decoration than to realism, partly due, no doubt, to his early work as apprentice



to a decorator.

He generally sketched whatever he thought beautiful or striking, marking every tinge of light with a similar colour: from these sketches he perfected his landscapes. His skies are aerial and full of lustre, and every object harmoniously illumined. His distances and colouring are delicate, and his tints have a sweetness and variety till then unexampled. He frequently gave an uncommon tenderness to his finished trees by glazing.<sup>8</sup>

Figure 40, Rest on the Flight, is expressive of Lorrain's use of color in painting.

#### SEVENTEENTH CENTURY PAINTING IN FLANDERS

##### RUBENS (1577-1640)

Most of the painters of this northern country cared little for decorative effects and the colors used were of rather low intensity, in harmony with their environment. Ruben's colors consisted mainly of deep blacks, crimson, yellows, and blues contrasted with light yellows, white, and vermillion. He also introduced into his compositions purplish grays, light blues, and creamy flesh tints.

Figure 33, Decent From the Cross, figure 34, Portrait of the Artist, and figure 35, Flight into Egypt, are expressive of color used by Rubens which gives effects of concentrated areas of light by strong contrast of tones to achieve a more dramatic effect.

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<sup>8</sup> William Michael Rossetti, "Claude of Lorraine," The Encyclopaedia Britannica, 11th edition, VI, p. 463.

## SEVENTEENTH CENTURY PAINTING IN SPAIN

## EL GRECO (1548-1625)

El Greco ignored the palette of his Byzantine tradition and through his original imagination introduced a more brilliant range of hues and tones that include royal blue, pale rose, lemon and other yellows, green, and pinks. He achieved unity in color composition through the use of a greater range of colors and by introducing them in sequences in the modeling of form.

Figure 31, Holy Family, and figure 32, Cardinal Inquisitor, by El Greco, indicate a change of hue in his color gradations from light to dark. In this respect he was in advance of his contemporaries who still adhered to a more sculptural and monochromatic means of modeling. A dramatic feeling is achieved in his compositions by contrasting warm and cool colors in their strong dark and light tones.

## VELASQUEZ (1599-1660)

Velasquez lived in an age of realism and readily adapted himself to the spirit of the time. His works are without social message, consisting chiefly of figure compositions of friends, nobility, and historical incidents executed in neutralized and sombre colors.

Figure 36, The Spinners, figure 37, Surrender of Breda, figure 38, Infanta Maria Theresa, and figure 39, Lady with



Holy Family

El Greco, 1548-1625, Spanish

Figure 31





Cardinal Inquisitor El Greco, 1548-1625, Spanish

Figure 32



DESCENT FROM THE CROSS FLEMISH  
PETER PAUL RUBENS (1577-1640) ANTWERP CATHEDRAL

Figure 33





PORTRAIT OF THE ARTIST FLEMISH  
PETER PAUL RUBENS (1577-1640) VIENNA GALLERY

Figure 34





No. 158—Flicht into Egypt  
Rubens (1577-1640)

Kassel Gallery  
Dutch School

Figure 35



THE SPINNERS

SPANISH

DIEGO RODRIGUEZ SILVA Y VELASQUEZ (1599-1660)

PRADO MUSEUM, MADRID

Figure 36





No. 148—Surrender of Breda  
Velasquez (1599-1660)

Prado, Madrid  
Spanish School

Figure 37



INFANTA MARIA THERESA SPANISH  
DIEGO RODRIQUEZ SILVA Y VELASQUEZ (1599-1660)

Figure 38





LADY WITH A FAN SPANISH  
DIEGO RODRIGUEZ SILVA Y VELASQUEZ (1599-1660) PRIVATE

Figure 39



Rest on the Flight

Claude Lorrain, 1600-1682, French

Figure 40





No. 48—A Polish Nobleman  
Rembrandt (1606-1669)

Hermitage  
Dutch School

Figure 41



The Night Watch

Rembrandt, 1606-1669, Dutch

Figure 42





THE PANTRY DUTCH  
PIETER DE HOOCH (1629-1677) RIJKS MUSEUM, AMSTERDAM

Figure 43



YOUNG WOMAN WITH A WATER JUG DUTCH  
JAN VERMEER (1632-1675) METROPOLITAN MUSEUM, N. Y.

Figure 44



a Yan, by Velasquez, show a range of grays that were composed not of black and white, but of hues which render them colorful. His forms do not express much depth because of the lack of change of hue, value, and intensity; although, he keeps the cool colors in the background and brings the warmer, stronger colors forward.

The later period of Velasquez shows color that is thinner and more luminous, having abandoned the deep blacks and dramatic contrasts of value of his earlier era. Historians divide Velasquez's career into three definite periods. The early period, in subject matter, is chiefly street scenes, and commonplace objects, such as pottery, fish, and fruits. His manner of working during this time was quite photographic and characterized by the use of contrasting areas of light and shadow. The next period follows his first visit to Italy where he studied the principles of composition as they had been devised by the Italians. He also showed special attention to the works of Titian, Tintoretto, and Veronese. Out of these influences developed the last period wherein Velasquez found himself. He became concerned with the fugitive qualities of light as it envelopes forms, and affects surfaces. Light and atmosphere being in a constant state of movement, he observed, continuously altered the outward appearance of those surfaces.

## EIGHTEENTH CENTURY PAINTING IN FRANCE

## WATTEAU (1684-1721)

Watteau was one of the first painters who experimented with prismatic colors. He gave equal significance to technique and choice of hue. His experiments were based on the findings of Sir Isaac Newton, who, in 1666, discovered the connection between color and the refraction of light. Previous to his time white light was assumed to be homogenous. By the use of a prism Newton refracted a beam of white light into an indefinite number of spectral hues. The differences in the degree of refraction distinguished each hue. When the ray of light has undergone the separation, each of the component elements of white light retains its characteristics, and also retains its own refractive power.

He was supreme in his command of those gold and silver tones which with ineffable charm pervade every scheme of color in his compositions. Rubens was his first color-master, and as red is Ruben's hue, so red, silvered down to palest tints of pink, is Watteau's also. Veronese gave him saffron and yellow, hence we see so many of his ladies arrayed in those colors. Titian was his guide in his "carnations," his flesh tints--subtle reality with a gloss of gold upon it, the "amber carnations" of the Venetian masters. But one of his colors was entirely his own, his pearly, creamy white, which like an opal takes reflections from all around..... He painted the color of the air, not merely objects. His richest effects are those of reflection, and the gradation of flashes of light through breaks in thick foliage. His use of broken tones is as much a characteristic as his exuberance of vivid color. The irridescence, so to speak, of his delicate and changeful hues is astonishing. The lighting of his pictures has all the





No. 89—The Fete  
Watteau (1684-1721)

Berlin Gal.  
French School

Figure 45

brilliant effect of the footlights at a theatre, the illumination seeming to issue from some source between the beholder and the scene.<sup>9</sup>

Figure 45, The Fete, is a good example of Watteau's use of color in painting the French aristocracy against French pastoral settings, costumed ladies and gentlemen dancing, picnicing and romancing in ideal landscapes.

#### CHARDIN (1699-1779)

Chardin knew how to render the delicate greys produced by light, the reflections and depth of atmosphere. He is one of the first French artists who devoted his art to the life around him by revealing the simple domestic life of the eighteenth century in France.

He places his colors alongside of each other almost without mixing them, so that his work looks like mosaic or patchwork, or like that hand-made tapestry called 'point carre.'.....  
The only justification for such a rough and unpolished manner of painting was a thorough knowledge of the effect that colors produce upon one another. Chardin had devoted much thought and study to the theory of painting, and on that subject was vastly in advance of his century. He deals with unimportant subjects, but in his treatment of them he proves his superiority of his love of truth, by the harmony of his composition, and by the consummate science of his technique. Above all, he is at times a great colorist, and that alone is sufficient for his glory.<sup>10</sup>

Figure 46, Kitchen Maid, and Figure 47, The House of Cards, are expressive of Chardin's use of color.

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<sup>9</sup> Edgcombe Staley, "Watteau," *Masters in Art*. part 39, 4, p. 34.

<sup>10</sup> Charles Hornum, "The Art of Chardin," *Masters in Art*, part 69, 6 (May, 1905), pp. 30-34.





No. 52—Kitchen Maid  
Chardin (1699-1779)

Paris  
French School

Figure 46



THE HOUSE OF CARDS  
JEAN CHARDIN (1699-1779)

FRENCH  
LOUVRE, PARIS

Figure 47



## FRAGONARD (1732-1806)

In subject matter Fragonard was attracted to the theatre, portraiture, glorious trees, subjects of gallantry and the court life of the Du Barry period. Figure 48, L'Etude, is an example of his portraiture as it was influenced by court life. In his last period he worked for simplicity and more light and solidity in his paintings of subjects from the lower classes.

Fragonard employed delicate tones of hue in the portrayal of his subjects of court life. He expressed form by modeling in monochromatic sequences, as did the Italians in the early period of the Renaissance.

## DAVID (1748-1825)

David was leader of the classicist movement in France. He developed the classical ideals of the revolution and was a devotee of the Antique-Greco-Roman sculpture period. He subordinated the use of color to line and photographic modeling in light and shade. Figure 51, Mme. Recamier, is expressive of his painting in areas of unbroken color, which lack life, vibration, and is weak in chroma.

## EIGHTEENTH CENTURY PAINTING IN SPAIN

## GOYA (1746-1828)

Goya's works represent a wide range of subject matter,

including country scenes, portraits, strange fantasies of grim and morbid tendencies. Within his canvases is a crispness and accent, and a feeling of strong pattern in the elements of design. Embodied in his compositions are textural qualities, the play of light on surfaces and the changing vibrant character of details.

Within a vast repertoire of paintings, drawings and prints, Goya unleashed his fury and sardonic interpretations over the injustice, selfishness, and lack of values in the character of his countrymen.

Goya's choice of hues was as varied as his choice of subject matter, although forms were modeled by monochromatic sequences. Strong contrasts of color aided the expression of his intense feeling or response to subject matter, as in figure 49, The Water Barrier, and figure 50, Family of Charles IV.

#### LANDSCAPE PAINTING IN ENGLAND

##### TURNER (1775-1851)

Turner devoted himself to the study of light, atmosphere and movement. The great aim of his artistic ambition was to gain a thorough knowledge and attain a complete representation of light in all its phases.

Turner in one principle worked with delicate blues, greens, and whites, keyed with a touch of rich brownish crimson.





L'ETUDE

JEAN HONORE FRAGONARD (1732-1806)

FRENCH

LOUVRE, PARIS

Figure 48



No. 64—The Water Carrier  
Goya (1746-1828)

Budapest  
Spanish School

Figure 49





Family of Chas. IV

Goya, 1746-1828, Spanish

Figure 50



No. 82—Mme. Recamier  
J. L. David (1748-1825)

Louvre  
French

Figure 51



In another principle he combined rich autumn colors in a foreground with a brilliant blue sky. He graded the middle-ground with pearly tints to hold the main contrast of his scheme together.<sup>11</sup>

His work may be divided into two periods: the first, wherein he aimed chiefly at form, and painted in dark tones; the second, in which color was given primary consideration. Turner was the first artist who represented the sun shining through mist and its colorful effects upon the landscape and marine subjects, as in figure 52, The Fighting Temeraire.

#### CONSTABLE (1776-1837)

Constable observed in his realistic study of nature that the planes of forms are not one flat color but are broken up into many spots of various hues. Upon his discoveries and uses of color the Impressionists based their early experiments.

Previous to Constable, landscape had been employed as backgrounds for figure subjects. The landscapes were painted indoors in browns and very grayed hues. However, the Frenchmen, Lorrain and Poussin in the seventeenth century contributed to a great advance in the art of landscape painting, although they were influenced by the classicism of the Italians. It remained for Constable to develop this phase of art, as illustrated in figure 53, The Cornfield.

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<sup>11</sup> Faber Birren, *The Story of Color*, p. 125.



No. 125—The Fighting Temeraire  
J. M. W. Turner (1775-1851)

National Gallery, London  
English School

Figure 52





The Cornfield

Constable, 1777-1837, English

Figure 53

His paintings express with force and compositional truthfulness the tone, color, movement and atmosphere of the scenes represented. His treatment of skies as a compositional quantity is quite notable.

#### THE ROMANTIC MOVEMENT IN FRANCE

The Romantic movement in France followed the French Revolution, which to a great extent broke up the old traditions and impositions, and gave liberty to the desire for self-expression. It was not confined to France, but had its origin in Goethe's writings and reached France through Byron and Scott of England, who were inspired by him. Victor Hugo and other poets, and Gericault and Delacroix, the artists, gave the movement expression in France. It brought recognition of freedom from the past and the possibilities of the present. It is characterized by emotional self-expression and response to nature, as opposed to false, rigid formalism and restraint, the weak, insipid, cold, lifeless, classical and impersonal.

Its followers studied Rubens and the English artists, and used color, as well as line, form, and composition to express light, atmosphere, movement, dramatic action, and sensation to an extent not done before in France. For subject matter they were chiefly concerned with medieval stories, or the dramatic happenings of the present, following



the themes of novelists and poets.

In this movement lay the roots of the Expressionists, as in the soft prettiness of the seventeenth century art lay the cause for the rigid severity of the classical reaction, and in this cold and impersonal classical expression is found the reason for the emotional art of the Romanticists.

#### DELACROIX (1798-1863)

The expression of Delacroix was dynamic, through vivid color, rapid movement, tragedy and freedom. He wished to parallel in art the picturesque drama of literature. Delacroix is important in art as the exponent of the Romantic ideals and a precursor of modern art. He sought to develop the dramatic possibilities of pure color and strong contrasts. His use of color was a decided change from the monochromatic modeling of the Italians and the colorless photographic realism of the French Classicists. Delacroix wrote,

"From my window I see a joiner working, naked to the waist, in a gallery. Comparing the color of his body to that of the outside wall, I notice how strongly the half-tones of flesh are colored as compared with inert matter. I noticed the same thing yesterday in the Place Saint Sulpice, where a loafer had climbed up on the statues of the fountain, in the sun. Dull orange in the carnations, the strongest violets for the east shadows, and golden reflections in the shadows which were relieved against the ground. The orange and violet tints dominated alternately, or mingled. The golden tone had green in it. Flesh only shows its true color in the open air, and above all in the sun. When a man

puts his head out of the window he is quite different to what he was inside. Hence the folly of studio studies, which do their best to falsify this color."<sup>12</sup>

Delacroix was a student of Chevreul's color theories, an explanation of which may be found under the heading of French Impressionism and Chevreul, in this text.

#### THE BARBIZON PAINTERS AND FRENCH NATURALISM

The Barbizon School is often called "Men of 1830" and includes painters, writers, and critics. The painter group, frequently called the School of Poetic Landscape, revolted against the Academy at the time of the revolution. Until this time figure painting had constituted the best works of art. This group of landscape painters worked outdoors from nature in the forest of Fontainebleau near the village of Barbizon. They endeavored to depict nature faithfully and interpret its moods, often becoming photographic in their expression through copying nature and its detail. These realistic tendencies were influenced by the introduction of photography and by Constable's use of juxtaposed color. Rousseau was the leader of this group which included Millet and Corot.

#### COROT (1796-1875)

Corot went outdoors and painted effects as he saw them,

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<sup>12</sup> Ibid., p. 129.





Dance of the Nymphs

Corot, 1796-1875, French

Figure 54

not as he imagined them to be. He was influenced by Constable and was interested in air and sunlight, color, tone, and spirit in relation to form. He became more deeply interested in tone to the extent that his landscapes are expressions of atmosphere and the forms are softened and lost. His landscapes are not reproductions of nature but are idealized and imaginative.

Figure 54, Dance of the Yuzuka, by Corot, is a good example of his landscapes painted in soft, gray-greens, with bits of a complement added in the figures that dance, play or row against sylvan scenes. He expressed a range of color and values comparable in effect to that of nature.

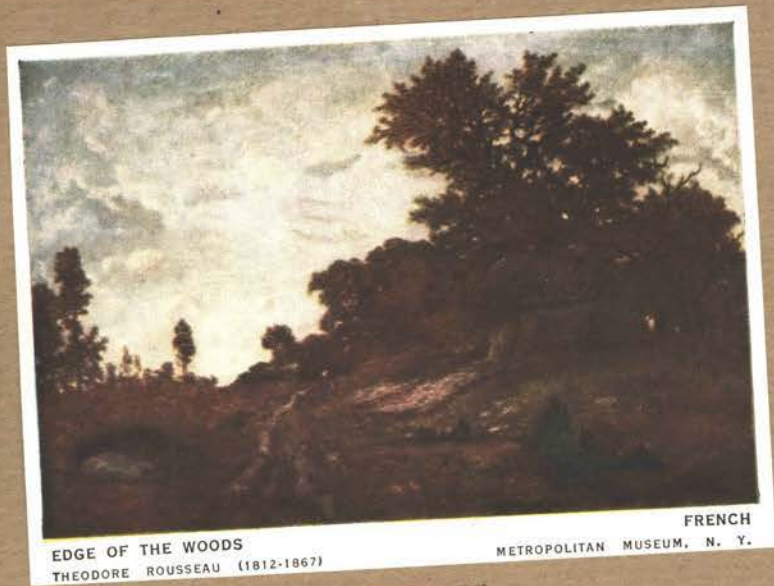
#### ROUSSEAU (1812-1867)

Rousseau, a member of the Barbizon school of painters, and one of the leaders of French naturalism worked and studied outdoors. He expressed the strength of nature by often using the oak tree as his theme, as in figure 55, Edge of the Woods. He portrayed a normal range of color values and intensities in his compositions. Like Millet, he painted in planes of broken or juxtaposed spots of color.

#### MILLET (1814-1875)

Millet was a painter of French peasant life. His landscapes were secondary in importance to his figures, serving





EDGE OF THE WOODS  
THEODORE ROUSSEAU (1812-1867)

FRENCH  
METROPOLITAN MUSEUM, N. Y.

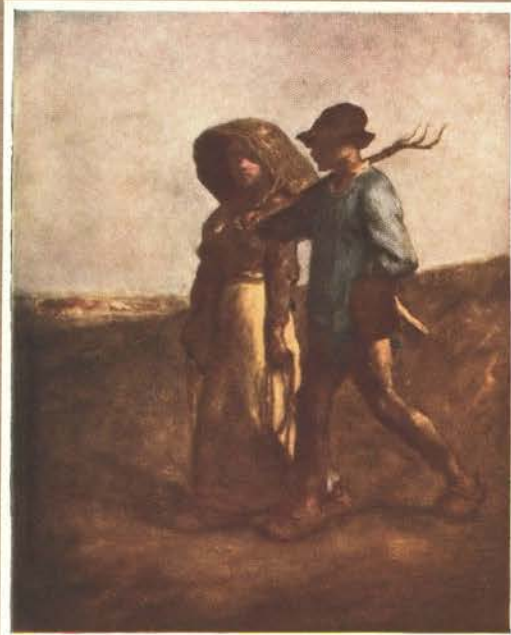
Figure 55



WOMAN CHURNING FRENCH  
JEAN FRANCOIS MILLET (1814-1875)

Figure 56





No. 157—Going to Work  
Millet (1814-1875)

Glasgow Gallery  
French School

Figure 57

as backgrounds for their activities. Color, to Millet, was sombre and heavy, in harmony with his subjects. His colors are low in value and intensity and in some instances appear quite dull as though too many pigments were employed in his mixtures. His color relationships of grayed and intense pigments also cause this appearance of dullness in his compositions. Figure 56, Woman Churning, and figure 57, Going to Work, by Millet are expressive of his use of color.

#### DAUMIER (1818-1879)

Daumier portrayed the follies, legal hypocrisy, and politics of his time. He was a professional cartoonist and satirized the political life of Paris in painting and lithograph. His paintings are simple, strong drawings with the addition of a very simplified palette of color, making for a unity and solidity of artistic expression of interest aside from the propaganda thought. As a painter he was one of the pioneers of naturalism. His palette often consisted only of yellow ochre, burnt sienna, and black. Figure 58, The Washerwoman, is expressive of his use of color. This composition is dominantly warm through the use of grayed yellows and grayed oranges. An accent of cool color is expressed by smaller areas of grayed green.

#### FRENCH IMPRESSIONISM AND CHEVREUL

Impressionism brought about an enlarged understanding



and use of color contrast and the distinction between the problems of the additive color combinations on the retina and the subtractive color combinations of mixed pigments. To Chevreul, director of the Chemical Department of the Government Gobletins Manufactory in Paris, is due the credit for the discovery and formulation of the original statements regarding the principles of color contrast.

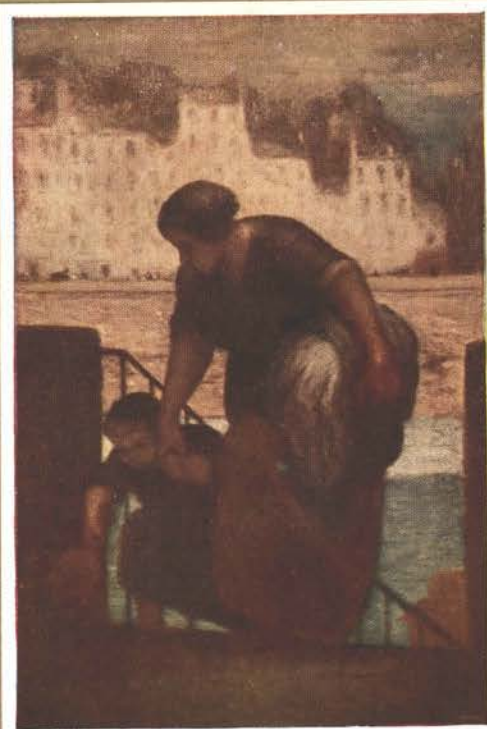
Chevreul noted that in seeing colors the eye presented certain subjective reactions which influenced appearances. Immediately he foresaw the necessity of dealing with color as a visual phenomenon. He studied the after-image with a vengeance, prepared charts and diagrams to explain every minor detail. He gained scintillating effects through the juxtaposition and diffusion of color areas (which led to pointillism).<sup>13</sup>

Color-contrast, briefly stated, is a mutual modification of juxtaposed, unrelated hues, increasing the apparent difference between them. The after-image, to which Chevreul devoted intensive study, may be defined as a sensation occurring after the stimulus causing it has ceased. The visual after-image is complementary to each color in the original sensation.

The Impressionists, Monet, Manet, Renoir, Degas, Sisley, and Pissarro, contributed greatly to the scientific view and use of color. They expressed objects by juxtaposed spots or lines of pure hue. Within their compositions the surfaces bathed in sunlight were expressed with yellow pigment,

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<sup>13</sup> Ibid., p. 137.



No. 92—The Washerwoman  
Honoré Daumier (1818-1879)

Private Collection  
French School

Figure 58



and the shadows were violet-blue, in harmony with the physicists' theory of color, that shadows are complementary in hue to the light source. The Impressionists were intensely interested in the manner in which light affected surface color.

#### MANET (1832-1883)

Manet's paintings are solidly constructed, straightforward in conception, and painted with freedom and directness. He advocated and tried to accomplish in his paintings the rendering of a momentary vision of light, of life, and of movement.

He abandoned the conventions of outlines and modeled his form with subtle gradations that "melted" together in the eye of the observer. He was attracted to illumination as a major rather than an accessory quality in beauty.<sup>14</sup>

Although considered as the leader of the Impressionist movement, he was never a member of the group. Figure 59, The Boat, and figure 60, The Breakfast, by Manet are expressive of his use of color in painting.

#### DEGAS (1834-1917)

Degas was successful in combining line and color. He knew how to deal with the substance and density of hue, as it related to movements and textures of form, which gave life to his characters and scenes. In subject matter his

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<sup>14</sup> Ibid., p. 128.

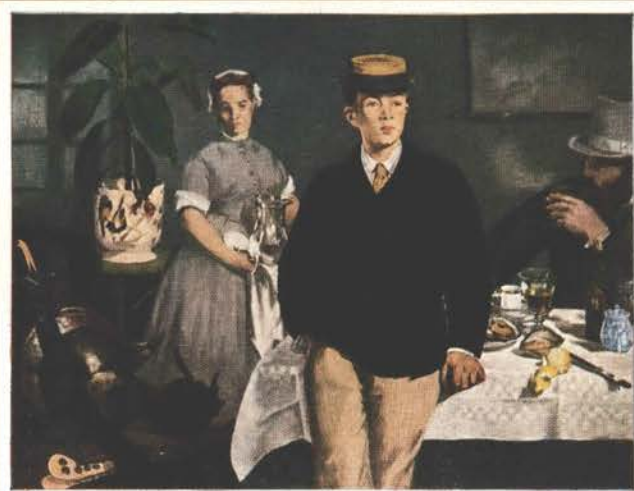


THE BOAT  
EDOUARD MANET (1832-1883)

FRENCH  
MUNICH ART GALLERY

Figure 59

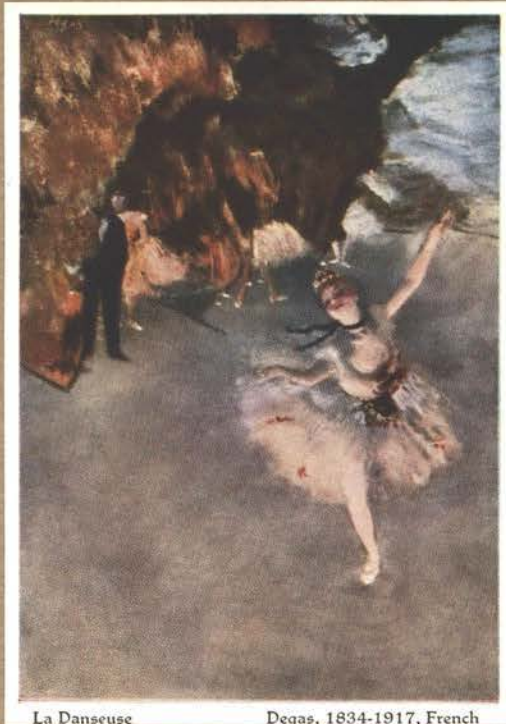




No. 86—The Breakfast  
Edouard Manet (1832-1883)

Munich Gal.  
French School

Figure 60



La Danseuse

Degas, 1834-1917, French

Figure 61





THE JOCKEY

HILAIRE G. E. DEGAS (1834-1917)

FRENCH

PENNSYLVANIA MUSEUM

Figure 62

works include ballet dancers, jockeys, actors, washerwomen, riders, and horses. Figure 61, La Danseuse, and figure 62, The Jockey, express his use of color.

#### MONET (1840-1926)

One of the most distinctive phases of Monet's composition is the analysis of shadows. He perceived that local color was quite illusive and that shadows were not the absence of light but were areas of lesser illumination. The color of the shadows in sunlight was complementary to the source of light, a violet-blue. Previous to him those areas were painted in a sombre conventional color tone for the purpose of forcing into relief the brilliance of the more luminous regions. He expressed examples of the theory we know as the theory of complementary color. He observed and understood the reaction of colors, one upon another, when placed in juxtaposition. The technical ancestry of Monet includes Turner, Constable, Chardin, Delacroix, and Watteau.

Figure 68, Church at Vernon, figure 69, Trees Near the Sea: Bordighera, by Monet, and figure 67, A Sunny Landscape, by Sisley, are expressive examples of the Impressionists' use of color in painting.

#### RENOIR (1841-1919)

Renoir was responsive to light and the manner in which



it affected surfaces. He handled color and effect of light with feeling and expressed in his pictures a human warmth and joy in living.

Renoir, working with separate brushstrokes, produced dominant and radiant tones by a shrewd sequence of hues. Values were replaced by color contrasts. All shadows were luminous and hued. He gave attention to mass, achieved rotundity in his forms and built luminosity by clever analogies.<sup>15</sup>

He painted with a full, generous brush, indicating form, color and light without articulating too clearly, as in his figure 70, Au Loge, figure 71, La Moulin De La Galette, and figure 72, Young Woman Reading.

#### NEO-IMPRESSIONISM

##### SEURAT (1859-1891)

Seurat was a student of Chevreul's color theories. He built up his canvases by the juxtaposed spotting of pigments. The colors of his palette corresponded to the dominant colors of the spectrum: red, orange, yellow, green, blue, indigo, and violet.

The divisionism of Seurat and Signac, on the other hand, was far more analytic and technical. The touches were scientifically juxtaposed without regard to form. The style was almost abstract for this reason--primarily designed to get vivid color, using nature more or less as a pattern. The work of these two artists was perhaps the purest expression of the pointillist technique. They painted by rule and laid their "beads" of color by

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<sup>15</sup> Ibid., p. 130-131.

the thousands, "embroidering" them into compositions with incredible patience.<sup>16</sup>

In order that the eye of an observer may respond adequately to the intermingling of pigments on the canvas, the juxtaposed bits of color must be quite small or the distance between canvas and observer should be increased. Seurat's results appear to be more of a mosaic craft than painting, as may be observed in his figure 80, Near the River Seine.

#### POST-IMPRESSIONISM

The chief exponents of the Post-Impressionist school were Cezanne, Gauguin, and Van Gogh, who may rightly be considered the fathers of modern art. Individually, the Post-Impressionists pursued the study of color as did the Impressionists. These men did not paint fleeting impressions of worldly objectives. Instead, they drew on their environment as a source of inspiration for effects of form and color, searching for the hidden order beneath the temporary aspects of nature. In this respect, many of our modern painters may be considered disciples of the Post-Impressionists.

The transition from Impressionism to Post-Impressionism was marked by a reaction against color analysis as light only.

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<sup>16</sup> Ibid., p. 130.



The Post-Impressionists' reaction was expressed by emphasizing the functional use of color. Cezanne employed planes of various intensities and hues in light and dark values to create volume, and gave each object the proper color to its position in distance and space. Van Gogh's use of intense, vibrant colors was a definite contrast to the mechanical vision of the Impressionists. Gauguin's abstract, primitive use of color expresses the individual emotional reaction of the painter.

Willard Huntington Wright long ago pointed out that study of color in the painting of the past, since the Renaissance, would show that it had been used naturally, to increase the illusion of appearance-reality; ornamentally, to add to the pleasing aspect of pictures as decoration--this trailing off into the voluptuousness of court painting, etc., and dramatically, to heighten the feeling of the spectator by color-contrast. The Impressionists might be said to have deified color for its own sake, wresting it free from the other elements of design; and certainly they paved the way to discovery of its independent plastic-dynamic properties. It was left for the Expressionists, led by Cezanne, to pick up color thus purified and fuse it constructively with the other plastic elements: to recover the volume-organization that had been thrown away by the Impressionists, and to co-ordinate it with color orchestration.<sup>17</sup>

Early painting developed drawing and design or composition--the two other elements of the art of painting to the exclusion of the understanding and use of color.

#### CEZANNE (1839-1906)

Cezanne used color to create forms and space. His

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<sup>17</sup> Sheldon Cheney, *Expressionism in Art*, pp. 257-258.

manner of painting reduced the independent value of individual objects, subordinating them into a closer relationship. The solidity of his canvases is dependent upon the small component parts, the modulations of color, tone, and volume. These elements create Cezanne's compositional conception. His approach to painting was a definite reaction to the Impressionists' method of obliterating form to achieve the fullest possible intensity of light.

From close and patient observation of nature he determined that the achromatic value of a surface changes as the direction of the planes composing the object change. The colors of the planes of the object change in hue also, due to the manner and amount of light reflected. Through the judicious use of color, the gradation of tones, and by drawing in perspective, Cezanne achieved the third dimension in his compositions. He observed that one must see in nature the cylinder, the sphere, and the cone, all put into perspective of line, tone, and color.

Cezanne combined the processes of drawing and color into one operation. Previous to his most Occidental painting had been a matter of arranging form and value. Color was secondary and arbitrary. He sought chromatic gradations and functions of color, constructing form with color, as expressed in his figure 63, Still Life, figure 64, The Bathers, figure 65, Mt. Ste. Victoire, and figure 66, The Smoker.





Figure 63



THE BATHERS  
PAUL CEZANNE (1839-1906)

FRENCH  
PRIVATE COLLECTION

Figure 64



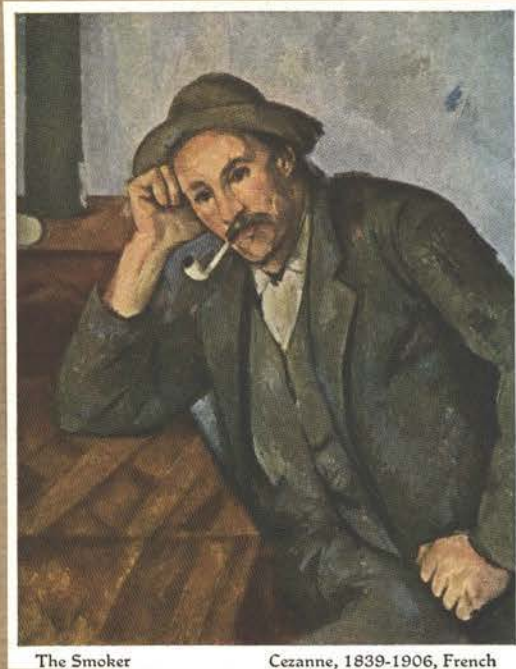


Mt. Ste. Victoire

Cezanne, 1839-1906, French

Figure 65





The Smoker

Cézanne, 1839-1906, French

Figure 66





Figure 67





Church at Vernon

Monet, 1840-1926, French

Figure 68



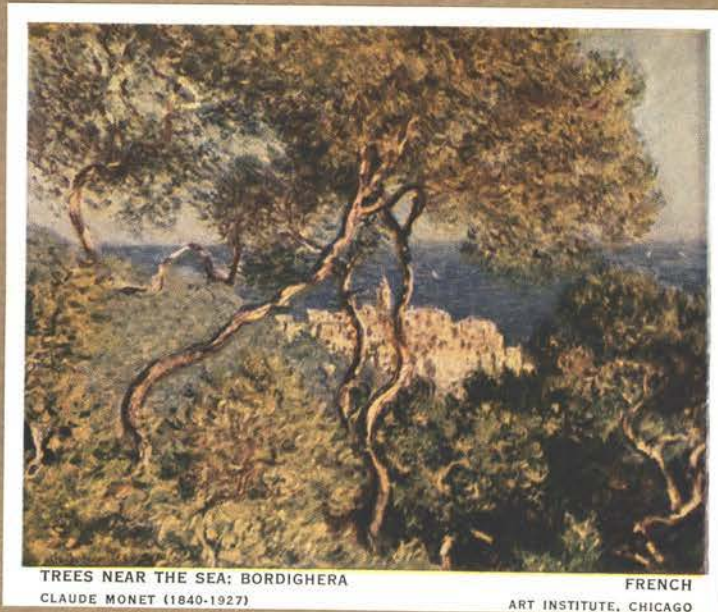
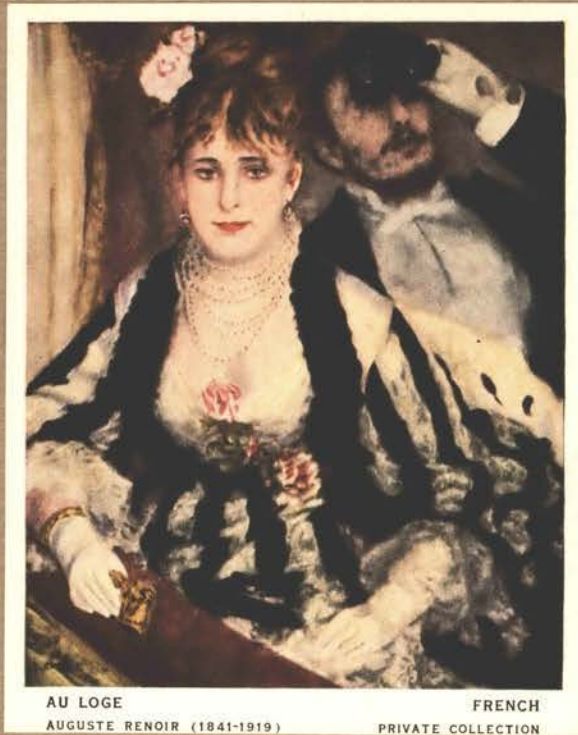


Figure 69





AU LOGE

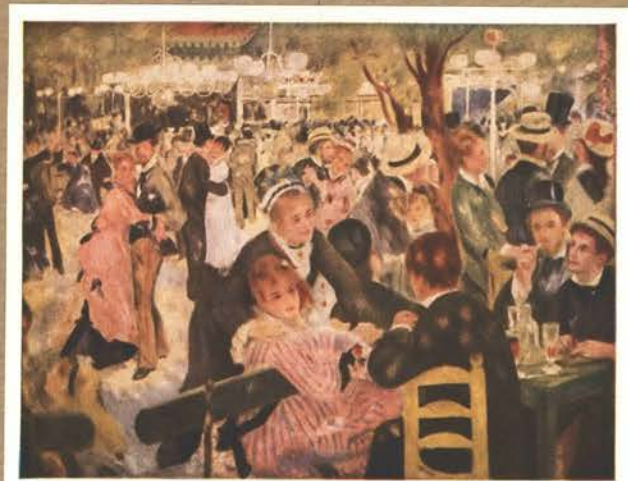
AUGUSTE RENOIR (1841-1919)

FRENCH

PRIVATE COLLECTION

Figure 70

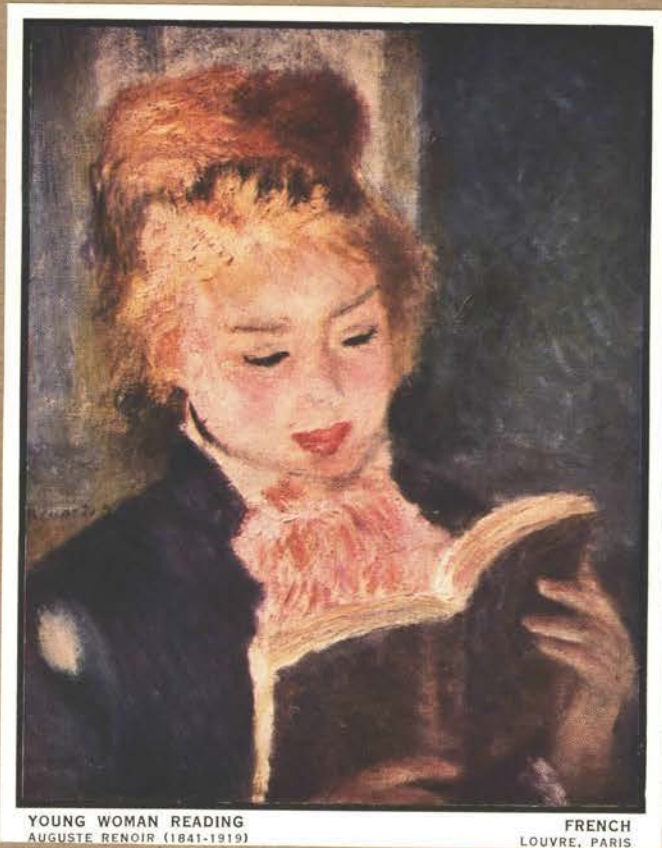




LE MOULIN DE LA GALETTE FRENCH  
AUGUSTE RENOIR (1841-1919) LUXEMBOURG GALLERY, PARIS

Figure 71





YOUNG WOMAN READING  
AUGUSTE RENOIR (1841-1919)

FRENCH  
LOUVRE, PARIS

Figure 72



## GAUGUIN (1848-1903)

Gauguin used intense color in large flat masses, only suggesting color modeling. Being dissatisfied with the objectivism of the Impressionists, he enclosed, cloisonné fashion, his mighty, simple figures, that are indicative of a type-idea based on forms observed directly in nature. Gauguin endeavored to reproduce in his compositions an all-embracing vision, expressed by a few elements of color and volume. In his compositions he never ceased to decorate. His motives, even if they happen to be men or women, twist and unwind in arabesque manner on the surface of the canvas. The figures are not so individual but were reduced to a type. He interpreted the spirit of a place and people, achieving decorative effects through the use of pure hue. He also developed new and valuable color relationships.

Figure 73, At the Seaside, figure 74, Bayard Scene, and figure 75, Tahiti, by Gauguin, are examples from an individual who was engrossed in the beauty of decoration, but essentially interpretative of what he would like to see.

## VAN GOGH (1853-1890)

Van Gogh used color dynamically to express his vital interest in life. He used vibrant and intense color in juxtaposed and interwoven spots and lines. His compositions are strong contrasts of value and intense colors. The

subject matter, technique, and the color combinations all seem to move within his canvases. He has interwoven oranges and purples, and flaming yellows with his dazzling greens. Van Gogh painted the effect of light with color in a new technique. His use of color shows the influence of the Impressionists, while in his conception of nature he was the direct opposite of them. To him, a landscape was an actual human experience rather than reflections in the eye. He enclosed color areas with outline.

His palette consisted of Prussian blue, vermilion, violet, pinks, greens, and yellows in varying tones, oranges to light lemon yellow. These colors he contrasted or combined to form his harmonies. His canvases do not present great harmonic values of neutrals with color.

Figure 76, Portrait of the Artist, figure 77, Cypress Landscape, figure 78, Cornfield in Provence, and figure 79, Sunflowers, by Van Gogh express his dynamic use of color in painting.

#### MODERNISM

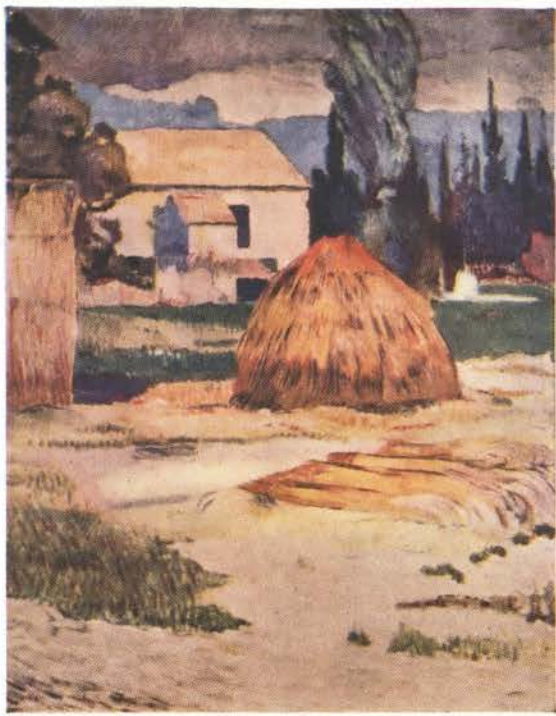
Picasso and Braque originated Cubism in the early part of the twentieth century. The Cubists pursued structure through its architectural aspects rather than through color. The planes of forms were emphasized, giving the objects a geometrical appearance. They believed that one view of an





Figure 73



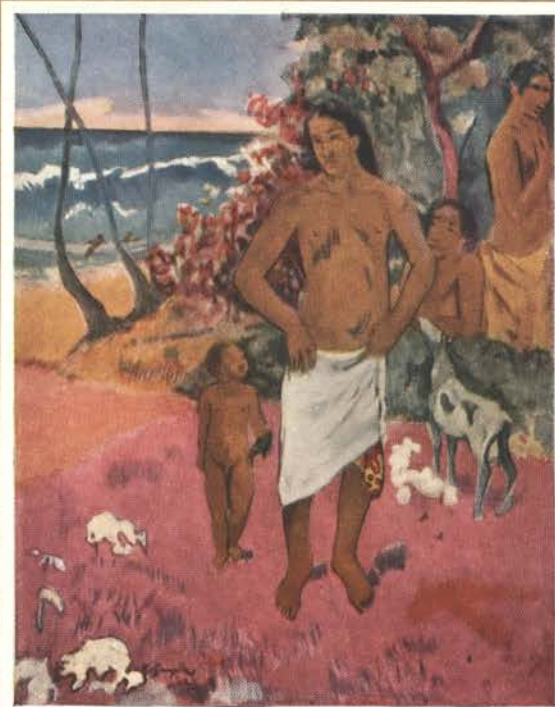


Farmyard Scene

Gauguin, 1848-1903, French

Figure 74



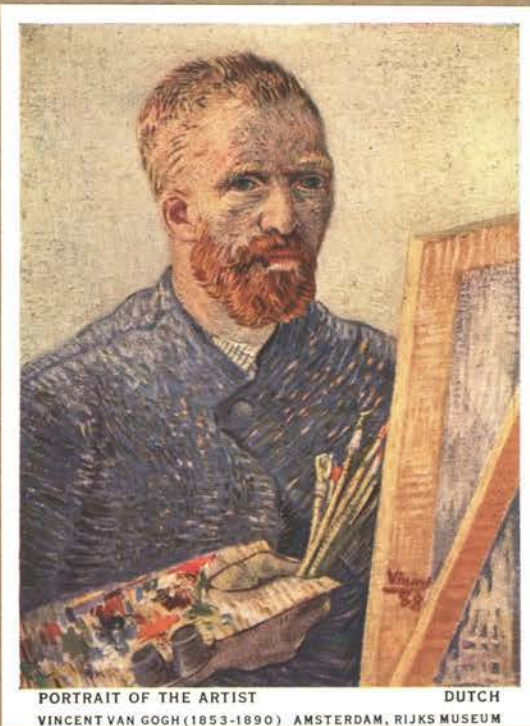


No. 142—Tahiti  
Gauguin (1848-1903)

Albright Art Gal., Buffalo  
French School

Figure 75





PORTRAIT OF THE ARTIST DUTCH  
VINCENT VAN GOGH (1853-1890) AMSTERDAM, RIJKS MUSEUM

Figure 76





Cypress Landscape

Van Gogh, 1853-1890, Dutch

Figure 77





Cornfield in Provence

Van Gogh, 1853-1890, Dutch

Figure 78





Sunflowers

Van Gogh, 1853-1890, Dutch

Figure 79

object gave only a partial sense of its structure. As a result of this assumption, they sought to correct this sense by presenting the object in various views simultaneously. They sought to eliminate objectivity and achieve form by intersectional planes.

The Moderns are concerned with the abstract values of color, being interested in geometric forms as flat planes and lines. By the use of abstract forms instead of concrete things they have been free to study new and interesting arrangements of forms. They have developed a comparatively wide range of intense and grayed color harmonies. By the combination of various techniques they have achieved an interesting variety of textures.

It may be stated, indeed, that there are two main divisions of the Expressionist current: one in which the abstract values are sought for their own sake, independent of natural appearances, or with only incidental relation to the objective world; and one in which a picture ordered with nature's materials and rich in "feeling" contains a supporting skeleton or structure of the abstract, the latter being the more important reason for the pictures existence, aesthetically considered though there may be a range of over-values, depending upon the nature of the subject, affording human and social interest and stimulation.<sup>18</sup>

Out of the Cubist movement grew Abstractionism. In this movement the Moderns desired to divorce painting from objective values. The chief exponent of Abstractionism is Kandinsky. He advocated the construction of color harmonies

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<sup>18</sup> Ibid., pp. 59-60.



without reference to natural forms, much in the same manner that a musician can compose melodies without reference to natural sounds.

They do not wish to remind you of something or give you a picture of something or point a moral with an artistic interpretation of something. They want to stimulate and delight your vision with a composition of pigments on the canvas. They want you to enjoy painting as color and form in the same way that you enjoy music as sound--without considering whether it calls to mind a rivulet or the Day of Judgment.<sup>19</sup>

Picasso's early canvases depict beggars, circus folk, the impoverished, and the less fortunate members of Parisian society. In these pictures are to be found human qualities and dramatic characteristics.

Following this period he withdrew to the studio and contemplated ideas rather than working objectively from the outside world. He studied the theories of Cezanne and proceeded to paint in the style of the African Negroes. This later developed into Cubism, reducing all forms to a few planes. Like Cezanne, Picasso has sought authentic, artistic values, and has been active in getting back to essentials of form.

Figure 81, Improvisation No. 30., by Kandinsky, figure 82, Bouquet, figure 83, Blue Window, by Matisse, figure 84, View From the Studio, by Picasso, and figure 85, Still Life--Fruit and Guitar, by Braque, express the Modernists' abstract

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<sup>19</sup> "Fourteen Notable Paintings", Fortune Magazine. (January, 1934) 30.



Near the River Seine

Georges Seurat, 1859-1891, French

Figure 80





Figure 81





Bouquet

Matisse, 1869-, French

Figure 82





Blue Window      Henri Matisse, 1869-, French

Figure 83



View from the Studio

Pablo Picasso, 1881-, French

Figure 84





Figure 85

use of color in painting.

#### CONCLUSION

It is obvious that science has been the most influential factor in contributing to the understanding of the use and development of color as related to Occidental painting in Europe since the twelfth century. However, there were no scientific contributions toward color understanding, previous to Da Vinci. He studied the physical and psychological properties of hue, and advocated the theory of the four visual primaries, red, yellow, green, and blue.

Following the discovery of light refraction by Sir Isaac Newton in 1666, a more universal interest was manifested by artists in the study and experimentation of color. Newton's discovery is a foundation on which many color theories have been created. One of the most important was that of Chevreul, who formulated principles of color contrasts, which profoundly influenced the experiments and use of color by the Impressionists.

From the Impressionists the Post-Impressionists gained a scientific knowledge of color. This understanding and influence has continued as a dominant factor into the Modern movement, contributing to a more intelligent use of color.



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