### **ABSTRACTION**

Kandinsky, Concerning the Spiritual in Art Background: Serial Music

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### KANDINSKY

Wassily Kandinsky (7866-7944) was born in Moscow, brought up in Florence and Odessa, studied political economy and law at the University of Moscow In 1896, the thirty-year-old Russian economist went to Munich to study painting; he soon opened his own painting school and began to move toward non, figurative painting, trying to rely on imagination rather than on visual experience and asking beholders to "look at the picture as a graphic representation of a mood and not as a representation of objects." In 1912, he was one of the founders of Der Blaue Reiter (the Blue Rider)-a group that tried to return to the "basic" elements in painting, their approach to color and form being strongly influenced by Neo-Impressionists like Gauguin and Van Gogh, their chief interest being in the intellectual and universally valid contents and possibilities of art. It was in 1912 that Kandinsky's essay, the first part of which follows, and most of which had been written in 1910, was published in Munich. Über das Geistige in der Kunst ("Concerning the Spiritual in Art") mad a great stir: the German edition was reprinted thrice within the first year, an English and Russian translations had already been published before the First World War broke out.

In 1914, Kandinsky returned to Moscow, taught there for some years, briefly after the Revolution held the Directorship of the Museum for Pictorial Culture, and helped found the Russian Academy of Artistic Sciences. In 1922 he joined Gropius' Bauhaus, but eleven years later left Germany for Paris where he remained (at Neuilly) until his death a few months following the Liberation. His epitaph, only slightly exaggerated, may be left to his wife: "Kandinsky," she wrote in 1946, "was perhaps the greatest revolutionist in the field of plastic art; by completely detaching painting from the object he gave endless possibilities to those with the gift of creation."

Concerning the Spiritual in Art 1. INTRODUCTION

Every work of art is the child of its time; often it is the mother of our emotions. It follows that each period of culture produces an art of its own, which cannot be repeated. Efforts to revive the art principles of the past at best produce works of art that resemble a stillborn child. For example, it is impossible for us to live and feel as did the ancient Greeks. For this reason those who follow Greek principles in sculpture reach only a similarity of form, while the work remains for all time without a .soul. Such imitation resembles the antics of apes: externally a monkey resembles a human being; he will sit holding a book in front of his nose, turning over the pages with a thoughtful air, but his actions have no real significance.

But among the forms of art there is another kind of external similarity, which is founded on a fundamental necessity. When there is, as sometimes happens, a similarity of inner direction in an entire moral and spiritual milieu, a similarity of ideals, at first closely pursued but later lost to sight, a similarity of "inner mood" between one period and another, the logical consequence will be a revival of the external forms which served to express those insights in the earlier age. This may account partially for our sympathy and affinity with and our comprehension of the work of primitives. Like ourselves, these pure artists sought to express only inner and essential feelings in their works; in this process they ignored as a matter of course the fortuitous.

This great point of inner contact is, in spite of its considerable importance, only one point. Only just now awakening after years of materialism, our soul is infected with the despair born of unbelief, of lack of purpose and aim. The nightmare of materialism, which turned life into an evil, senseless game, is not yet passed; it still darkens the awakening soul. Only a feeble light glimmers, a tiny point in an immense circle of darkness. This light is but a presentiment; and the mind, seeing it, trembles in doubt over whether this light is a dream and the surrounding darkness indeed reality. This doubt and the oppression of materialism separate us sharply from primitives. Our soul rings cracked when we sound it, like a precious vase, dug out of the earth, which has a flaw. For this reason, the primitive phase through which we a now passing, in its present derivative form, must be short-lived.

The two kinds of resemblance between the forms of art of today and the past can be easily recognized as diametrically opposed. The first, since it is external, has no future. The second, being internal, contains the seed of future. After a period of materialist temptation, to which the soul almost succumbed, and which it was able to shake off, the soul is emerging, refined by struggle and suffering. Cruder emotions, like fear, joy and grief, which longed to this time of trial, will no longer attract the artist. He will attempt to arouse more refined emotions, as yet unnamed. Just as he will live a complicated and subtle life, so his work will give to those observers capable feeling them emotions subtle beyond words.

The observer of today is seldom capable of feeling such vibrations. He see instead an imitation of nature with a practical function (for example, a portrait, in the ordinary sense) or an intuition of nature involving a certain interpretation (e.g., "impressionist" painting) or an inner feeling expressed nature's forms (as we say, a picture of "mood"). When they are true work of art, such forms fulfill their purposes and nourish the spirit. Though this remark applies to the first case, it applies more strongly to the third, in which the spectator hears an answering chord in himself. Such emotional chords cannot be superficial or without value; the feeling of such a picture can indeed deepen and purify the feeling of the spectator. The spirit at least is preserved from coarseness: such pictures tune it up, as a tuning fork does the strings of a musical instrument. But the subtilization and extension of this chord in time and space remained limited, and the potential power of art is not exhausted by it.

Imagine a building, large or small, divided into rooms; each room is covered with canvases of various sizes, perhaps thousands of them. They represent bits of nature in color-animals in sunlight or shadow, or drinking, standing in water, or lying on grass; close by, a "Crucifixion," by a painter who does not believe in Christ; then flowers, and human figures, sitting, standing, or walking, and often naked; there are many naked women foreshortened from behind; apples and silver dishes; a portrait of Mister So-and-So; sunsets; a lady in pink; a flying duck; a portrait of Lady X; flying geese; a lady in white; some cattle in shadow, flecked by brilliant sunlight; a portrait of Ambassador Y; a lady in green. All this is carefully reproduced in a book with the name of the artist and the name of the picture. Book in hand, people go from wall to wall, turning pages, reading names. Then they depart, neither richer nor poorer, again absorbed by their affairs, which have nothing to do with art. Why did

they come? In every painting a whole life is mysteriously enclosed, a whole life of tortures, doubts, of hours of enthusiasm and inspiration.

What is the direction of that life? What is the cry of the artist's soul, if the soul was involved in the creation? "To send light into the darkness of men's hearts-such is the obligation of the artist," said Schumann. "A painter is a man who can draw and paint everything," said Tolstoi.

Of these two definitions we must choose the second, if we think of the exhibition just described. With more or less skill, virtuosity and vigor, objects are created on a canvas, "painted" either roughly or smoothly. To bring the whole into harmony on the canvas is what leads to a work of art. With cold eye and indifferent mind the public regards the work. Connoisseurs admire "technique," as one might admire a tight-rope walker, or enjoy the "painting quality," as one might enjoy a cake. But hungry souls go hungry away.

The public ambles through the rooms, saying "nice" or "interesting:" Those who could speak have said nothing; those who could hear have heard nothing. This condition is called "art for art's sake." This annihilation of internal vibrations that constitute the life of the colors, this dwindling away of artistic force, is called "art for art's sake:"

The artist seeks material rewards for his facility, inventiveness and sensitivity. His purpose becomes the satisfaction of ambition and greediness. In place of an intensive cooperation among artists, there is a battle for goods. There is excessive competition, over-production. Hatred, partisanship, cliques, jealousy, intrigues are the natural consequences of an aimless, materialist art."

The public turns away from artists who have higher ideals, who find purpose in an art without purpose....

During periods when art has no champion, when true spiritual food is wanting, there is retrogression in the spiritual world. Souls fall ceaselessly from the higher to the lower segments of the triangle, and the whole seems motionless, or even to move down and backwards. During these mute and blind times men attribute a special and exclusive value to external success, for they judge them by outward results, thinking of material well-being. They hail some technical advance, which can help nothing but the body. Real spiritual gains are undervalued or ignored.

The love visionaries, the hungry of soul, are ridiculed or considered mental;, abnormal. But the rare souls, who cannot be lulled into lethargy and

who feel dark longings for spiritual life, knowledge and advancement, sound, amid the vulgar materialistic chorus, lamentful and disconsolate. The spiritual night falls deeper and deeper around such frightened souls; and their bearers, tortured and weakened by doubt and fear, often prefer complete obliteration to this gradual darkening.

In such periods art ministers to lower needs and is used for material ends. It seeks its content in crude substance, because it knows nothing fine. Objects remaining the same, their reproduction is thought to be the aim of art. The question "what?" disappears; only the question "how?" remains. By what method are these material objects reproduced? The method becomes a rationale. Art loses its soul.

The search for the "how" continues. Art becomes specialized, comprehensible only to artists, and they complain of public indifference to their work. For, since the artist in such times has no need to say much, but only to be notorious for some small originality among a small group of patrons and connoisseur (which incidentally is also profitable), many externally gifted and skilful people come forward, so easy does the conquest of art appear. In each "art center" there are thousands of such artists, of whom the majority seek only some new mannerism, producing millions of works of art, without enthusiasm,, with cold hearts and souls asleep.

Meanwhile competition grows. The savage battle for success becomes morn and more material. Small groups who have fought their way to the top entrench themselves in the territory they have won. The public, left behind, looks on bewildered, loses interest and turns away.

Despite this confusion, this chaos, this wild hunt for notoriety, the spiritual triangle moves ahead, slowly but surely, with irresistible strength moving ever, forward and upward.

An invisible Moses descends from the mountain and sees the dancing around.; the golden calf. But he brings to man fresh stores of wisdom.

His voice, inaudible to the crowd, is first heard by the artist. Almost unwittingly artists follow the voice. In the very question "how" lies a hidden seed of renascence. Sterile though this "how" may be on the whole, there is always a possibility that the "difference" which we still call personal distinction may be able to see, in the objects about it, not only what is purely material, but also something less corporeal than was seen in the period of realism, when the

universal aim was to reproduce things "as they really are," without indulging in fancies.

If the emotional power of the artist can overwhelm the "how" and give free scope to his feelings, then art has started on the path by which she will not fail to find the "what" she lost, the "what" which forms the spiritual necessity of the nascent awakening. This "what" will no longer be the material, objective "what" of a stagnant period, but an artistic substance, the soul of art, without which the body (i.e., the "how") can never be healthy, whether an individual or a whole people.

This "what" is the substance which only art can comprise, which only art can clearly express by those means of expression that are proper to it.

### 3. SPIRITUAL TURNING-POINT

The spiritual triangle moves slowly ahead. Today one of the largest of the lower segments has reached the point of using the first battle-cry of materialism: The inhabitants of this segment call themselves Jews, Catholics, Protestants, etc. Really they are atheists, and this a few of the boldest, or the narrowest, openly avow. "Heaven is empty," "God is dead:" In politics they are liberals or progressives. The fear and hatred which yesterday they felt for these political creeds they now direct against anarchism, of which they know nothing but its dread name.

In economics these people are socialists. They sharpen the sword of justice to slay the hydra of capitalism.

Because they have never solved any problem independently, but are dragged in a cart, as it were, by the noblest of their fellow-men, who have sacrificed themselves, they know nothing of toil, which they watch from a distance. Therefore they rate it lightly, putting their trust in unexceptionable precepts and infallible cures.

The men of the segment next below are blindly dragged higher by those just described. But they cling to their old position, full of dread of the unknown and of betrayal.

The higher segments are not only atheists but justify their godlessness with strange words; for example, those of Virchow - so unworthy of a scholar - "I have dissected many corpses, but never yet come upon a soul."

In politics they are generally leftists, with a knowledge of different parliamentary procedures; they read the political articles in the journals. In

economics they are socialists of various shades and can support their "principles" with numerous quotations, passing from Schweitzer's *Emma* via Ricardo's *Iron Law of Wages*, to Marx's *Capital*, and still further.

In these higher segments other categories of ideas gradually begin to appear - science and art, literature and music.

In science these men are positivists, recognizing only what can be weighed and measured. Everything beyond they consider harmful nonsense, as they did yesterday the theories which are "proven" today.

In art they are realists, which means that they recognize and value the personality, individuality and temperament of the artist up to a certain definite point. This point has been fixed by others, and they believe in it without, reserve.

Despite their patent and well-ordered security, despite their infallible principles, there lurks among these higher segments a hidden fear, a nervousness; a sense of insecurity like that in the minds of passengers on a large, solid, oceangoing liner on the high seas when, the continent left behind in mist, dark clouds gather, and the winds raise the water into black mountains. This is the result of their upbringing. They know that the philosophers, statesmen and artists whom they revere today were spurned as arrivistes, gangsters and frauds yesterday. The higher the segment in the triangle, the better-defined this fear, this modern sense of insecurity. Here and there are people with eyes that see, minds that correlate. They ask: "If the knowledge of day before yesterday was overturned by that of yesterday, and that of yesterday by that of today, is it not possible that what we call knowledge now will be overturned, by the knowledge of tomorrow?" And the bravest of them answer: "It's possible."

Then people appear who can discern matters which the science of today" has not yet "explained." They ask: "Will science, if it continues on the road" it has followed for so long, ever attain the solution of these questions? And if it does, will man be able to rely on its answers?" In these segments are professional men of learning who remember the time when facts now recognized by the academies as firmly established were scorned. There are also aestheticians who write about an art which was condemned yesterday. In these books they remove the barriers over which art has most recently stepped and they set up new ones. They do not notice that they are erecting barriers: not in

front of art, but behind it. If they do, they write fresh books and hastily set the barriers a little further on. This process will go on until it is realized that the most advanced principle of aesthetics can never be of value to the future, but only to the past. No theory can be laid down for those things that lie in the realm of the immaterial. That which has no material existence cannot be materially crystallized. That which belongs to the spirit of the future can only be realized in feeling, and the talent of the artist is the only road to feeling. Theory is the lamp which sheds light on the crystallized ideas of the past. As we rise higher in the triangle, we find that confusion increases, just as a city built on the most correct architectural plan may be shaken by the uncontrollable force of nature. Humanity is living in such a spiritual city, subject to sudden disturbances for which neither architects nor. mathematicians have made allowance. In one place lies a great wall fallen down like a house of cards, in another are the ruins of a huge tower which: once stretched to the sky, built on presumably immortal spiritual pillars. The abandoned churchyard quakes, forgotten graves open, and from them rise forgotten ghosts. Spots appear on the sun, and the sun grows dark; and what power is left against the dark? In this city also live men who are dulled by false knowledge, who hear no crash, who are blinded by strange wisdom, so that they say "our sun shines brighter every day, and soon even the last spots will disappear:" But even these people shall hear and see.

Still higher, we no longer find bewilderment. There work is going on which boldly criticizes the pillars men have set up. There we find other professional men of learning who test matter again and again, who tremble before no problem, and who finally cast doubt on that very matter which was yesterday the foundation of everything, so that the whole universe rocks. The theory of the electrons, that is, of waves in motion, designed to replace matter completely, finds at this moment bold champions who overstep here and there the limits of caution and perish in the conquest of the new scientific fortress. They are like self-sacrificing soldiers making a desperate attack. But "no fort is unconquerable:"

Thus facts are being established which the science of yesterday dubbed frauds. Even newspapers, which are the most obsequious servants of worldly success and of the masses, which trim their sails to every wind, find themselves compelled to modify their ironical judgments on the "marvels" of

science, and even to abandon them. Many learned men, among them ultramaterialists, are dedicating their strength to scientific research on obscure problems, which can no longer be lied about or passed over in silence."

... When religion, science and morality are shaken (the last by the strong hand of Nietzsche) and when outer supports threaten to fall, man withdraws his gaze from externals and turns it inwards. Literature, music and art, are the most sensitive spheres in which this spiritual revolution makes itself 'felt. They reflect the dark picture of the present time and show the importance of what was at first only a little point of light noticed by the fever Perhaps they even grow dark in their turn, but they turn away from the soul, less life of the present toward those substances and ideas that give free scope; to the non-material strivings of the soul.

Such a poet in the realm of literature is Maeterlinck. He takes us into a world which may be called fantastic, or more justly transcendental. "La Princesse Maleine," "Les Sept Princesses," "Les Aveugles," etc., are not people of past times like the heroes in Shakespeare. They are souls lost in fog, threatened with asphyxiation, eternally menaced by some invisible and somber force.

Spiritual darkness, the insecurity of ignorance and fear pervade the world in which they move. Maeterlinck is perhaps one of the first prophets, one of the first reporters and clairvoyants of the decadence just described. The gloom of the spiritual atmosphere, the terrible but all-guiding hand, the sense of utter fear, the feeling of having strayed from the path, the absence of a guides; all these are clearly felt in his works.

Maeterlinck creates his atmosphere principally by artistic means. His material machinery (gloomy mountains, moonlight, marshes, wind, the cries of owls, etc.) really plays a symbolic role and helps to give the inner note. Maeterlinck's principal technical weapon is words. The word is an inner sound. It springs partly, perhaps principally, from the object denoted. But if the object is not seen, but only its name heard, the mind of the hearer receives an abstract impression only of the object dematerialized, and a corresponding vibration is immediately set up in the "heart." Thus a green, yellow, or red tree in a meadow are accidental realizations of the concept tree which we formed upon hearing the word.

The apt use of a word (in its poetical sense), its repetition, twice, three times, or even more frequently, according to the need of the poem, will not only tend to intensify the internal structure but also bring out unsuspected spiritual properties in the word itself. Further, frequent repetition of a word (a favorite game of children, forgotten in later life) deprives the word of its external reference. Similarly, the symbolic reference of a designated object tends to be forgotten and only the sound is retained. We hear this pure sound, unconsciously perhaps, in relation to the concrete or immaterial object. But in the latter case pure sound exercises a direct impression on the soul. The soul attains to an objectless vibration, even more complicated, I might say more transcendent, than the reverberations released by the sound of a bell, a stringed instrument, or a fallen board. In this direction lie great possibilities for the literature of the future. This verbal potency has already been used in an embryonic form in Serres Chaudes. An ostensibly neutral word in its felt quality will become somber as Maeterlinck uses it. A familiar word like "hair," used in a certain way, intensifies an atmosphere of sorrow or despair. This is Maeterlinck's method. He makes us realize that thunder, lightning and a moon behind driving clouds are external, material means, which on the stage, even more than in nature, resemble the bogey-man of childhood: imaginings.

Inner forces do not lose their strength and effect so easily." A word which has two meanings, the first direct, the second indirect, is the material of poetry and literature, which these arts alone can manipulate and through which they speak to the soul.

Something similar may be seen in the music of Wagner. His famous Leitmotiv is an attempt to give personality to his characters by something more than theatrical paraphernalia, makeup and light effects. His method of using a definite motiv is a musical method. It creates a spiritual atmosphere by means of a musical phrase which precedes the hero, which he seems radiate from any distance." The most modern musicians, like Debussy, create a spiritual impression, often taken from nature, but embodied in purely musical form. For this reason Debussy is often classed with the impressionist painters, on the ground that he resembles these painters in using natural phenomena for the purposes of art. Whatever truth there may be in this comparison merely accentuates the fact that the various arts of today learn from each other and often resemble each other. But it would be rash to say that this proposition is

an exhaustive statement of Debussy's significance. Despite a certain similarity to the impressionists, he shows such a strong drive toward essential content that we recognize at once in his work the flawed, vocal soul of the present, with all its harassing anxiety and jangled nerves. Debussy, even in his impressionist tone-pictures, never uses the wholly a material note characteristic of program music, but relies on the creation of an abstract impression.

Russian music (Moussorgsky) has had a great influence on Debussy. So it is not surprising that he stands in close relation to the young Russian composers, the chief of whom is Scriabin. There is an internal amity in the compositions of the two men, and they have identical faults, which disturb the listener. He is often snatched from a series of modern discords into the charm of conventional beauty. He feels himself often insulted, tossed about like a ball between the internal and the external beauty. The internal beauty is achieved through necessity and renunciation of the conventionally beautiful. To those who are not accustomed to it, it appears as ugliness; humanity in general inclines to external beauty and knows nothing of internal beauty. Almost alone in abandoning conventional beauty and m sanctioning every means of expression is the Austrian composer, Arnold Schoenberg. This "publicity hound," "fraud," and "dilettante" says in his Harmonielehre: "Every combination of notes, every advance is possible, but I am beginning to feel that there are definite rules and conditions which incline me to the use of this or that dissonance."

In other words, Schoenberg realizes that the greatest freedom of all, the freedom of an unfettered art, can never be absolute. Every age achieves a certain measure of this freedom, but beyond the boundaries of its freedom the mightiest genius can never go. But this measure must in each instance be exhausted, let the stubborn resist as they may. Schoenberg is endeavoring to make complete use of his freedom and has already discovered mines of new beauty in his search for spiritual structure. His music leads us to where musical experience is a matter not of the ear, but of the soul - and from this point begins the music of the future.

V: The Effect of Color

If you let your eye stray over a palette of colors, you experience two things. In the first place you receive a purely physical effect, namely the eye itself is enchanted by the beauty and other qualities of color. You experience satisfaction and delight, like a gourmet savoring a delicacy. Or the eye is stimulated as the tongue is titillated by a spicy dish. But then it grows calm and cool, like a finger after touching ice. These are physical sensations, limited in duration. They are superficial, too, and leave no lasting impression behind if the soul remains closed. Just as we feel at the touch of ice a sensation of cold, forgotten as soon as the finger becomes warm again, so the physical action of color is forgotten as soon as the eye turns away. On the other hand, as the physical coldness of ice, upon penetrating more deeply, arouses more complex feelings, and indeed a whole chain of psychological experiences, so may also the superficial impression of color develop into an experience.

On the average man, only impressions caused by familiar objects will be superficial. A first encounter with any new phenomenon exercises immediately an impression on the soul. This is the experience of the child discovering the world; every object is new to him. He sees a light, wishes to hold it, burns his finger and feels henceforth a proper respect for flame. But later he learns that light has a friendly side as well, that it drives away the darkness, makes the day longer, is essential to warmth and cooking, and affords a cheerful spectacle;: From the accumulation of these experiences comes a knowledge of light, in-delibly fixed in his mind. The strong, intensive interest disappears, and the visual attraction of flame is balanced against indifference to it. In this way the whole world becomes gradually disenchanted. The human being realizes that trees give shade, that horses run fast and automobiles still faster, that dogs bite, that the moon is distant, that the figure seen in a mirror is not real.

Only with higher development does the circle of experience of different beings and objects grow wider. Only in the highest development do they acquire an internal meaning and an inner resonance. It is the same with color, which makes a momentary and superficial impression on a soul whose sensibility is slightly developed. But even this simplest effect varies in quality. The eye is strongly attracted by light, clear colors, and still more strongly by colors that are warm as well as clear; vermilion stimulates like flame, which has always fascinated human beings. Keen lemon-yellow hurts the eye as does a

prolonged and shrill bugle note the ear, and one turns away for relief to blue or green.

But to a more sensitive soul the effect of colors is deeper and intensely moving. And so we come to the second result of looking at colors: their psychological effect. They produce a correspondent spiritual vibration, and it is only as a step towards this spiritual vibration that the physical impression is of importance.

Whether the psychological effect of color is direct, as these last few lines imply, or whether it is the outcome of association, is open to question. The soul being one with the body, it may well be possible that a psychological tremor generates a corresponding one through association. For example, red may cause a sensation analogous to that caused by flame, because red is the color of flame. A warm red will prove exciting, another shade of red will cause pain or disgust through association with running blood. In these cases color awakens a corresponding physical sensation, which undoubtedly works poignantly upon the soul.

If this were always the case, it would be easy to define by association the physical effects of color, not only upon the eye but the other senses. One might say that bright yellow looks sour, because it recalls the taste of a lemon. But such definitions are not universal. There are several correlations between taste and color which refuse to be classified. A Dresden doctor reported that one of his patients, whom he designated as an "exceptionally sensitive person," could not eat a certain sauce without tasting "blue," i.e., without "seeing blue." I It would be possible to suggest, by way of explanation, that in highly sensitive people the approach to the soul is so direct, the soul itself so impressionable, that any impression of taste communicates itself immediately to the soul, and thence to the other organs of sense (in this case, the eyes). This would imply an echo or reverberation, such as occurs sometimes in musical instruments which, without being touched, sound in harmony with an instrument that is being played. Men of sensitivity are like good, much-played violins which vibrate at each touch of the bow.

But sight has been known to harmonize not only with the sense of taste but with the other senses. Many colors have been described as rough or prickly, others as smooth and velvety, so that one feels inclined to stroke them (e.g., dark ultramarine, chromoxide green, and madder-lake). Even the

distinction between warm and cool colors is based upon this discrimination. Some colors appear soft (madder-lake), others hard (cobalt green, blue-green oxide), so, that fresh from the tube they seem to be "dry."

The expression "perfumed colors" is frequently met with.

The sound of colors is so definite that it would be hard to find anyone who would express bright yellow with bass notes, or dark lake with the treble. The explanation in terms of association will not satisfy us, in many important cases. Those who have heard of chromotherapy know that colored light can influence the whole body. Attempts have been made with different colors to treat various nervous ailments. Red light stimulates and excites the heart, while blue light can cause temporary paralysis. If the effect of such action can be observed in animals and plants, as it has, then the association theory proves inadequate. In any event one must admit that the subject is at present unexplored, but that it is unquestionable that color can exercise enormous influence upon the body as a physical organism.

The theory of association is no more satisfactory in the psychological sphere. Generally speaking, color directly influences the soul. Color is the keyboard, the eyes are the hammers, the soul is the piano with many strings. The artist is the hand that plays, touching one key or another purposively, to cause vibrations in the soul.

It is evident therefore that color harmony must rest ultimately on purposive playing upon the human soul; this is one of the guiding principles of internal necessity.

### VI: The Language of Form and Color

The man that hath no music in himself, Nor is not moved with concord of sweet sounds, Is fit for treasons, stratagems, and spoils; The motions of his spirit are dull as night, And his affections dark as Erebus: Let no such man be trusted.

Mark the music.

The Merchant of Venice, Act V, Sc. i.

Musical sound acts directly on the soul and finds an echo there, since music is innate in man.

"Everyone knows that yellow, orange, and red suggest ideas of 'joy and plenty' " (Delacroix)."

The above quotations show the deep relations among the arts, and especially between music and painting. Goethe said that painting must consider this relation its ground, and by this prophetic remark he foretold the position of painting today. Painting stands, in fact, at the first stage of the road by which it will, according to its own possibilities, grow in the abstract sense and arrive finally at painterly composition.

For this ideal of composition, painting has two means at its disposal:

Color

Form.

Form can stand alone, as a representation of an object ("real" or not), or as an abstract limit to a space or a surface.

Color cannot stand alone; it cannot dispense with boundaries of some kind. An unlimited expanse of red can only be seen in the mind; when the word red is heard, the color is evoked without definite boundaries; if they are necessary, they have to be imagined deliberately. But red as is seen abstractly and not materially arouses both a precise and an unprecise impression on the soul, which has a purely internal physical sound. 2 This red has also no independent transition to warmth or cold; the same must be imagined as subtleties of the red tone. Therefore, I call this spiritual seeing "unprecise." However, it is at the same time "precise," since the inner sound remains without incidental tendencies to warm and cold, etc. This inner sound is similar to the sound of a trumpet or an instrument which one can imagine one hears when the word "trumpet" is pronounced. This sound is not detailed; it is imagined without the variations that occur depending upon whether the trumpet is sounded in the open air, in a closed room, alone or with other instruments, if played by a postilion, a huntsman, a soldier or a professional.

But when red is presented concretely (as in painting), it must possess 1) some definite shade of the innumerable shades of red that exist and (2) a limited surface, divided off from other colors which are unconditionally there; this may under no circumstance be avoided, and by this means, through

delimitation and proximity, the subject characteristics change, i.e., receive an objective sheath, here the objective "accompanying sound."

The inevitable relation between color and form brings us to the question of the influences of form on color. Form alone, even though abstract and geometrical, has its internal resonance, a spiritual entity whose properties are identical with the form. A triangle (without consideration of its being acute or obtuse or equilateral) is such an entity, with its particular spiritual perfume. In relation to other forms this perfume may be somewhat modified, but it remains in intrinsic quality the same, as the scent of the rose cannot be mistaken for that of the violet. The case is similar with a circle, a square or any conceivable geometrical figures As above, with red, we have a subjective substance in an objective sheath.

The mutual relation of form and color now becomes clear. A yellow tri- angle, a blue circle, a green square, or a green triangle, a yellow circle, a blue square: all these are differently acting entities. ', It is evident that certain colors can be emphasized or dulled in value by certain forms. Generally speaking, sharp colors are well suited to sharp forms (e.g., yellow in the triangle), and soft, deep colors by round forms (e.g., blue in the circle). But it must be remembered that an unsuitable combination of I, form and color is not necessarily discordant, but may with manipulation show fresh harmonic possibilities.

Since the number of colors and forms is infinite, their combinations also are infinite, and, simultaneously, their effect. This material is inexhaustible.

Form, in the narrow sense, is the boundary between one surface and another: that is its external meaning. But it has also an internal significance, of varying intensity; and properly speaking form is the external expression of inner meaning. To use again the metaphor of the piano, and substituting form for color, the artist is the hand which, by playing this or that key (i.e., form), purposely vibrates the human soul in this or that way. It is evident that form harmony must rest only on the purposive vibration of the human soul. This principle has been designated here as the principle of internal necessity.

The two aspects of form define its two aims. The external boundary is purposive only when it realizes expressively the meaning of form. The external aspect of farm, i.e., the boundary, may assume different shapes; but it will never overstep two external limits:

- (1) Either a form aims at delimiting a concrete object twodimensionally,
- (2) Or a form remains abstract, a purely abstract entity. Such abstract entities, which have life in themselves, are a square, a circle, a triangle, a rhombus, a trapezoid, etc., many of them so complicated as to have no mathematical formula. All these forms are of equal rank in the abstract realm.

Between these two boundaries lie the innumerable forms in which both elements exist, with a preponderance of either the abstract or the concrete. These forms are at present largely the treasure from which the artist draws all the component elements of his creations. Purely abstract forms are in the reach of few artists at present; they are too indefinite for the artist. It seems to him that to limit himself to the indefinite would be to lose possibilities, to exclude the human and therefore to weaken expression.

Nevertheless, there are artists who even today experience abstract form as something quite precise and use it to the exclusion of any other means. This seeming stripping bare becomes an inner enrichment.

On the other hand, there exists no purely material form. A material object cannot be absolutely reproduced. For better or worse the artist depends on his eye, his hand, which in this case are perhaps more artistic than his soul that would confine itself to photographic aims. But the discriminating artists who cannot be content with an inventory of material objects seek to express objects a by what was once called "idealization," and later "stylization," and which in the future will again be called something else.

The impossibility and, in art, the purposelessness of copying an object, the desire to make the object express itself, are the beginning of leading the artist away from "literary" color to artistic, i.e., pictorial aims. And this brings us to the question of composition. The purely pictorial composition has in regard to form two aims:

- 1. The composition of the whole picture.
- 2. The creation of the various forms which, by standing in different relations to each other, serve the composition of the whole. Many objects (concrete, abstract and purely abstract) have to be considered in the light of the whole, and so arranged as to suit this whole. Singly they will have little meaning, being of importance only so far as they help the general effect. These single objects must be fashioned in one way only; this, not because their

internal meaning demands that particular means, but because they must serve as a material for the whole. Here we have defined the first problem, which is the composition of a whole canvass

Thus the element of the abstract is creeping into art, although yesterday it was derided and ignored for mundane ideals. Its gradual advance and eventual success is natural enough, for as representational form falls into the background, the abstract gains.

But residual organic forms possess, nevertheless, an internal sound of their own, which may be similar to that of their abstract parallel (thus producing a simple combination of the two elements) or different (in which case the combination may be complex and possibly discordant). However diminished in importance organic forms may be, their internal sound will always be heard; for this reason the choice of natural objects in painting is an important one. The spiritual accord of naturalism with the abstract may strengthen the appeal of the latter (either by concord or counterpoint), or may be disturbing, to it. The subject may possess only a casual sound, which would not effect an essential change in the fundamental harmony if the subject were replaced.

Let us suppose a rhomboidal composition, made up of human figures. The artist asks himself: Are these human figures absolutely necessary to the composition, or could they be replaced by other organic forms, without affecting the fundamental harmony of the whole? If the answer is in the affirmative, we have a case in which the materialistic appeal not only does not help the abstract but damages it directly. An indifferent sound in the object weakens the sound of the abstract. This is not only logical but an actual artistic fact. Therefore, in this case another object should be found which is more suitable to the inner sound of the abstract (either through similarity or contrast), or this entire form should, generally speaking, remain a purely abstract form.

Once more the metaphor of the piano applies: for "color" or "form" substitute "object." Every object (whether a natural form or man-made) has its own life and therefore its own potency; we are continually being affected by spiritual potency. Many results will remain in the "subconscious" (where they continue to be alive and creative). Many rise to the "super-conscious." Man can free himself from many of these by shutting his soul to them. Nature, that

is to say, the ever changing surroundings of men, sets in vibration the strings of the piano (the soul) by manipulation of the keys (various objects with their specific potentialities).

The effects we receive, which often appear chaotic, consist of three elements: the action of the color of the object, of its form, and of the object per se, independent of either color or form.

At this point the individuality of the artist asserts itself and makes use of these three elements. Here too the purposive prevails. It is clear, therefore, that the choice of an object (i.e., one of the elements of form) must be decided by a purposive vibration in the human soul; therefore, the choice of the object' also originates from the principle of internal necessity.

The freer the abstract form, the purer and more primitive the vibration. Therefore, in any composition where corporeal form seems superfluous it may be replaced by abstract or semi-abstract form. In each case this translation should be guided by our feeling. The more an artist uses these semi-abstract or abstract forms, the deeper and more confidently will he advance into the sphere of the abstract. And after him will follow those who look at his pictures, who will in turn gradually acquire familiarity with the language of abstract art.

Must we then altogether abandon representation and work solely in abstraction? The problem of harmonizing the appeal of the concrete and the abstract answers this question. Just as each spoken word rouses an internal vibration, so does every object represented. To deprive oneself of this possibility of causing a vibration would be reducing one's arsenal of means of expression: anyhow, that is the case today. But besides this, there is another one which art can always offer to any question beginning with "must": There is no "must" in art, because art is always free.

With regard to the second problem of composition, the creation of the forms which are to compose the whole, it must be remembered that the same form with the same relations will always have the same internal appeal. Only the relations constantly vary. The result is that: (1) Ideal harmony alters according to its relation with other forms; (2) Even in similar relations, a slight approach to or withdrawal from other forms may affect the structure. Nothing is absolute. Form composition is relative, depending on (1) alterations in the relations of one form to another, and (2) alterations in each individual form,

down to the very smallest. Every form is as sensitive as smoke, the slightest wind will fundamentally alter it. This extreme mobility makes it perhaps easier to obtain similar harmonies from the use of different forms than from a repetition of the same one: apart from the fact that, of course, an exact repetition can never be produced. So long as we are susceptible mainly to the appeal of a whole composition, this fact is of theoretical importance. But when we become more sensitive, by a constant use of abstract forms (which have no material interpretation), it will become of great practical significance. On the one hand, the difficulties of art will increase, but at the same time the wealth of forms of expression will also increase in quality and quantity. Simultaneously the problem of distortion in drawing disappears and is replaced by the problem of how far the internal structure of a particular form is veiled or bared. This changed point of view will lead further and to greater enrichment of the media of expression because veiling is of enormous power in art. The combining of the veiled and bared will form a new possibility of leitmotivs in form composition.

Without such development as this, form composition is impossible. To any-one who cannot experience the internal structure of form (whether natural or abstract), composition must be meaningless and arbitrary. Apparently aimless alterations in arrangement make art seem a senseless game of forms. Here we find the same criterion and principle which thus far we have encountered everywhere as the only purely artistic one free from the unessential, the principle of inner necessity.

If, for example, features of the face or parts of the body are changed or distorted for artistic reasons, one encounters not only the purely pictorial question but also that of anatomy, which hampers the pictorial intention and imposes upon it the consideration of unimportant details. In our case, however, the unessential disappears automatically and only the essential remains, the artistic aim. These seemingly arbitrary but, in reality, well-reasoned alterations in form are one of the sources of an infinite number of artistic creations.

The flexibility of each form, its internal, organic variation, its direction(motion) in the picture, the relative weight of concrete or of abstract forms and their combination; further, the concord or discord of the various elements to a pictorial structure, the handling of groups, the combination of

the hidden and the stripped bare, the use of rhythmical or unrhythmical, of geometrical or non-geometrical forms, their contiguity or separation - all these things are the elements of structure in drawing.

But as long as color is excluded, such structure is confined to black and white. Color itself offers contrapuntal possibilities and, when combined with design, may lead to the great pictorial counterpoint, where also painting achieves composition, and where pure art is in the service of the divine. The same infallible guide will carry it to the great heights, the principle of internal necessity.

Inner necessity originates from three elements: (1) Every artist, as a creator, has something in him which demands expression (this is the element of personality). (2) Every artist, as the child of his time, is impelled to express the spirit of his age (this is the element of style) - dictated by the period and particular country to which the artist belongs (it is doubtful how long the latter distinction will continue). (3) Every artist, as a servant of art, has to help the cause of art (this is the quintessence of art, which is constant in all ages and among all nationalities).

A full understanding of the first two elements is necessary for a realization of the third. But he who realizes this will recognize that a rudely carved Indian column is an expression of the spirit that actuates any advance-guard work.

There has been in the past, and there is now, much talk of "personality" in art. Talk of the coming "style" is more frequent each day. But in spite of their importance now, these questions will lose their edge under the perspective of time.

Only the third element - that of quintessential art - will remain forever. Time, far from diminishing its importance, increases it. An Egyptian carving moves us more deeply today than it did its contemporaries; for they judged it with the restrictive knowledge of period and personality. But we can judge it as an expression of an eternal art.

Similarly, the greater the part played in a modern work of art by the elements of style and personality, the better will it be appreciated by people today; but a modern work of art which is full of the third element will fail to reach the contemporary soul. Sometimes centuries have to pass before the

third element is understood. But the artist in whose work this third element predominates is the great artist.

These three mystical necessities are the constituent elements of a work of art, which interpenetrate and constitute unity of the work. Nevertheless, the first two elements include what belongs to time and space, while in the pure and eternal artistry, which is beyond time and space, this forms a relatively non-transparent shell. The process in the development in art consists of the separation of its quintessence from the style of the time and the element of personality. Thus, these two elements are not only a cooperative but also a hindering force. The personality and the style of the time create in every epoch many precise forms, which in spite of apparent major differences are so organically related that they can be designated as one single form: their inner sound is finally but one major chord. These two elements are of a subjective nature. The entire epoch desires to reflect itself, to express artistically its life. Likewise, the artist wishes to express himself and chooses only forms which are sympathetic to his inner self. Thus, gradually is formed the style of an epoch, i.e., a certain external and subjective form. The pure and eternal art is, however, the objective element which becomes comprehensible with the help of the subjective.

The inevitable desire for expression of the objective is the impulse here defined as "internal necessity." This impulse is the lever or spring driving the artist forward. Because the spirit progresses, today's internal laws of harmony are tomorrow's external laws, which in their further application live only through this necessity which has become external. It is clear, therefore, that the inner spirit of art uses the external form of any particular period as a stepping-stone to further development.

In short, the effect of internal necessity and the development of art is an ever advancing expression of the eternal and objective in terms of the historical and subjective.

Because the objective is forever exchanging the subjective expression of today for that of the morrow, each new extension of liberty in the use of external form is hailed as final and supreme. At present we say that an artist may use any form, so long as he draws on forms that exist in nature. But this limitation, like all its predecessors, is temporary. From the point of view of

inner need, no limitation can be made. The artist may use any form which his expression demands; his inner impulse must find suitable external form.

Thus one sees finally (and this is of utmost importance for today or any time) that to seek for personality and "style," for nationality, to achieve this deliberately, is not only impossible but comparatively unimportant. The general relationship of those works of art which through the centuries are not weakened but always more and more strengthened, does not lie in the "external" but in the deep roots of mystical inner content. Therefore, the following of schools, the searching for the "mode," the desire for principles in a work and the insistence upon certain media of expression of a period can only be misleading and must bring misunderstanding, obscurity and silence.

The artist must ignore distinctions between "recognized" or "unrecognized" conventions of form, the transitory knowledge and demands of his particular age. He must watch his own inner life and hearken to the demands of internal necessity. Then he may safely employ means sanctioned or forbidden by his contemporaries. This is the only way to express the mystical necessity. All means are sacred which are called for by internal necessity. All means are sinful which are not drawn from inner necessity.

It is impossible to theorize about this ideal. In real art, theory does not precede practice but follows it. Everything is at first a matter of feeling. Even though the general structure may be formulated theoretically, there is still an additional something which constitutes the soul of creation. Any theoretical scheme will be lacking in the essential of creation - the internal desire for expression - which cannot be formulated. Despite the most accurate weights and balances to be had, a purely deductive weighing can never suffice. True proportions cannot be calculated, nor true scales be found ready-made. Proportions and scales are not outside the artist but within him; they are what we may call a feeling for boundaries, artistic tact - qualities which are innate and which may be raised by enthusiasm to genius. In this sense we may understand the possibility of a general base to painting, as envisaged by Goethe. Such a grammar of painting is at present a matter of conjecture, and, should it ever be achieved, it will be not so much according to physical laws (which have often been tried and which the cubists try today), as according to the laws of internal necessity, which is of the soul.

Inner necessity is the basis of both small and great problems in painting. Today we are seeking the road which is to lead us away from the external to the internal basis. The spirit, like the body, can be strengthened and developed by frequent exercise: just as the body, if neglected, grows weak and finally impotent, so the spirit perishes if untended. The innate feeling of the artist is the biblical talent which must not be buried in the earth. And for this reason it is necessary for the artist to know the starting-point for the exercise of his spirit.

The starting-point is the study of color and its effects on men.

There is no need to deal with the profound and refined complexities of color; we should consider at first only the direct use of simple colors.

To begin with, let us test the effect upon ourselves of individual colors, and make a chart, which will simplify the whole question.

Two great divisions of color immediately occur to the mind: warm and cool; and light and dark. Thus it becomes evident that each color may have four principal notes: either (i) warm, and therefore either light or dark; or (2) cold, and either light or dark.

Generally speaking, warmth or coolness in a color means an approach to yellow or to blue. This distinction occurs on one level, so to speak: i.e., the color preserves its basic quality, but this quality is, now more, now less, earthy. It represents a horizontal movement, the warm colors approaching the spectator, the cool ones retreating from him.

The colors that cause in another color a horizontal movement while they are themselves affected by it have another movement of their own, which acts

j with a violent, separative force. This is therefore the first great antithesis in

internal value, and the inclination of the color to cool or warm is of tremendous importance.

The second great antithesis is between white and black; i.e., the inclination to light or dark caused by the two tones. These tones have, too, a peculiar movement to and from the spectator, but in a more rigid form.

Yellow and blue have another movement which affects the first antithesis - an eccentric and concentric movement. If two circles are drawn and painted respectively yellow and blue, a brief contemplation will reveal in the yellow a spreading movement out from the center, and a noticeable approach to the spectator. The blue, on the other hand, moves into itself, like a snail retreating into its shell, and draws away from the spectator. The eye feels stung by the first circle while it is absorbed into the second.

In the case of light and dark colors movement is emphasized. That of the yellow increases with an admixture of white, i.e., as it becomes lighter. That of the blue increases with an admixture of black, i.e., as it becomes darker. This fact has a greater importance if we note that yellow inclines to the light (white) to such an extent that there can be no very dark yellow. The relationship between white and yellow is as close as between black and blue, for blue can be so dark as to border on black. Besides this physical relation, there is also a spiritual one (between yellow and white on one side, and blue and black on the other), which marks a strong separation between the two pairs.

An attempt to make yellow colder produces a greenish tint and checks both the horizontal and eccentric movement. The color becomes sickly and unreal, like an energetic man who has been checked in the use of his energy by external circumstances. The blue by its contrary movement acts as a brake on the yellow and is hindered in its own movement, and, if more blue is added, the contrary movements cancel each other and complete immobility ensues. The result is green. Similarly white, when mixed with black, loses permanence, and the result is gray, which is spiritually similar to green.

But while yellow and blue are potentially active in green, though temporarily paralyzed, in gray there is no possibility of movement because gray consists of colors that have no motive power, one representing static resistance, the other non-resistant immobility (like an endless wall or a bottomless pit).

Because the component colors of green are active and have a movement of their own, it is possible, even theoretically, on the basis of this movement, to determine (or anticipate) their spiritual effect.

We reach the same results by proceeding experimentally in having colors act upon us. The first movement of yellow, that of straining toward the spectator (which can be increased by intensifying the yellow), and the second movement, that of overrunning the boundaries, having a material parallel in

that human energy which attacks every obstacle blindly and goes forth aimlessly in all directions.

If steadily gazed at in any geometrical form, yellow has a disturbing influence; it pricks, upsets people, and reveals its true character, which is brash and importunate. The intensification of yellow increases the painful shrillness of its note, like that of a shrill bugle.

Yellow is the typical earthly color. It never acquires much depth. When cooled by blue, it assumes, as I have said before, a sickly tone. If we were to compare it with human states of mind, it might be said to represent not the depressive, but the manic aspect of madness. The madman attacks people and disperses his force in all directions, aimlessly, until it is completely gone. To use another metaphor, we are reminded of the last prodigal expansion of summer in the glaring autumn foliage, whose calming blue component rises to the sky.

Depth is found in blue, first in its physical movements (I) of retreat from the spectator, (2) of turning in upon its own center. It affects us likewise mentally in any geometrical form. The deeper its tone, the more intense and characteristic the effect. We feel a call to the infinite, a desire for purity and transcendence.

Blue is the typical heavenly color;" the ultimate feeling it creates is one of rest. When it sinks almost to black, it echoes a grief that is hardly human. It becomes an infinite engrossment in solemn moods. As it grows lighter it becomes more indifferent and affects us in a remote and neutral fashion, like a high, cerulean sky. The lighter it grows, the more it loses resonance, until it reaches complete quiescence, in other words, white. In music a light blue is like a flute, a darker blue a 'cello; a still darker the marvelous double bass; and the darkest blue of all - an organ.

Yellow easily becomes acute and is incapable of great depth. Conversely, blue resists pointing up and heightening. A well-balanced mixture of blue and yellow produces green; the horizontal movements cancel each other, and so do movements from and towards the center. Calm ensues. This is a fact recognized not only by oculists, but by the world. Absolute green is the most restful color, lacking any undertone of joy, grief or passion. On exhausted men this restfulness has a beneficial effect, but after a time it becomes tedious. Pictures painted in shades of green bear this out. As a

picture painted in yellow always radiates spiritual warmth, or as one in blue has apparently a cooling effect, so green is only boring. Yellow and blue have an active effect corresponding to man's participation in continuous and perhaps eternal cosmic motion, whereas green represents the passive principle. This contrasts with the active warmth of yellow or the active coolness of blue. In the hierarchy of colors green represents the social middle class, self-satisfied, immovable, narrow. 18 It is the color of summer, when nature is quiescent after the perturbations of spring (see Fig. II).

Any preponderance in the absolute green of yellow or blue introduces a corresponding activity and changes the inner appeal. The green keeps its characteristic equanimity and restfulness, the former increasing with the inclination to lightness, the latter with the inclination to depth. In music, absolute green is represented by the placid, middle notes of a violin.

Black and white have already been discussed in general terms. Speaking more particularly, white, although often considered as no color (a theory due largely to the impressionists, who saw no white in nature: Van Gogh, in his letters, asks whether he may not paint a white wall dead white. This question offers no difficulty to the non-representational artist, who is concerned only with the inner harmony of color. But to the impressionistrealist it appears a bold liberty to take. To him it seemed as outrageous as his own change from brown shadows to blue seemed to his contemporaries. Van Gogh's question marks a transition from impressionism to an art of spiritual harmony, as the coming of the blue shadow marked a transition from academicism to impressionism. See The Letters of Vincent van Gogh.), is a symbol of a world from which all colors as material attributes have disappeared. This world is too far above us for its structure to touch our souls. There comes a great silence which materially represented is like a cold, indestructible wall going on into the infinite. White, therefore, acts upon our psyche as a great, absolute silence, like the pauses in music that temporarily break the melody. It is not a dead silence, but one pregnant with possibilities. White has the appeal of the nothingness that is before birth, of the world in the ice age.

On the other hand, the ground-note of black is a silence with no possibilities. In music it is represented by one of those profound and final pauses, after which any continuation of the melody seems the dawn of another world: the circle is closed. Black is something burnt out, like the ashes of a

funeral pyre, something motionless like a corpse. The silence of black is the silence of death. Outwardly black is the most toneless color of all, a kind of neutral background against which the minutest shades of other colors stand forth clearly. It also differs in this from white, in conjunction with which nearly every color becomes blurred, dissolves and leaves only a faint resonance.

White is not without reason taken to symbolize joy and spotless purity, and black, grief and death. A blend of black and white produces gray, which, as has been said, is silent and motionless, being composed of two inactive colors, its restfulness having none of the potential activity of green. The immobility of gray is desolate. The darker the gray the more preponderant becomes this feeling of desolation and strangulation. When it is made lighter, the color seems to breathe again, as if invested with new hope. A similar gray is produced by an optical mixture of green and red, a spiritual blend of passivity and glowing warmth.

The unbounded warmth of red has not the irresponsible appeal of yellow, but rings inwardly with a determined and powerful intensity. It glows in itself, maturely, and does not distribute its vigor aimlessly.

The varied powers of red are very striking. By a skilful use of it in its different shades, its fundamental tone may be made warm or cool.

Light warm red has a certain similarity to medium yellow, alike in texture and appeal, and gives a feeling of strength, vigor, determination, triumph. In music, it is a sound of trumpets, strong, harsh and ringing.

Vermilion is a red with a feeling of sharpness, like flowing steel which can be cooled by water. Vermilion is quenched by blue, for it can bear no mixture with a cold color: more accurately speaking, such a mixture produces what is called a muddy color, scorned by the painters of today. But mud as a material object has its own internal appeal, and therefore to avoid it in painting is as unjust and narrow as was yesterday's cry for pure color. At the call of internal necessity that which is outwardly foul may be inwardly pure, and vice versa.

These two shades of red are similar to yellow, except that they reach out less toward the spectator. The glow of red is within itself. For this reason it is a color more beloved than yellow, being frequently used in primitive and traditional decoration and also in peasant costumes, because in the open air the

harmony of red and green is very charming. Taken by itself this red is material and, like yellow, has no very deep appeal. It is dangerous to seek to deepen red by an admixture of black, for black quenches the glow or at least reduces it.

There remains brown, unemotional, disinclined to movement. An intermixture of red is outwardly barely audible, but there does ring out a powerful inner harmony. Skilful blending can produce an inner appeal of extraordinary, indescribable beauty. The vermilion now rings like a great trumpet or thunders like a drum.

Cool red (madder-lake), like any other fundamentally cool color, can be deepened, especially by an intermixture of azure. The character of the color changes; the inward glow increases, the active element gradually disappears.

But this active element is never so wholly absent as in deep green. There always remains a hint of renewed vigor somewhere out of sight, waiting for a certain moment in order to burst forth afresh. In this lies the great difference between a deepened red and a deepened blue, because in red there is always a trace of the material. Corresponding in music are the passionate, middle tones of a 'cello. A cool, light red contains a very distinct bodily or material element, but it is always pure, like the fresh beauty of a young girl's face. The singing notes of a violin exactly express this in music.

Warm red, intensified by a kindred yellow, is orange. This blend brings red almost to the point of spreading out towards the spectator. But the element of red is always sufficiently strong to keep the color from flippancy. Orange is like a man convinced of his own powers. Its note is that of a church-hell (the Angelus bell), a strong contralto voice, or the large of an old violin.

Just as orange is red brought nearer to humanity by yellow, so violet is red withdrawn from humanity by blue. But the red in violet must be cool, for spiritual need does not allow of a mixture of, warm red with cold blue.

Violet is therefore both in the physical and spiritual sense a cooled red. It has a morbid, extinct quality, like slag. It is worn by old women, and in China it is the garb of mourning. In music it is an English horn, or the deep notes of woodwinds (e.g., a bassoon).?'

The last two colors, which result from mixing red with yellow or blue, are rather unstable. We are reminded of a tight-rope walker who has to balance himself continuously. Where does orange start, and either red or yellow cease? Where is the border-line dividing violet from red or blue, and when does it become lilac? Orange and violet are the fourth and last pair of antitheses of the primitive colors. They stand to each other in the same relation as the third antithesis - green and red -, i.e., as complementary colors.

As in a great circle, a serpent biting its own tail (the symbol of eternity, of something without end), appear the six colors that make up the three main antitheses. And to right and left stand the two great possibilities of silence death and birth.

It is clear that all I have said of these simple colors is very provisional and general, and so are the feelings (joy, grief, etc.) which have been quoted as parallels to the colors. For these feelings are only material expressions of the soul. Shades of color, like those of sound, are of a much finer texture and awaken in the soul emotions too fine to be expressed in prose. Certainly each tone will find some probable expression in words, but there will always be something left over, which the word fails to express and which yet is not supererogatory but the very kernel of its existence. For this reason words are, and will always remain, hints, mere suggestions of colors. In this impossibility of expressing color in words, with the consequent need for some other mode of expression, lies the possibility of a monumental art. In this art, among in-'. numerable rich and varied combinations, at least one is based on firm fact and is as follows: the same internal tone may be achieved by the different arts; each art will bring to this general tone its own special characteristics, thereby adding to it a richness and a power which no one art form could achieve. The immense possibilities of profundity and strength to be gained by combination or by discord between the various arts may be easily realized.

It is often said that to admit the possibility of one art replacing another (for example, painting by literature) amounts to a denial of the necessary difference between the arts. This is not the case. An absolutely similar inner tone cannot be achieved by two different arts: even if it were possible, the second version would differ at least outwardly. But suppose this were not the case, that is to say, suppose that a repetition of the same tone, exactly similar both outwardly and inwardly, could be achieved by different arts: such repetition would not be merely superfluous. To begin with, different people find affinity with different farms of art (alike on the active and passive side, among the creators or the audience): further and more important,

repetition of the same tones thickens the spiritual milieu that is necessary for the maturing of the finest feelings, in the same way that the warm air of a greenhouse is necessary for the ripening of fruit. An example of this is the case of the individual who receives a powerful impression from constantly repeated actions, thoughts or feelings, although if they had come singly they might have passed unnoticed .2g However, we must not apply this rule only to the simple examples of the spiritual atmosphere. For this atmosphere is like air, which can be pure or filled with various foreign elements. Not only visible actions, thoughts and feelings, with their external expression, make up this atmosphere, but the secret happenings of which no one knows; unspoken thoughts, hidden feelings are also elements. Suicide, murder, violence, low and unworthy thoughts, hate, ,hostility, egotism, envy, narrow "patriotism," partisanship, are elements of the spiritual atmosphere.

And conversely, self-sacrifice, mutual help, lofty thoughts, love, unselfishness, joy in the success of others, humanity, justness, are the elements which destroy those already enumerated, just as the sun destroys microbes and restores the atmosphere to purity.

The second and more complicated form of repetition is that in which several elements make mutual use of different forms. In our case these elements are the various arts summed up in monumental art. And this form of repetition is even more powerful, because different natures respond to different elements in the combination. For one, musical form is the most moving and impressive; for another, the pictorial, for the third the literary, and so on. There lie, therefore, in arts that are outwardly different hidden forces equally different, so that they may all work towards a single result, even though each art may be working in isolation.

This not easily definable action of isolated colors is the basis upon which various values can be harmonized. Paintings, art objects, whole settings, may be based on a certain harmony chosen with artistic tact. The carrying out of one color, the binding together and admixture of two related colors, are the foundation of most color harmonies. From what has been said about color action, from the fact that we live in a time of questioning, experiment and contradiction, we may draw the conclusion that for a harmonization on the basis of individual colors our age is especially unsuitable. Perhaps with envy and with a mournful sympathy we listen to the music of Mozart. It acts as a

welcome pause in the turmoil of our inner life, as a consolation and as a hope. but we hear it as the echo of something from another age long past and funda mentally strange. The strife of colors, the sense of the balance we have lost tottering principles, unexpected assaults, great questions, apparently useless striving, storm and tempest, broken chains, antitheses and contradictions these make up our harmony. The composition arising from this harmony is a mingling of color and drawing, each with its separate existence, but each blended into a common life, which is called a picture by the force of internal necessity. Only the individual parts are essential. Everything else (including the representational element) is secondary. The combination of two colors is a logical outcome of modern conditions. The association of colors hitherto considered discordant is merely a further development. For example, the use, side by side, of red and blue - colors in themselves with no physical relation but from their spiritual contrast of strong effect - is one of the most frequent occurrences in modern structure .2s Harmony today rests chiefly on the principle of contrast, which has for all time been one of the most important principles of art. But our contrast is an internal contrast which stands alone and rejects the help (for help would mean destruction) of any other principles of structure. It is interesting to note that this placing together of red and blue was so beloved by the primitive both in Germany and Italy that it has survived until today, principally in popular religious carvings. One often sees in popular paintings and painted sculpture the Virgin in a red gown and a blue cloak: it seems that the artists wished to express the grace of heaven in terms of humanity, and humanity in terms of heaven. Legitimate and illegitimate combinations of colors, the shock of contrasting colors, the silencing of one color by another, the sounding of one color through another, the checking of fluid color spots by contours of design, the overflowing of these contours, the mingling and the sharp separation of surfaces, all these open great vistas of purely pictorial possibility.

One of the first steps away from representation and toward abstraction was, in the pictorial sense, the exclusion of the third dimension, i.e., the tendency to keep the picture on a single plane. Modeling was abandoned. In this way the concrete object was made more abstract, and an important step forward was achieved - this step forward has, however, had the

effect of limiting the possibilities of painting to the actual surface of the canvas: and thus painting acquired another material limit.

Any attempt to free painting from this material limitation, together with the striving after a new form of composition, must concern itself first of all with the destruction of the theory of one single surface - attempts have been made to place the picture on some ideal plane, which of course had to exist prior to the material plane of the canvas. Out of composition in flat triangles has developed a composition with plastic three-dimensional triangles, that is to say, with pyramids; and this is cubism. But here a tendency has arisen towards inertia, towards a concentration on form for its own sake, and consequently once more a reduction of potential values. But that is the unavoidable result of the external application of an inner principle.

A further point of great importance must not be forgotten. There are other ways of using the concrete plane as a space of three dimensions in order to create an ideal plane: the thinness or thickness of a line, the placing of the form on the surface, the crossing of one form by another may be mentioned as examples of the extension of picture space in depth through drawing. Similar possibilities are offered by color, which, when rightly used, can advance or retreat, and can make of the picture suspended, non-material form.

The combination of both means of extension-in-depth in harmony or counter- point is one of the richest and most powerful elements in pictorial structure.

### Serial Music

Music traditionally centered on one tone of twelve.

A A# B C C# D D# E F F# G G#

1 2 3 4 5 6 7 8 9 10 11 12

TONALITY = IN A KEY; ONE TONE FUNCTIONS AS A CENTER OF GRAVITY (L. BERNSTEIN: "HOME PLATE"); CERTAIN TONES MORE IMPORTANT THAN OTHERS

## BASED ON ACOUSTICAL LAWS OF NATURE -- SERIES OF OVERTONES

Between 1890 and 1913, breakdown of tonality

Atonality = absence of tonality

Serialism = method of composing without tonality; organizational scheme; most important scheme in the 20th century.

Schoenberg: 1913 piano pieces developed "serialism" (twelve-tone, dodecaphonism, atonality)

The System:

EXTREMELY CEREBRAL APPROACH TO COMPOSING

# TAKE 12 TONES, PLACE THEM IN AN ORDER (AT YOUR DISCRETION). THIS IS THE "TONE ROW."

Tone row must use all 12 tones

Tone row cannot be altered

Tone row cannot suggest a key

All tones are of equal importance

#### FOUR ALLOWABLE FORMS OF ROW

Original (O)

Retrograde (R): Start at end and go forward

Inverted: (I) Start at center, go our 4, and return; go back 4 and return

Inverted Retrograde (IR): reverse of inverted

TRANSPOSITION ALSO POSSIBLE: STARTING ON A TONE OTHER THAN THE FIRST, BUT KEEPING THE INTERVALLIC (INTERVAL = DISTANCE BETWEEN 2 TONES) RELATIONSHIPS THE SAME. C# - F - A = D - F# - A#

Since there are 12 tones, there are 12 possible transpositions for each form

 $12 \times 4 = 48$  possible versions of the row

BEFORE "COMPOSING" YOU MUST CONSTRUCT A "MATRIX" OF ALL 48 POSSIBLE VERSIONS; ALL COMPOSITION MUST MAKE USE OF THESE VERSIONS.

### COMPOSITIONAL PROCESS:

Once you initiate one of the versions, you must complete it: NO repeating of tones is allowed.

Row may be picked up and completed by various instruments

Sax XXX

Trumpet XX

Clarinet XXXXX

### Piano XX

May have more than one version of the row going at the same time.

Analysis requires using colored pencils, following O3, IR4, I2, etc.

Row need not (and usually doesn't) stay within one instrument: as melody unfolds, tone color changes = *Klangfarbenmelodie*.

If you want the same note twice, eg. EE, you must look to another row where E is at the beginning, etc.

## TWO ISSUES CONTROVERSIAL AMONG SERIAL COMPOSERS

Vertical sounding of row: eg. a piano "chord" may include 6 or 7 notes of the row simultaneous. Schoenberg did not accept this at first, but gradually did.

How do you listen? Horizontally-- Schoenberg; Vertically-Hindemith.

### FORM:

Schoenberg was ABSOLUTELY strict about using 18th century FORMS: sonata, rondo, minuet, etc.

Thus were he and followers deemed the "Second Viennese School."

IMPLICATIONS: Use of rows: choices.

Anything can be serialized: rests and silences, non-musical sound events (John Cage using "aleatoric method" according to mathematical laws of chance).

Position of Schoenberg in 1990s: his theory is more important than his music

Leon Botstein: Brahms - Schoenberg associations

linear approaches

Non congruence of musical lines (Walter Frison: "ongoing variation")

Rhythm: Brahms wanted escape from "tyranny of barline": negated regularity of beat.

Schoenberg - Bach associations:

linear approach

Polyphony (musical texture): combination of musical lines (imitative and non-imitative)

What IS subjective in this objective system?

Construction of row

What are 20th century composers to do beyond this?