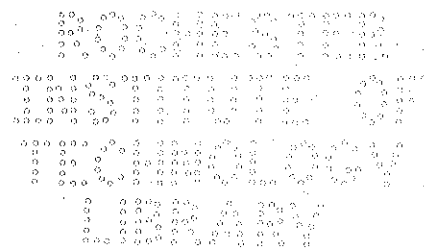


the  
way  
beyond  
'art'



**the way  
beyond 'art' -**

**by  
Alexander Dorner**



**New York University Press**

**New York, 1958**

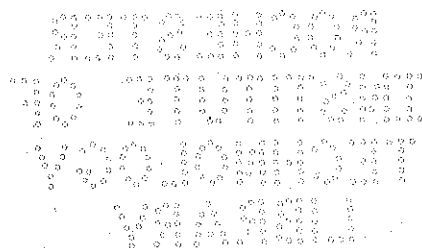
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**TO JOHN DEWEY**

**42512**



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## INTRODUCTION TO THE REVISED EDITION

The reader of *The Way Beyond 'Art'* is frequently struck by the fact that the author's point of view is that of a creative artist rather than a conventional art historian. One of Alexander Dorner's outstanding characteristics was his recognition of the changing intellectual climate of man and its effect upon art. One recalls the words of the German Romantic painter Philipp Otto Runge, who in 1802 wrote, "Works of art all through the ages show us in the clearest fashion how mankind has changed, how a stage that has once appeared never reappears" (Robert Goldwater, *Artists on Art*, New York, 1945, p. 247). This dynamic concept of art history, this sensitivity to changing intellectual currents are qualities that are usually associated with poets, artists, and philosophers. Dorner as early as the mid-twenties gave them visual form in the installation of the museum at Hannover. They are clarified and expanded in *The Way Beyond 'Art.'*

During the dozen years that have elapsed since the book was first written, the dynamic changes of which Dorner was so conscious have continued in all fields of human activity. Political boundaries have changed; time-honored economic and social theories have been attacked by both Left and Right; an entire new scientific field has emerged—molecular biology—which has revolutionized the study of genetics; the refinement of scientific instruments has led to the discovery of more and more minute particles which make up matter. Painting, too, has changed. In 1946 the dominant style of the western world, Abstract Expressionism, had scarcely emerged from the chaos of the second world war. Today it has reached its maturity and is universal, transcending geographic boundaries and ethnic cultures. Some critics interpret the style as a reflection of the untrammelled political freedom in the democratic West. Others, pointing out the increasing ease and rapidity of transportation with its accompanying spread of standardization and "packaged civilization," believe that the style, by its very sameness and universality, is a negation of individualism. It is interesting to examine the prophetic words that Dorner wrote in 1946 (*The Way Beyond 'Art,'* first edition, p. 118): "Those [artists] who see in the abstract movement a means of expressing the new dynamic vision . . . will create a new symbolic language of Abstract Art. This language which is addressed to and may be understood by everybody we call MODERN REALISM." The author wrote this passage with a group of leading industrial designers in mind. It could apply today with equal validity to the leading painters committed to this dominant style of the nineteen-fifties.

The origin of Abstract Expressionism is an art-historical problem beyond the scope of this brief introduction. It is generally agreed that it is an outgrowth of the first abstract painters of the twentieth century. Alexander Dorner played a significant part in the development of abstract art, for he early recognized its importance. At Hannover, being in an official position, he was able to encourage many of the pioneers of the movement and to obtain the patronage so necessary to their development.

Alexander Dorner's sensitivity to the art of his own age, his awareness of the possibilities of the avenues of the future, his concept of the changing attitudes of the past are vividly apparent in almost every page of this book.

Cambridge, Massachusetts, 1958

Charles L. Kuhn

## INTRODUCTION

No more far-reaching or penetrating statement could be made, in my judgment, than that which is made in the early pages of the present volume. We are in the moving presence of a great intellectual transformation scene. It is the counterpart of the intellectual transformation that began in Greece and that has so controlled the subsequent development of philosophic and scientific thought that it may be said to have been their classic pattern. It was, to borrow the words of Dr. Dorner, a search for immutabilities below and behind the changing events of nature and life. The frame of reference appropriate to this point of view became itself so immutable that it controlled even those who rebelled against some of the forms it had earlier taken. The particular things taken to be fixed "changed," but whatever new things took their place were supposed to be equally immutable. Newton is a good example from the side of science. His atoms had no likeness to the fixed forms and species that were the subjects of Greek science. But they were equally fixed and equally independent of each other in the space and time which were also equally fixed and disconnected — or "absolute." Darwin dealt the idea of fixed species of plants and animals a mortal blow. But his successors in biological science took up the search for smaller elementary units which remained immutable under the process of change.

The movement now going on is, as Dr. Dorner points out, a counterpart change. But it is reversed in its direction. The movements that are characteristically "modern" are coming to a head in search for mutabilities below and behind what both, on its face, and according to the language that comes habitually to our lips, is fixed, settled beyond peradventure. Laws that once were taken to be fixed are changing — adherents of the older view would say "dissolving" — into statistical probabilities, in the form of generalizations stable enough to permit reasonably dependable predictions. In philosophy, belief in eternal and absolute universals has far from disappeared. But the idea of *process* is making its way into that which is known and the idea of operations into our account of how we know. "Event" is the aspect of which comes out of, which proceeds, from a total process, whose other aspect is "*fact*," that which is done, finished (in a relative sense) while event and fact enter together as inceptions of new events and new things to be done.

There is one phase of this wide field I should like to call particular atten-

tion to. In the older view, a person as individual was thought to be a fixed element in a given larger whole; departure from this fixed place was heresy, in matters of belief; disloyalty in matters of overt action. Later what was called "The Individual" was cut loose entirely, and was supposed to be fixed in himself — a synonym at the time for *by himself*, or in isolation. The author effectively calls attention to something fundamentally important, but usually ignored: the assumption of immutability is common to both cases. In the first instance, the artist was "servant of absolute form"; in the second he was taken to be himself absolute and hence "spontaneous creator." Against these fixations, Dr. Dorner points to the personal individual as a partaker in the "general process of life" and as a "special contributor to it." This union of partaker and contributor describes the enduring work of the artist.

In the confusion that marks a period of conflict of an overlaying old with the incoming new, it is extremely difficult for one who is sensitive to both to find a secure lodgment. In production of works of art some tend to lose their balance. The average spectator and appreciator of works of art more often, almost certainly if he turns professional critic, tends to judge by standards derived from the art of an earlier and more fixed period. To him practically everything characteristically new or "modern" is an eccentricity and originality. In consequence, members of the public who are influenced by critics who judge on the basis of standards appropriate to a by-gone age are indeed fortunate when they come in intellectual contact with critics who see that genuine art is a liberating event to and *by* its producer and *for* the one who perceives it with intelligence, not by pre-formed routine. Opportunity for this kind of intelligent growth in power of perception and enjoyment is generously provided in these pages from the pen of Dr. Dorner. If I express my appreciation of the honor he has done me in dedicating the book to me and asking me to write the introductory words, it is because I know that he has done so not on account of any competency in the field in which he is expert, but because we have an underlying community of belief as to things common to artistic creation and appreciation and to all other vitally significant phases of human life. That community I am happy to share.

Were I to take what Dr. Dorner says about non-three-dimensional forms in productions appealing to visual perceptive enjoyment, I should be taking an illustration from a field in which I should have to live much longer than I am going to live to form a judgment. For to some considerable extent we all have to await the outcome of a movement, we have to see what it is in accomplishment, before we can judge it with security. But I may use his treatment as an illustration, albeit a minor one, of the unusual balance of knowledge of the history of art with personal sensitiveness of perception that permeates and unifies all that he says. And what he says runs the whole gamut from the

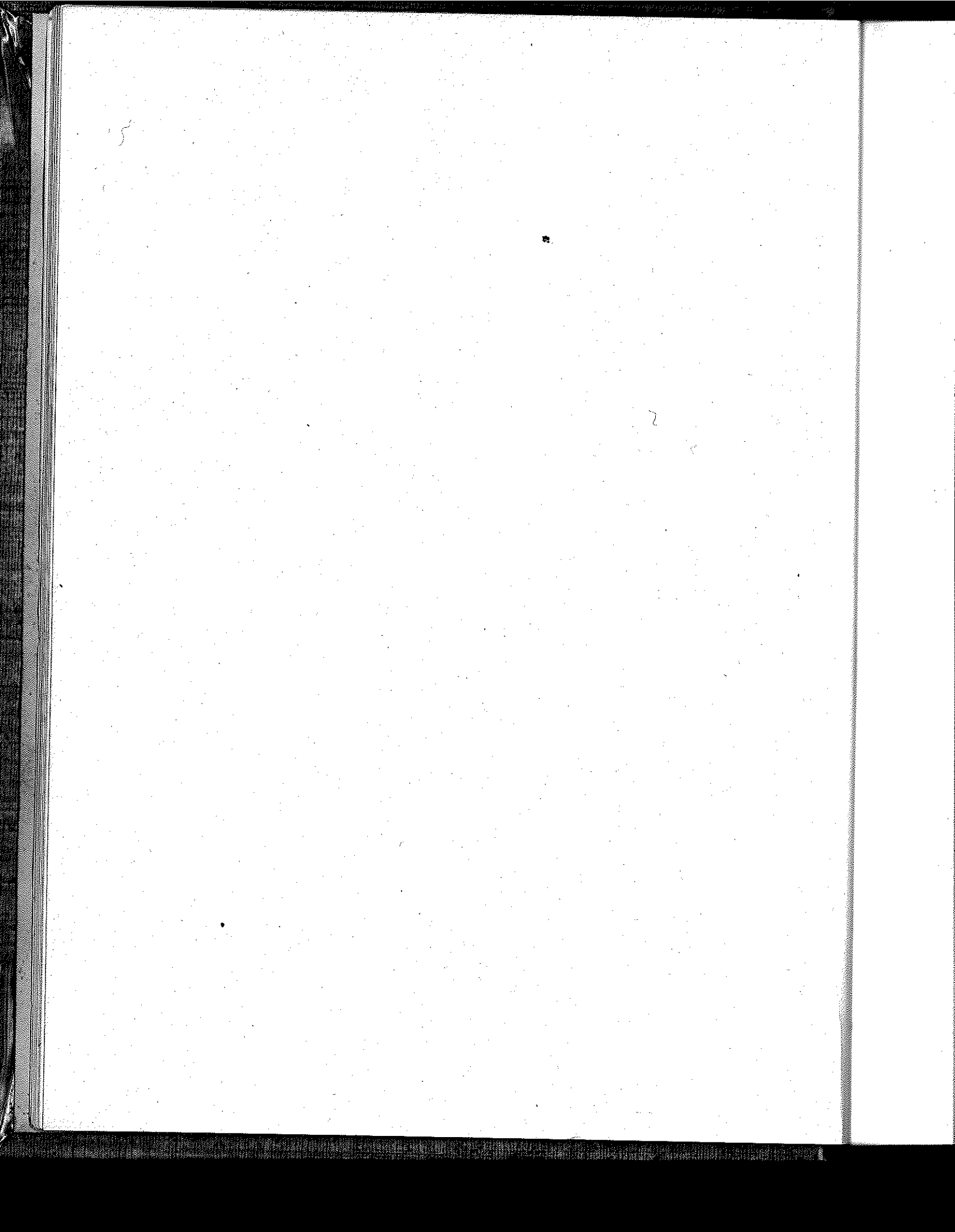
urgency of our present need to give to time "a higher dignity and a deeper meaning than it has in our present philosophy of art history" (and he might have said of the history of every aspect of human activity) through his account of "Tensions in Contemporary Art," "The Genesis of Contemporary Art," and his conclusion in which, among many things, pertinent remarks are made about Museums of Art. I shall be sorry for those readers who fail to get from reading this book that increment of meaning and vitality to perception, to taste and judgment, to enjoyment that these pages have in them to supply.

New York, November 1946.

JOHN DEWEY



**I**  
**PREFACE**



I have called this study *the way beyond "art."* That sounds rather aggressive, and yet it does not give the real depth and intensity of the change in our vision of the world which this study tries to convey. A more precise title for this study might have been: The decline of the species of visual communication called "art" and the origin of a new species of visual communication. No doubt such a title would have been monstrous. Its very monstrosity is a sign of the inadequacy of traditional language to express a profound transformation process, such as the one in question, in a few telling words.

The development of our language in the last two millennia has resulted in a body of immutable distinct ideas and their eternal interrelations. We have only recently discovered that this static scaffolding is too narrow and rigid for an adequate expression of the changes we have begun to observe. Where tradition had taught us to see always one identical term, e.g., art, we have learned to observe transforming processes which have exploded the inner identity of the term. The same thing has happened to almost all words used to designate fixed intellectual concepts. We are today in a position comparable to that of the Greeks, except that our own crisis is more universal and points in a different direction. Socrates tried to find words that would express the newly discovered concept of immutability beyond all sensual change, while we are trying to coin terms which will thrust beyond this immutable cause into an even remoter depth and dynamize the static ground itself. Hence the traditional terms for immutability and for change have both become too weak for our present exigencies. The expression "the way beyond 'art'" still suggests a change on the surface that does not reach the essence of the matter in question. But in our case it should mean an explosive transformation of the very idea of *art*. We have set *art* in quotation marks to indicate that even our conception *art* is but a temporary fact in human history. This semantic problem is part of a universal problem: the transition from thinking in terms of eternal basic conditions to thinking in terms of a self-changing basis.

This transition has shaken all our traditional concepts, especially our concept of the individual. In the individual artist too we no longer find eternal elements that remain unchanged with him for the duration of his work processes. There too we have nothing but the dynamic of the inner transformation of the supposedly eternal elements. The present becomes a re-formation of the past; the elements of the past live on in it in a new and much more dynamic fashion. In order to understand the present we must link it to the self-transforming urges of the past. We must see it as an evolutionary urge toward a transformation of all traditional notions, as a gradual process of growth in which several earlier currents have penetrated one another and thus have changed their very essence.

I have reached this conclusion not through theoretic speculations but through long practical experience. I may be permitted, then, to say a few words regarding these experiences.

I left the art-history seminar of Adolf Goldschmidt in Berlin a staunch partisan of Alois Riegl's dialectical concept of history, i.e. of a concept which harnesses the evolution of art to the traditional eternal polarity of

body and spirit. According to that concept, the spirit and its pure, general ideas eat, as it were, through the crust of sensory images. By virtue of its eternal divine properties the soul was supposed to rise from the haptics of objective sensory notions to the optics of subjective intellectual concepts, from the palpable *plane* to the higher intellectual representation of *space*. It goes without saying that this historical concept still contained many vestiges of Kantian and Hegelian thinking. Soon after, I became director at the Hannover Museum and was thus given an occasion to put my beliefs into practice. At the same time, however, contact with the problems of public life and with the pioneers of modern design gave me a new kind of experience.

The Hannover Museum furnished a testing ground for the traditional notions of art philosophy, inasmuch as its collections covered the whole stretch between prehistoric art to the most modern movements. The heterogeneous elements of these collections coexisted side by side without any inner connections; they were a loose aggregate, mostly arranged according to ownership. It was evident that they were in need of reorganization. But how were they to be reorganized? What principles were there to guide me? The public was to derive from them the greatest possible benefit, but what was it exactly that the public needed? How could art collections improve the lives of the individual students and of adults coming from different professions and strata of society? Was it really possible to represent by such a reorganization the idea that art evolution was a gradual approach to an absolute, collective and spiritual truth which would eventually unite us all and help us to overcome the spontaneous powers of change? Was, for instance, the intellectual notion of a *space*, which unites all human activity into a static harmony, an eternal human faculty, whose early stages could be demonstrated in prehistoric art while its consummation became manifest in the most recent art movements? Were there really any human concepts or properties which conserved their essence despite their continual exposure to change? And would such a static basis really possess that unifying power we are wont to attribute to it? How could the magical and the modern worlds be reduced to one and the same basis?

The structure of Riegl's idealistic art philosophy was bound to collapse under the impact of practical exigencies, i.e. the need for a reorganization of the wide-range museum collections in such a manner that they could become a positive force in the nexus of public life. The life of art history was seen to contain energies which were much too strong to be confined in the rigid spirit-body antinomy. These energies were the only ones that could actively influence the lives of our contemporaries. So I was gradually driven to a practical, sensory representation of art-historic evolution and its inherent dynamism. I discovered that a slow but unceasing process of far-reaching transformation was taking place in our traditional concept of reality, and that this change was conditioned by a corresponding autonomous change in our mental faculties. And what was now happening had happened similarly before in history: the species *man* itself has been subject to constant transformation of its essential mental faculties. To base the development of visual creation on any eternally identical human ideas or

categories is therefore no longer possible. The changing force of life is of such a depth and intensity that it explodes any such static unification. To understand that means to be driven toward a new philosophy, not only of the history of art, but also of esthetics and the art museum—toward a philosophy which reaches with a heretofore unknown force into our whole conduct of life.

As a result of these reflections, my rearrangement of the Hannover collections became ever more relativistic and intensive. I sought to emphasize the changes in the artists' reality concepts. My efforts found temporary expression in two rooms. The first was the widely known "abstract cabinet," arranged in collaboration with the Russian Constructivist, El Lissitzky, where we tried to show the new reality embodied in abstract compositions since Cézanne. The second room was to have been constructed in collaboration with Moholy-Nagy, afterwards director of the Institute of Design in Chicago. In it we meant to represent the new vision and its effects upon technical production, such as the abstract movie, cinematography, etc. Both rooms were intended to involve the visitor both physically and spiritually in the growing process of modern reality. Unfortunately, I was unable to complete the second room owing to the reactionary attitude of the government, while the first was destroyed by the Nazis after a tug-of-war extending over three years. Concurrently, I had begun to apply the same principle of an "active museum" to the other collections, beginning with prehistoric times and progressing from there to classical antiquity and the Middle Ages. I can see quite clearly today that my innovations, which involved the arrangement of objects, lettering, etc., were designed to introduce the concepts of modern science into the humane study of art history.

It goes without saying that close contact with modern artists (it happened that in the 1920's and early '30's a part of modern art life concentrated in Hannover) my lecturing to prospective architects at Hannover University and my contact with the director and the teachers at the Bauhaus also forced me to reconsider my inherited notions. Besides, being a member of the commission for the maintenance of monuments in northwestern Germany, I had time and again to make up my mind as to which historical buildings and monuments were to be preserved; i.e. I had continually to focus my thought on the role of the historical art work in the context of our present-day life and on its value and legitimacy as a life-improving factor. Which of the two was more important: the better functioning of a street, bringing about an elimination of accidents, or the preservation of a medieval building? Was it not a sign of our clinging to a rather primitive cult of relics allegedly containing timeless values that we were still basing our culture on the concrete maintenance of a maximum of historical buildings, while everything around us furnished mounting proof that the value of life consisted in the act of transformation? Were we not driven toward a deeper and more intense evaluation of historical art products, an evaluation that would make us preserve only those monuments which represented such an act? And should we not regard that act as the normative principle behind any collection and representation of historical art works? The humanistic eternity cult was indeed about to become an obsolete clog on life

instead of a directional force. We are summoned to outgrow that traditional fear of life's transforming energies, that distrust of the creative power of time.

I believe that anyone wishing to construct a new esthetics, art history or philosophy of the museum must first expose himself to the impact of practical life. By so doing he will be able to adjust his philosophies to the exigencies of modern life. This constant impact, which has so long been regarded as a hostile intruder, will exercise his best faculties and instil in him the desire for a new philosophy of art history.

I felt as though a helping hand had been proffered me when, in America, I became acquainted with the philosophy of American Pragmatism through the writings of James and Dewey and, last but not least, through personal contact with Joseph Ratner, who has interpreted Pragmatism. Pragmatism has transformed the tradition of Kant and Hegel. It has begun to free that tradition from the static immutability of eternal ideas which rule as a timeless ground over the changeability of life and so only guarantee its unity. By doing so, Pragmatism has broken up the traditional opposition between absolute Being and historical Becoming; it has set the formerly static ground of reality in motion. Practical, i.e. change-creating, experience transforms the essence of conceptions. Truth changes itself, it grows. In Pragmatism there rests a possibility of developing a vision of history with the deeper dynamic of an open growth in the sense of modern sciences. This possibility of freeing new energies for our own life has not begun to be exploited. The pragmatic liberation of art history from Kantian and Hegelian absolutistic vestiges seems to be an evolutionary act of the highest importance, since our art philosophy, despite its increase in inner flexibility, is still largely indebted to the Kantian and Hegelian tradition and is hence anxious to preserve the unity of history statically, i.e. through eternal mental faculties (categories). I have reached conclusions similar to those of Pragmatism through long practical experience, and I am convinced that here lies the only road toward a reintegration of art history, esthetics and the art museum with actual life. All these artistic disciplines must become energies which transform life itself; we can no longer afford to let them be a dam against life's total self-changeability as they have been in the past.

The following study may be called an organic growth. Since it owes much to pragmatist philosophy I have dedicated it to the great American philosopher, John Dewey.

I might sum up the aim of this study by saying that I wanted to give Time a higher dignity and a deeper meaning than it has in our present philosophies of art history; or—what is the same—that I intended to show that there are much more profound forces of change at work in life, which unite past and present in a much intenser way, than we are accustomed to see. These forces break up any timeless foundation of history. They consist of a never resting interpenetration of energies which results in their constant self-transformation. This wholly relative, wholly dynamic interpenetrative history has a new power to direct us. History indeed is able to tap a substratum of positive, new—and badly needed—energies for our conduct of all life, artistic and otherwise.

Such a new concept of history is bound to meet strong resistance from all those who cannot imagine a unity of historical life without at least one never changing leg to stand on. As enlightened minds they are willing to admit constant changes in material fields but not in the so called basic faculties of man's spirit. Hence they seek and see in full sincerity in all movements—whether ancient or modern, scientific or humanistic—chiefly the waning relics of old elements which has not yet quite dissolved in the slow process of transformation, and they conclude from their observation the eternity of certain human concepts or even of certain properties of nature. The more modern a man's mind the stronger is his instinct for the strength and direction of the transforming forces. He feels the urge of these forces toward detachment from tradition and visualizes the positive power of growth to replace any identity and to overrule the traditional mind-matter antithesis of Being and Becoming.

I am acutely conscious of the shortcomings of this study, particularly of the necessity I have been under to confine myself in its general part to brief assertions which, lacking the flesh of concrete examples, are all too apt to appear arbitrary or to assume the dryness and repetitiousness of skeleton statements.

All friends and colleagues who have helped, through discussions and otherwise, to clarify my views on the subject I wish to thank heartily. I am indebted to the publishers for their genuine cooperation, to the Museum of Modern Art for the generous loan of cuts, to my colleague at Brown University, Dr. George E. Downing, who has read the text and made valuable suggestions for its improvement and last but not least to Mr. Francis C. Golfing who has devoted his many talents partly to correcting, partly to translating, the manuscript.

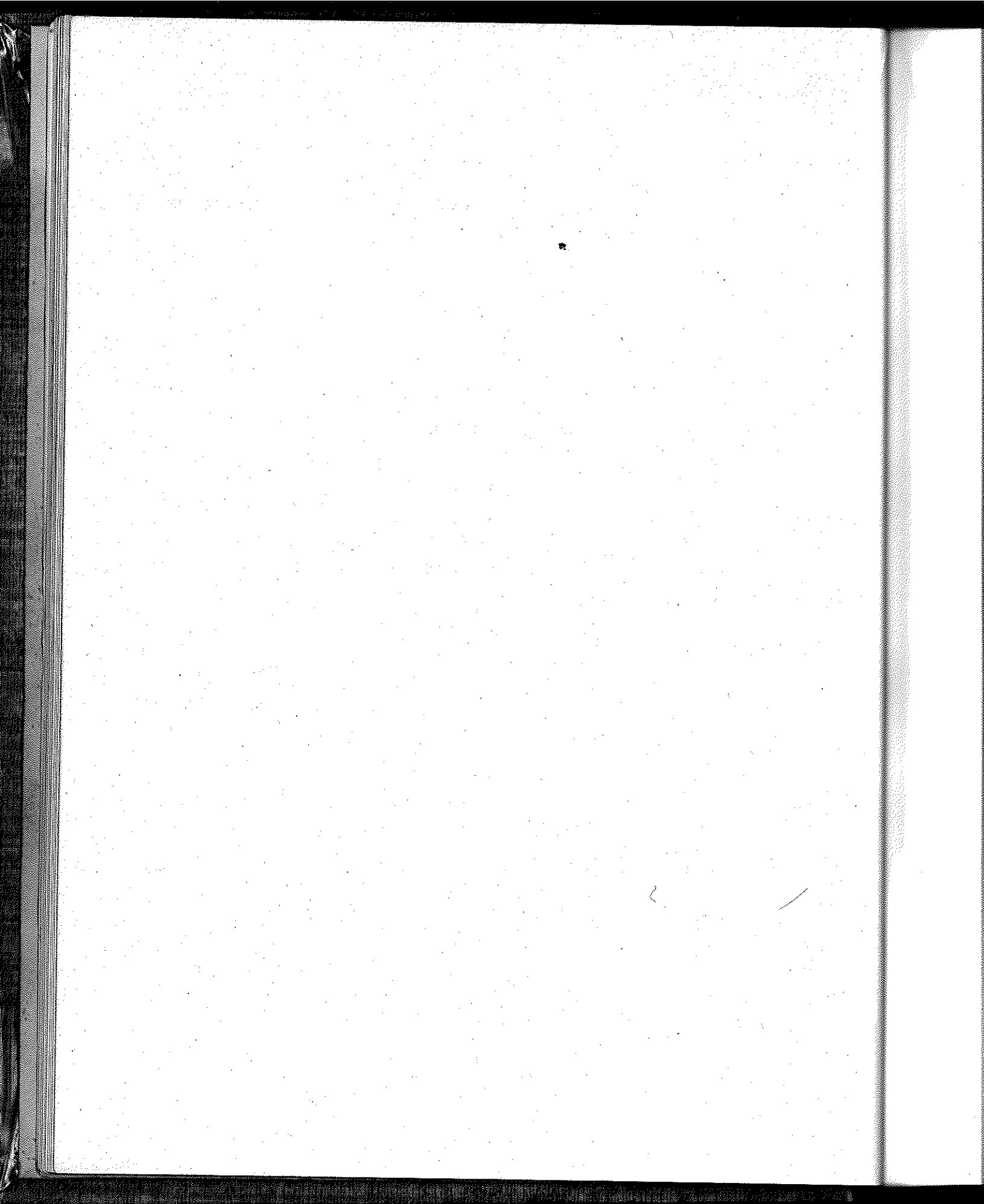
Brown University.

A.D.



II

**TENSIONS IN CONTEMPORARY ART**



## 1 The Artist as Servant of Absolute Form

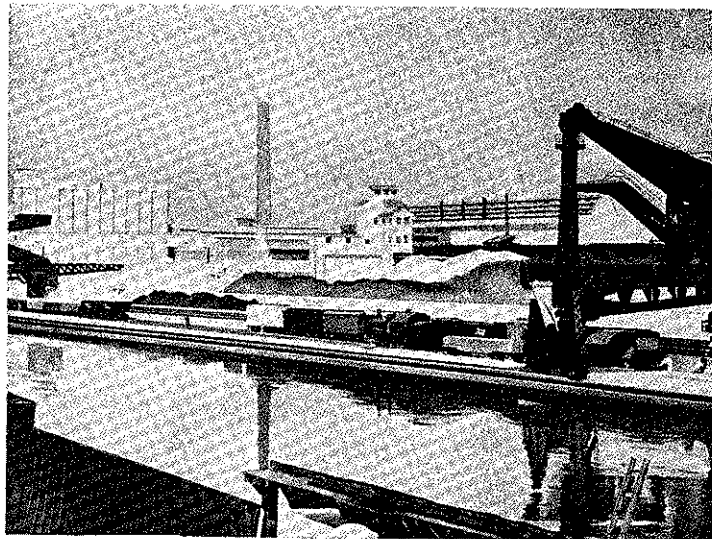
Why are today's artists unable to paint like the great masters? Why can they not represent beauty in the same way? This is almost a standard question for gallery-goers confronted with modern works of art.

The vast majority of our contemporaries crave a beauty of the kind Leonardo or Raphael envisaged. But what exactly are the elements of that beauty? What does the average person find BEAUTIFUL in the Renaissance painters' rendering of reality? What is the most striking quality for us, say, of Raphael's "School of Athens"? It is its complete serenity and order, which sustain the visible in an invisible framework. All the historical changes and accidents of philosophy have been transformed into a calm, immutable balance — the balance between Plato's "world of ideas" and Aristotle's "world of experience."

For Raphael and the Renaissance philosophy behind him, only two poles are conceivable: the stable realm of the divine spirit and the changeable realm of sensory experience. The spirit is the dominant principle; it is God's will that spirit triumph over sense, that it inform all experience and mould it in its own image. Thus we are taught to see the core of a unifying idea at the heart of all external change — an idea that organizes the universe into a STATIC ORDER. Now the symbol of this order is the concept of a universal three-dimensional SPACE. Space becomes the eternal scaffolding within which even the most violent changes of life are forcibly enclosed. All movements are determined by identical geometrical relations within this space. The treacherous, harrowing notions of mutability and decay are either suppressed or transmuted into a timeless spiritual unity. Just as the Christian *communio* rises, one and immutable, behind our sensual chaotic drives, so the spiritual idea of space rises behind the feverishness of sensory experience. Composition in perspective was *the* problem of Renaissance painting. The solution of this problem enabled the artist to convey the illusion of a spatial world, a world that by virtue of its balance, its harmony of geometric proportions, became the image of the divine spirit. It is in this sense that Raphael's "School of Athens" may be interpreted as a balancing of spiritual and sensual forces, as a uniform, static scaffolding of space. Emptiness and solid mass are alike informed by spatial unity and brought into unison. This intrinsic three-dimensional unity characterizes each separate shape as well as the mutual relationship of all diverse shapes. The beauty of the world of the great masters resides in this static



1. "School of Athens," Vatican,  
Raphael, about 1509



2. "American Landscape,"  
Charles Sheeler, 1930

unity which has conquered all spontaneous change. Yet this beauty can be spontaneously experienced only by those among us who believe in the reality of such a world. What appeared to the pioneers of the Renaissance as a new solution for their inherited problems of seeing has now become reality and beauty for the large majority of people. The majority are still living in the universe of the Renaissance and the immediate followers of the Renaissance, at least as regards their artistic needs. They too are looking for something immutable behind all change, for a space that imposes order upon the varieties of movement.

To illustrate this fact let me mention an interesting personal experience. The art department of a well-known New England department store made some time ago a survey of the artistic preferences of its clients. The vast majority wanted the "picture over the mantelpiece" to fulfil two requirements: first, it had to have "depth" so that "you could walk right into it"; second, within this "depth" a clearly comprehensible story must be unfolded and the richer the detail the better the "story." Here we see very plainly the implications of "spatial depth": it is the first condition to be satisfied, and the second condition is its logical sequel. First, the firmly balanced spatial scaffolding must be furnished which by virtue of its definite geometrical relations will enable a clear yet detailed story to be told. The story could not function without the perspective stage.

The average mind feels secure only in a world where sensory change and the forces behind that change are stayed by an immutable spiritual form which is itself exempt from change. The average person would think it impossible to live without this dominance of the *absolute One* over the relative and multiple.\* He feels progressively secure in proportion as the formal idea triumphs over uncertainty, and Being over Becoming. A picture's beauty thus comes to depend upon the degree in which its underlying unity forces itself to the surface. The millions of pictures we find on the walls of our houses are almost without exception sensory variations of one and the same spatial concept.

The static three-dimensional representation of reality is generally considered normal and natural — the only possible representation. Yet actually it is just one cultural effort, made at a certain stage of man's development, to come to terms with the mutability of the universe. Even prior to the Renaissance, attempts had been made throughout the Occident to triumph over mutability by finding a form that remained changeless behind the changes. In fact, the beginning of Western civilization coincided with the first attempts in this direction. The development started in Greece and culminated in the Renaissance. We can understand this phase of our cultural history only by examining the structure of the pre-Hellenic, magical cosmos. There is no urge inherent in human nature to conceive forms — let alone space — statically and three-dimensionally. This way of viewing the world is determined by local historical conditions. It changes with changing conditions and may even disappear, giving way before a new way of seeing and conceiving the universe.

\* This reaction is of course most of the time unconscious. Yet the individual can always be made conscious of it by being asked to analyze what strikes him as particularly reassuring and beautiful in the paintings of the old masters.

## 2 The Artist as Spontaneous Creator

I

This is precisely what has been happening now over a period of several centuries in Western civilization. Ever since the days of Enlightenment and Romanticism the average mind has been slowly superseded by a new and more penetrating one. Sharper minds have realized that the universe is by no means as simple as it appears to the average man and that our notion of reality must be revised.

What was the lesson of the Renaissance and its offspring, the academies? The lesson is that there is a definite idea of divine order behind all terrestrial change. Follow faithfully that divine idea and you will attain the ultimate truth, the ideal beauty. Yet, like similar tendencies in other walks of life, this tendency in the realm of art led to an obsessive pattern both of form and of content. Something was evidently wrong with the concept of reality involved in it. What was it?

The new mind was not yet ready to draw from its discovery the conclusion that there is no such thing as a supreme immutable principle. It only saw that ultimate being had to be removed to a farther, more abstract distance and that the forces responsible for that removal had to be more generously acknowledged. God could no longer be confined within a dogmatic context or a finite form. Strict contexts and forms had clearly proved too rigid and destructive of life. God now became the formative principle of each natural phenomenon and, especially, of each individual man: an infinite, inexhaustible source of ever new modes of perception and creation. Nevertheless this was a remarkable concession to mutability and multiplicity — those arch enemies of sheer Being! The prestige of the absolute One was undermined; the structure of the three-dimensional world began to crumble. The two opposite poles of idea and sense were moving toward each other. The unequivocal dictatorship of immobile form was turning into a HYBRID ONENESS that could be grasped only through the medium of ever changing multiplicity. It had been the function of the Absolute to stay the powers of change. But now the very consummation of that task was making its position untenable. In proportion as the Absolute absorbed mutability it became vaguer and vaguer. The final result was a hybrid divided against itself. The "changeless" basis of the universe was giving way under the continuous pressure of the powers of change.

What are the determinants of artistic creation now? The Romantic

artist\* no longer believes in the objective existence of a changeless truth, invested with a definite content and form. He believes, rather, in a divine transforming power searching for ever-novel contents and forms. As for himself, he has grown incredibly "free." He, that deciduous accident of history, has turned himself into an "autonomous being," the delegate of God's own creativeness. This he could do only by admitting the powers of transformation, pregnant with new verities, into the area of the Absolute, from which they had previously been rigidly excluded. The absolute One, the timeless Being, was invaded by multiplicity and historical change.

What then is the eternal warrant of a work of art now? What entitles the artist to dub himself the prophet of ultimate truth? What has happened to the timeless and changeless? Immutability has retired into the formative powers of the individual artist. Those powers since Adam aspire toward unity, organization, form. The eternal artist is like a harp on the strings of which the forces of sense experience play ever-new melodies. Artistic creation has become a free action of forces, while the immutable One has been replaced by the personal "style" of the individual artist seen in individual artistic products. Yet how can the basic elements of the "One" subsist in this dizzy play of novel forces? Is it possible for the spiritual elements to remain the same despite their continual conflict with changing sense impressions? And what proof do we have that they really exist? To prove their existence we would have to prove their identical existence through the ages, i.e. distil them from an endless variety of historical art works. But can it be supposed that the same set of basic faculties was active in this vast variety of creations? And, if it was, would not this very fact be a proof of inventive poverty on the part of the divine spirit? And if that spirit is not poor but instinct with ever changing spiritual powers, how can such abundance be reconciled with its supposed "sameness"? What, in brief, becomes of our "eternal warrant," our timeless standard in art?

It can easily be seen that the "free" artist, with his pretenses, was an impossible mixture who tried to combine the role of the prophet of Truth with that of the creator of ever changing "truths." In the light of cultural evolution, the "free artistic genius," with his "eternal creations," is shown to be a short-lived transitional phenomenon — as was the whole epoch of "autonomous individuality." We behold in him a relic of the hereditary desire on the part of Western civilization for an immutable supreme Being, still continuing at the very time when Western civilization has had to admit that the powers of change represent an ultimate

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\* We confine ourselves here to the Romantic type of free personality.

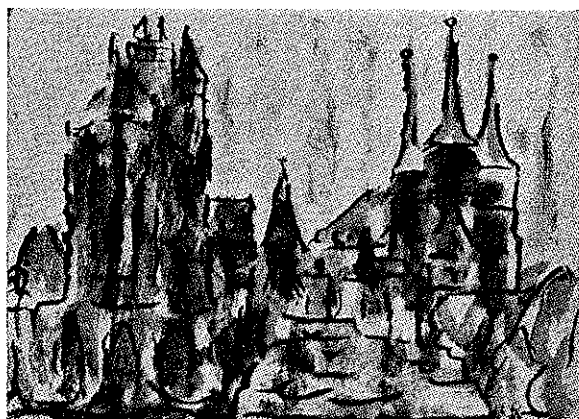
truth. It has proven as impossible to combine these two concepts as it is to mix fire and water.

For the Romantic artist, his new subjective freedom meant an ever increasing ISOLATION. Since the whole emphasis in achievement was now laid on a personal conception of the world, his concerted efforts were directed toward so radical a reinterpretation of old truths that they became completely unrecognizable. The Romantic artist subverted the teachings of the Renaissance and the academies, which tried to codify a distinct set of formal and substantial verities as the spiritual core of the universe. His link with the public grew more tenuous every day. Finally, he became incomprehensible, disquieting.

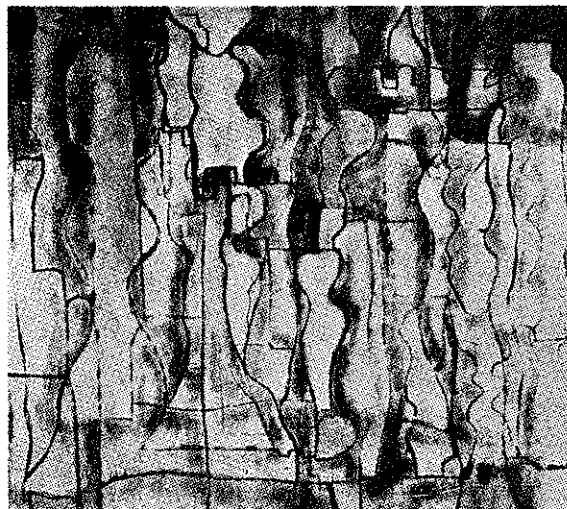
## II

The change in the artist's conception of himself and his function called for a corresponding change in the structure of the picture. The result was a progressive dissolution of the perspective spatial framework and the objects in it. From Enlightenment and Romanticism to Expressionism and Surrealism we witness the emergence of a new iconography and the breakdown of the old contours and colors of perspective painting. Line and color emancipate themselves and by so doing corrode the old scaffolding. They no longer signify a generally accepted truth but the experience of a metamorphosed truth. The work of art turns into a kind of hybrid: it is still a symbol of ultimate Being and thus of static form, but at the same time it seeks to express unformed, creative urges. It purports to embody both Being and Becoming. Its forms and colors now express a revolutionary way of experiencing traditional reality. The aspiration to ultimate form is a kind of ritual performed before the divine Absolute, yet at the same time the artist would be wholly personal, instinct with revolutionary potencies.

A completely new relationship between the art work and the spectator also resulted. The two could no longer meet on the old terms. The spectator could no longer find in the picture the reassuring confirmation of a fixed truth; instead, he found an old truth in ever changing guises. Looking at a picture became a tantalizing attempt to assess new and strange subjective changes. The Absolute was now symbolized by continually new forms. The esthetic experience became a radically new act of assimilation forcefully giving birth to something that formerly had been completely unknown. But this experience, too, was hybrid and divided against itself, for it still claimed to preserve the element of immutability. What it sought to do was to add a new reality to the old one. The revolutionary powers despite their vast increase in temporal signifi-



3. "Churches in Erfurt,"  
Christian Rohlf, 1924



4. "The Balcony," Wil-  
liam Baziot, 1944

cance were still moored to the static notion of timelessness. All novelty was "otherness" and nothing more — a derivative of ultimate uniformity. No wonder, then, that the esthetic experience has turned into an anxiety-ridden spiritual expansion. It has become empathy; but the empathic process is really a painful stretching and groping of the mind trying to identify itself with a mounting diversity of symbols which at the same time lay claim to a static transcendental unity. The empathic process stretching not only forward but also backward grows more oppressive. The spectator is called upon to feel empathy not only toward the present and future works of contemporary artists but also toward the art of past epochs and nations, because the same divine spirit has governed the endless diversity of modes of artistic seeing the world over.

Every artistic product preserves a timeless value despite the fact that it is also considered a passing accident of history. To the Romantic mind, the generation of personal historical styles has grown like a flood yet has frozen again and again into timeless Being. Thus we are led to the notion of "art without epoch." Once more we are brought up against the hybrid blend of Being and Becoming, of form and transformation. How different was the time when a classically determined visual concept ruled out all "heretical" modes of perception! Then history of art had been full of dark recesses; it had been considered almost harmful to study it in all its aspects. Timeless truth and beauty could be distilled directly from the eternal spirit. But with Romanticism art history grew into a vague vision which displayed ever-new symbols of the one eternal truth. The Romanticist stretches his resources of empathy desperately, while the varieties of truth and beauty grow vaster and vaster and ever more contradictory. He grows in all directions and yet remains moored to the immutable One. This hybrid condition — the "art style" — has been a necessary correlate of the "historic revival." It confirms empirically the timeless character of all historical styles.

### III

The art life representing this new type of art is at bottom still a form of "historic revival," however disguised. So long as the artist goes on creating novelty as a form of the "eternal One," so long as each novel product is but a new ritual glorifying the basically immutable, with self-expression and self-sufficiency as its final goal, so long will the wilderness of eternal truth and beauty spread, and we will wander in a fairy-tale forest of symbolic forms. Today we identify ourselves with the world of the Gothic, tomorrow with that of Dali and the day after tomorrow with the art of the South Sea Islands. In order to fathom the infinity of divine creation we must plunge into endless variety.

The Romanticist's attempt at "widening our horizon" through familiarity with all conceivable styles leads of necessity to paralysis or a constant moving in circles. The trouble is that he is unwilling to relinquish the notion of an ultimate and stable life-principle. The fallacy by which the Romanticist attributes identical constituent forces to the South Sea sculptor, to Praxiteles and to Michelangelo makes him assign an equal value to all historical art products and raise them to the status of timeless "varieties" which he must conserve and perpetrate through empathy.

Yet actually this whole philosophy of art has become obsolete. The fact that it started out as a running fight already spelled its doom. The main strength of Western reality was already in full retreat, with its

whole equipment of time-dominating devices. The attackers were the forces of change which turned the individual into a split personality, and his world into a split world. How could Being still prove its existence under the continual onslaughts of Becoming? What could be proved to remain stable in the dizzy whirl of artistic creation? All attempts to prove such an element of stability have ended in failure. It makes no difference whether we try to posit an eternal space-creating power, a power which tends toward a stable unitary condition or a power which invariably crystallizes into certain pictorial types symbolizing eternal human situations and relations — the transforming forces of life are bound to prove stronger than any arbitrary timeless formal unity. By trying to preserve some such unity while admitting the forces of transformation, art history has built up a hybrid concept of reality. But no more than other disciplines can the history of art stop at this transitional stage. The vaster its body of reference and the more elaborate its methods of comparison, the thinner the precipitate of the "unchanging One" — that "common" artistic property of the cave dweller and the man of today. Now the foundations of this hybrid theory have been shaken decisively by the most recent development in art.

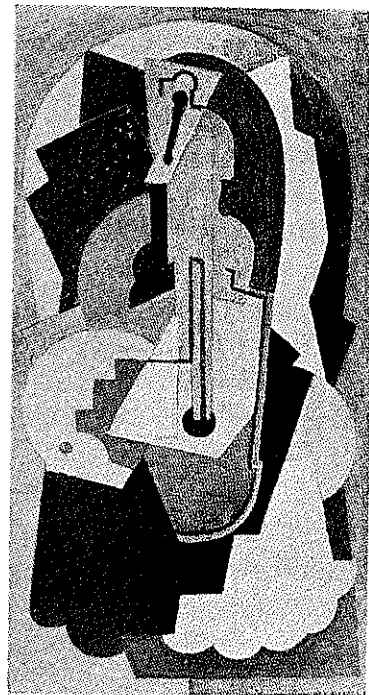
### **3 The Designer as Energy in the Self-Changing Life Process**

The most recent changes in art have one thing in common with the artistic tastes of average man: in both we are able to see a certain dissatisfaction with subjective "expressive" art and the philosophy behind it. The average man does not like expressive art because it lacks the traditional symbols of his world. What he misses in it is the perspective which had furnished him with a fixed space frame and its concomitant, narrative logic. Nor can he discover in it the fixed types which had peopled that spatial stage. To him the ancient religious and mundane symbols have not yet grown too rigid or narrow. He cannot understand why there should be any need for completely transforming those definite and timeless symbols. He feels that the art work is bound to lose its unity in the process, and with the unity its power to communicate the same thing to all men.

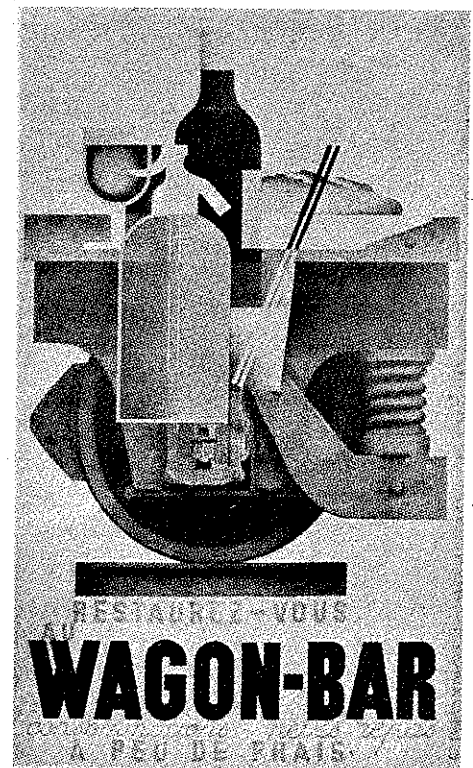
Yet the leaders of the new movement have turned away from the personal expressionistic style for different reasons. They object to that style not because of its rendering of revolutionary forces; rather, they claim that it has not gone far enough. They claim that it has stopped halfway, creating new and distorted symbolic forms which still preserve the old notion of an "ultimate Being." Like the average person, these leaders too are searching for unifying symbols but they feel that those symbols can be created only by turning resolutely away from any strict rigidity. What they are trying to find is a representation of the VERY PROCESS OF TRANSFORMATION. In this act they see the new harmonizing power of art. The act would have to be symbolized in a manner understandable to everyone, the symbols being derived not from solitary dreams but from verifiable observation. In the place of irrational novelty they would like to see a new rationality. This is how subjective expressionism has given birth to the ABSTRACT MOVEMENTS in art, which in turn have made way for the MODERN REALISM.

It is important for us to realize what a tremendous revolution this development implies. There is no doubt that it will take us away for good from the ruins of timeless symbolism. In the place of static or semistatic causation we now find the dynamic ground of SELF-TRANSFORMATION. The artist feels himself no longer a servant of objective and changeless truth or a lonely seer trying to approach the divine by yet another stylistic variant. Rather, he is now himself part of a primal force which is much too strong to remain identical through the ages. There is only one way

to cooperate with this energetic substratum: through a constant and active transformation of the life process. To account for change we have to gauge the pressure of a profound transforming power. As long as we try, by means of a static symbol, to curb and confine spontaneous change we shall never be able to understand and act really effectively. Instead, we must resolve the polarity of Being and Becoming so that Western civilization, as heretofore understood, through a wholly organic process, may grow into a better civilization. Just as in physiology each species represents a process of self-transformation until a point is reached where we may speak of a new species, so the species of Western civilization and art is about to give birth to a new species.



5. "Cubist Composition," Albert Gleizes, 1920



6. "Poster for Dining Cars,"  
A. M. Cassandre, 1932

To understand this revolutionary transformation we must step beyond the boundaries of Western thought. In other words, we must no longer try to trace life back to a changeless source. We must leave our three-dimensional house, as it were, and look at it from the outside. As I shall show later, it was the Greeks who started to build that house. The fact that this building process has now resulted in a completely different structure is a proof that the original blueprint cannot be considered eternally valid. We are thus led to assume a much greater power behind structural ideas of this kind. THERE MUST BE AN ENERGETIC MILIEU WHOSE GIGANTIC TENSIONS HAVE BROUGHT FORTH THE WHOLE PROCESS OF GROWTH AND TRANSFORMATION OF WESTERN CIVILIZATION. THERE MUST BE AN ENERGETIC INTERPLAY OF SUCH VAST INTENSITY THAT IT IS ABLE TO PENETRATE AND OVERCOME OUR PRESENT THREE-DIMENSIONAL REALITY. But this new concept of historical reality can be formed only by leaving behind all three-dimensional notions of eternal spiritual forms or powers. Our rigid instruments cannot grasp what lies outside the three-dimensional house. For it is the very belief in an ultimate Being, in a drive toward changeless unity, that has been shaken. That three-dimensional drive has led to its own transformation: by its own momentum it has turned into something else. The concept of a three-dimensional world has been an experiment, a play of certain energies which have changed through contact with the energies of their milieu. There is no need whatever to continue the old struggle between Being and Becoming. The value of this experiment, of this hypothetical wish-fulfilment of Western civilization, has proved temporary. We must look upon it as a transient product of the inner tensions in magical, pre-Hellenic thought.

TODAY'S PROBLEMS ARE THE PRODUCTS OF THE SELF-TRANSFORMATION OF THE HUMAN MIND AND ITS CONCEPT OF REALITY. This process has originated in the realm of natural history and then assumed palpable shapes in prehistoric and magic thought. It has become impossible to treat the pre-Hellenic evolution merely as an overture to the drama of Western civilization. Yet the Western mind has been inclined toward such a mutilation of the historical process. Whoever considers himself an exponent of eternal truth behind all change must needs regard his own period as the central act in the universal drama. To him anything that went before is an overture; anything that comes after an epilogue. All history books dealing with Western civilization from the Greeks or the Middle Ages to Hegel and his modern disciples have tried to gain unity but have gained it only through mutilation, through a bleeding to death of creative life.

To get at the meaning of history we must touch a profounder stratum

of life, a self-changing stratum of pure energy. Only by seeing in history an open growth freed from immutability — a view familiar to modern biology, physics and psychology\* — can we hope to judge adequately the evolution of art and, particularly, the most recent movements in art. To account for change, we must assume a power productive of change. This is our only means of doing justice to the all-important phenomenon of history, i.e. the irreversibility of time.

A biogenetic view of Western civilization furnishes us with a clue to the common tendency to classify historical phenomena *seriatim* on a timeless basis. Egyptian, Greek, Gothic and Surrealistic art are simply seen as "different." To the average thinker their mutual temporal relationship is negligible; he, like the Greeks, regards time as an inert receptacle made to hold a changeability born of weakness. Time is still the handmaiden of a changeless Being. Yet the immense power of life can never be grasped by minds which are contemptuous of time. Such an attitude toward life must be called obsolete. The slogan, "Back to strict form!" is really an invitation to return into the womb of the Renaissance, i.e. to repeat the outlived attempt at establishing a dictatorship of the Absolute.

This whole Western drive toward the Absolute, toward a check on temporal change must be seen as a provisional deliverance from the anxieties of a magical universe, from a fear of an uncontrollable world rife with energetically changing objects. By realizing this we can also realize why the modern transition to a wholly energized world has been inevitable. Yet it would be quite wrong to speak here of a mere relapse into magical notions. The vital force of the universe consists in its complete irreversibility, and life never tolerates a relapse. The modern road leads across the rigid stretch of three-dimensional reality toward a stronger and more profound unity, toward a growth open to autonomous change. The modern trend is exactly opposite to the magical one, insofar as it no longer fears the changeability of the world. It is a better remedy for magical troubles than the hypothesis of a three-dimensional reality.

The modern attitude helps to explain a curious phenomenon: our sympathy with the primitive world. It is no accident that this sympathy has been steadily growing for the past two hundred years, in proportion to the growing understanding of the world as energetic change. Such a sympathy could never have developed had not the Western mind already relinquished its hereditary basis. For it is exactly that forcefully chang-

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\* This modern attitude of the Sciences accounts for the gap that has developed between the Sciences and the Humanities in as far as they preserve the traditional belief in a basic immutability of reality.

ing reality of the Primitives which the Greeks and their successors had tried to overcome. In order to understand fully our Western heritage we must view the world as something basically energetic and then proceed to identify ourselves with history in a new way. We must allow for the active unity of autonomous change, handed down to us from natural history and prehistoric times, and urging us onward. All seemingly invariable conditions, timeless ideas, types and forms are but temporary elements of an equally temporary and still too superficial three-dimensional vision of the world. They are themselves only bubbles produced by vast self-changing energies in the depth of life.

**III**

**THE GENESIS OF CONTEMPORARY ART**



## 1 The Evolution of Magic Reality

### I

Our brief inquiry into contemporary art has convinced us that it is filled with heterogeneous energies. These energies we have tried to reduce to three different types of seeing, presenting and mastering reality. But the three movements do not run parallel nor are they of equal value — they are not simply “different” from one another; rather, we have seen how one has grown out of the other, splitting off whenever the need for transformation arose. The symbiosis of the three movements is really a constant process of mutual attrition. In this hostile process it is difficult for the younger forces to hold their own against the older ones; yet in the long run the former prove to be the more vital.

In order to understand the motive power behind this struggle we must see it in a larger frame. Then only shall we be able to realize the temporary character of western European art, its transitoriness. It will shrink to a tentative episode, to a transitional phase within a much vaster and more fundamental evolutionary process. Men are driven to create not by a simple desire for beauty but by much profounder forces and energies. Pictorial representation is a part of that tremendous process in which energy penetrates energy while struggling with it, trying to force through its particular vibration.

The history of Magical Man is the history of man trying to conquer the forces of change by means of artistic creation.

Even in terms of time the evolution of magical representation in Western civilization must be called overwhelming. It covered over 30,000 years,\* as against 2500 of post-magical art. Throughout that time a type of human mind was operative which, together with the works it produced, seems so different from the Western mind that the term ART becomes inapplicable to works of magical civilizations.

If we speak of the works of classical antiquity and later ages as “art,” then we cannot apply the same term outside that cultural sphere. By “art” we mean the creation of an esthetically potent structure. Yet only the BEAUTIFUL can be called esthetically potent, i.e. that which gathers diverse forces into an harmonious unity, into a form. All analyses of artistic beauty, from the early objective definitions to the subjective definitions of the eighteenth and nineteenth centuries, have one thing in

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\* We are forced to condense the rich growth of thousands of years in a few observations indispensable for an understanding of contemporary problems. Such a condensation is apt to obscure the constant changes of the magical thinker and his reality and to make the whole process appear much smoother than it actually was.

common: they expect the work to assure us of a tranquil unity, of an harmonious condition behind all change. Beauty and art are supposed to remove us from the cares of practical life into a calm "disinterested" sphere. "Art," then, is that which confirms the existence of something beyond the vicissitudes of action.

But there is no hint of such a concept in pre-Hellenic art or outside the sphere of Western civilization. There the concept of "beauty" is replaced by something pragmatically effectual and not at all concerned with calm "disinterestedness." The prehistoric cave drawings, Egyptian sculptures, the Aztec temples are all effectually alive. They are daemonic objects; they ACT. They were created so that they might actively influence the daily tenor of life or — what comes to the same thing — prevent anticipated changes.

The creation of such plastic structures and man's attitude toward them cannot possibly be compared with the creation of a "work of art" and the "esthetic" pleasure we derive from it. There may be superficial similarities, yet the disparity is radical. The pre-Hellenic mind and the Western mind work differently. They are not identical minds. The later mind has fully transformed the earlier.

How can a sculpture, a painting or an edifice be said to act effectually? Is not such action confined to live things? The pre-Hellenic mind draws no distinction between a live thing and its imitation. Whatever seems identical to the eye, ear or touch is identical. Seeing, hearing and feeling always imply a mental process, i.e. the assimilation of a sensory stimulus.\* This pre-Hellenic mind assimilates stimuli in a manner which strikes us today as naïve. The way in which it coordinates, explains, reacts seems to us hasty. It lacks completely what we call "rationality." In order to comprehend it we must divest ourselves of all the successive transformations of the human mind gained through experience: transformations which we still enact in the process of growing up. The primitive mind absorbs outer stimuli through fewer filters, yet its reactions are all the more direct for that. It acts instinctively, with unbridled energy. Its instinctive energies are bound to collide with the external world and to register that world only in terms of aggressively potent objects. Gradually a concept of reality emerges which is overwhelming in its inexhaustible dynamism. The instinctive mind encounters energetic objects everywhere; objects threatening by virtue of their changeable-

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\* This assimilation is closely bound up with the visual process. We cannot conceive vision as a timeless mechanical phenomenon. Biology has taught us that this seemingly mechanical process is never the same. Hence it is not feasible to assume an unchanging human faculty of sense-impression and to found on that faculty Impressionism as a timeless style.

ness, which even when they are not downright hostile seem treacherous enough to inspire fear. Human beings, animals, plants, clouds, planets — they all suggest movement and change. Even the stone on the ground seems alive, for it resists man's powers. Every object seems informed with a volition of its own. The universe becomes a texture of relativity, of struggling and self-willed objects.

THE MENTAL PROCESSES OF THIS MIND ARE CONFINED TO SENSORY EXPERIENCE,\* AND SO ARE ITS DESIRES AND CREATIONS. THIS MODE OF THOUGHT AND ACTION WE CALL MAGICAL. Whenever the magical mind is driven by instinct to maintain its own life process against the energetic objects of its milieu, it does so by reproducing the desired complex of sensory experiences.† All senses are involved in these experiences. The more mobile and aggressive the experience, the better. Mimetic reenactment and imitated sound are certainly more important to magical man than the visual impact of painting. But the latter, too, must be as aggressive, vital and volatile as possible. Even today, under totally different conditions, we can catch an echo of that vibration in the mind of the child. When a child desires keenly a certain experience it will scribble down a shape. That shape is the aggressive visual complex which it experiences as a moving object. The history of painting begins with a representation of such shapes. The road leads from crude scribbles to snapshots of all kinds of game. Here we are at the source of pictorial art.‡

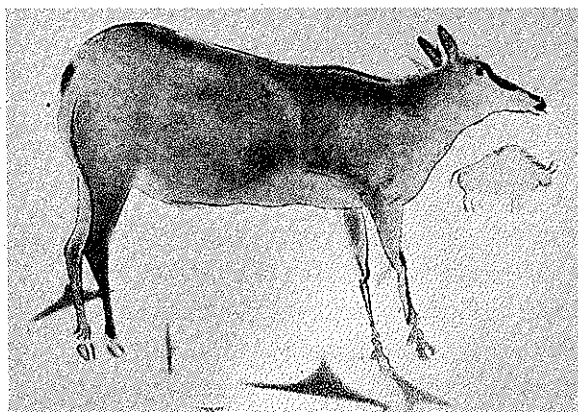
The painted bison can be smelled and its movement seen; it will be a tasty dish. Here we have not a symbol of the idea "bison," but an evocation of sensory experience. The bison design suggests a complete aggressive complex of experience which is complete only so long as it touches the senses explosively. Lines and spots of color stand side by side but discretely: they do not aspire to "inner harmony," to "formal unity." The legs seem to be nowhere, dangling loosely. They are not related to anything. The horns are close to the head, without correlation. Light spots are put beside dark, but not in terms of light and shade; no ulterior *form* is intended. There is no reason to assume that the magical mind already conceived the picture surface as something separate on which pictorial units might be organized. On the contrary, the plastic relief of the cave

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\* Hence the equivalence of dream and actual experience. Dreams are alive and exert influence. They present, like pictures, live objects.

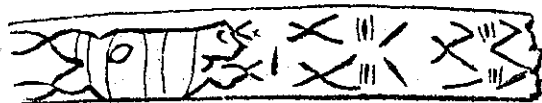
† This is its type of logic; a purely sensory kind of causality, a causal creating through sensory imitation.

‡ To speak here of an "innate eternal artistic drive" is to force the procedures of a later stage of evolution upon an earlier stage. There is nothing in the pictures themselves that would justify such conclusions. They are clearly "magical acts," instinctive creations of energetic live objects. The experience of the painting becomes real in the magical mind.



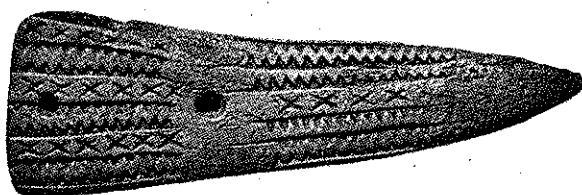
7. "Hind," Cave painting, Altamira, about 11,000 B.C.

*This painting is only a loose complex of single transient sense impressions. It is not yet a "thing" with an inner organic form. Solidity was only one of many sensuous experiences, not yet the core of reality as carrier of extension and its proportions. Thus, the picture has no permanence, no inner firmness and even less clear relations to other "things." It has no place. It disappears by being overpainted after having been "killed" (often by painted arrows).*



8. Bone covered with condensed powerful images. Raymonden, about 10,000 B.C.

*The growth of experience developed the ability to see complexes of powerful images in loose addition. This process comprised the condensation of images into magical signs, such as those for sex organs, rain and so on.*



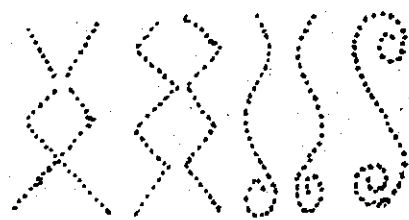
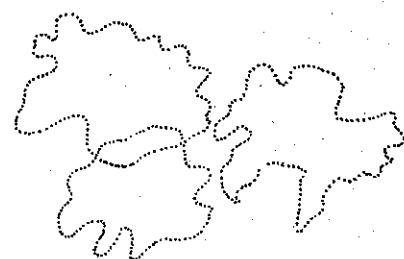
9. Bone covered with magical signs. Ruegen, about 4000 B.C.

*Alternating sequences of the signs of water and probably successful hunting.*

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*The diagrams indicate how the mind of the primitive hunter singled out from the vague flux of attacking and mostly hostile sense impressions the vitally important image of the game. Since his world consisted only of such transient sensuous images, the artificial production of them by painting created living reality. This primitive way of thinking and acting we call thinking and practicing magic.*

*Later this magical performance grew into representing aggregates of such images. This extension of the image of reality implied a schematization of the images and by that prepared a detachment of these signs from the flux of sensuous images.*

*Of these diagrams is true what is also true of all the following diagrams: They do not represent any fixed, identical concept, but are rather crude condensations of what are actually self-transforming processes. Evolutionary art history can be properly demonstrated only through the modern moving picture which allows the representation of self-transformation.*

wall was often the occasion for pictorial representation.\* The sensation of touch associated with the visual sensation and by so doing heightened the effective aliveness of the picture. For all pictures were considered alive, whether they had been painted or carved. Like the dancer disguised as the hunted animal, they, too, could be killed, by painted arrows as well as by real thrusts or shots.

## II

Quite early this loose association of magic images began to expand, for the magical mind realized that more than one image was needed for the creation of a desired sense experience. The sense impressions of rain, growing plants and multiplying game gradually coalesced.† This complication involved a concentration of effective signs. The evolution of tilling and planting forced upon the magical mind larger sensory units of seasonal change and growth, while the signs employed became progressively simpler, their groupings more rigid.

This process culminated in the so-called calendar cultures of Egypt, Mesopotamia, Mexico, etc. They have been called "calendar cultures" because they made an attempt to create order in the chaos of effectually daemonic objects by giving the celestial bodies supremacy over all other objects. This change accompanies the progress of agriculture as a basis of human existence. Yet here, too, the picture was still a loose association of single aggressive impressions, serving the creation of identical experiential complexes. The picture was still alive and active. For instance, Egyptian sculptures and reliefs still opened their mouths and acted; the temple columns acted because they were an aggregate of powerful signs; the gilded tops of the pyramids attracted the rising sun with their splendor while their rectangular shape maintained them in the frame of the four points of the compass. Even cities were planned as rectangles‡ to produce the magic power to enforce prosperity, and each

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\* In sculpture the shape of a bone became an occasion for imaginative action and for the representation of an animal in a certain position. It is a characteristic of all magical thinking that it is unaware of the intrinsic unity and the boundaries of an object. The shadow becomes part of the person who casts it; a person's limbs are associated with certain objects of the milieu. The magical mind invariably turns similarity into physical association.

† So the transition to nomadic life adds to the snapshot of cattle their all-important migratory routes. This may account for the fact that we find about 8000 B.C. for the first time a combination of ground lines and snapshots of herds. Yet the magical symbol for road has not yet developed into the category *place*.

‡ The hieroglyph, "city," is identical with the magic symbol for the points of the compass, which appears again and again on the ritual vessels of the calendar cultures as a potent charm. This makes one skeptical of our use of "urbanism" as a timeless rational idea.

city impressed the senses as a powerful and useful picture. No wonder, then, that cities, pyramids, statues and reliefs were not "beautiful" but complexes of signs for the effectual creation of vital experiences.

According to magical thinking, only a loose side-by-side arrangement of signs can have the power to act directly and usefully. That is why the Egyptian figure design, too, was a loose collocation of concentrated symbols. The eyes and the torso were given in front view, thus ensuring the fullest and therefore most potent image, while for the same reason the other parts of the body were given in side view. The animal sculptures of Mesopotamia and even the guard images in the Persian palaces had five and three legs, respectively; just as the South Sea Islanders represent a cube by placing five (!) squares alongside each other. All these images were combinations of front and side views. Their surfaces fell short of unity, for no unitary principle governed them from within. The calendar cultures had not yet developed the category "plane." No Egyptian relief or drawing is known to have been organized on a flat surface. The Egyptian relief does not reveal, as A. Riegl thought, an esthetically haptic concept but an aggressively potent simultaneity of various sensory experiences. The superficies of Mesopotamian statues consisted often of a vague crisscross of drapery folds and writing characters, inconsistent with our notion of "surface." To conceive the notion of a "plane" we must be able to imagine something inward irradiating outward, and making that outward over into a unified surface. The Egyptian edifice, too, was a loosely active association of energetic sensory images.\*

But if the whole of magical reality consisted in effectual sense experiences which had to be produced again and again pictorially, then it is evident that in that reality no object could be divided into changeable and unchangeable parts. The whole object was contained in the complex sense-impression; one could not disengage a certain aspect of it which would remain identical though the picture might change, nor was such a partial change conceivable. Inconceivable, too, was intrinsic form

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\*The Egyptians buried huge rocks inside their edifices. Those rocks had an additional efficacy: they symbolized the sensory experience of gravity and of immovable power. The outside of the edifice gave no inkling of that. The outside acted as symbol of the rectangular mound, which, like the Mastaba, was said to engage the sun. Likewise, the Egyptian representation of an edifice was by no means a two-dimensional surface view but a loose association of impressions, a blend of inside and outside views. An edifice was not yet seen as "form," as an intrinsic nexus to be grasped by a certain approach (Schaeffer's *Gradaufsichtigkeit* presupposes Western concepts). The edifice was for the Egyptians a sum of vitally important images, indispensable for the effectual experience of dwelling. We may judge how remote any notion of "form" was to that type of thinking from the fact that the continued existence of the dead was guaranteed by placing the Canopic jars, containing the entrails, beside the sarcophagus. The body was not yet seen as an organism unified by inner form.

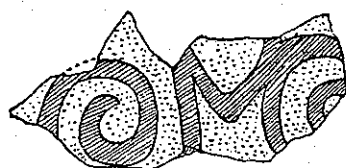
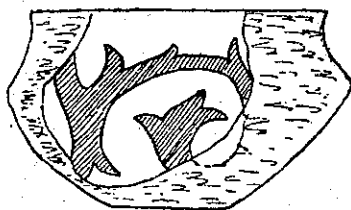


10. Magical plant-design of bones. France, about 10,000 B.C.

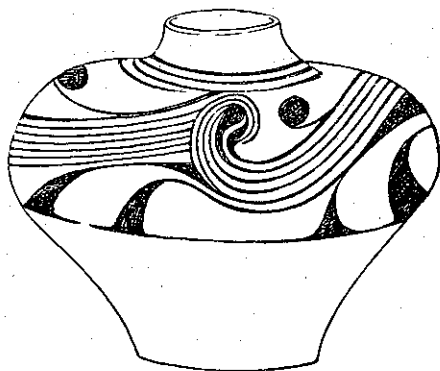


11. Bone covered with vegetal spirals in ochre. Predmost, Moravia, about 10,000 B.C.

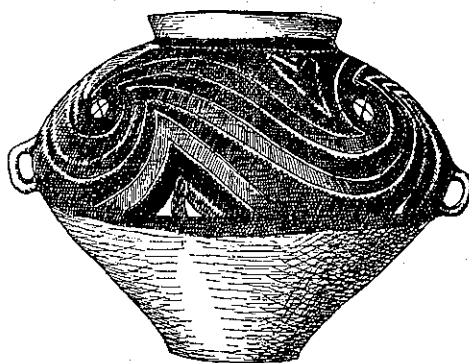
*The magical sign of the spiral, partly condensed from transient snapshots of plants, became a ubiquitous powerful sign of fertility and seasonal repetitiousness.*



12. Pottery with spiral plant-design. Malta, Third Millennium B.C.



13. Pot with repetitious spiral-design. Bilcze, East Galicia, Third Millennium B.C.



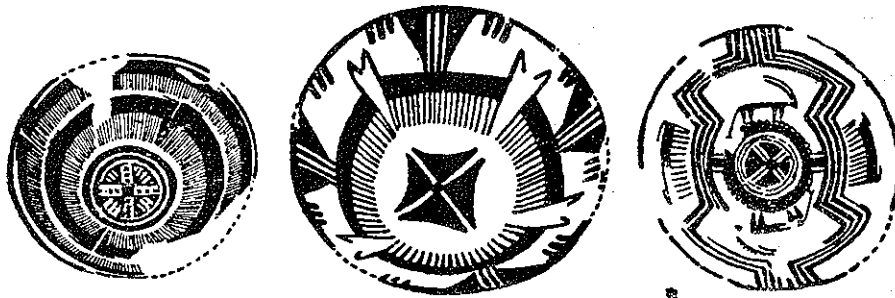
14. Pot with repetitious endless spiral-design. Yang-Shao civilization, China, eighteenth century B.C.



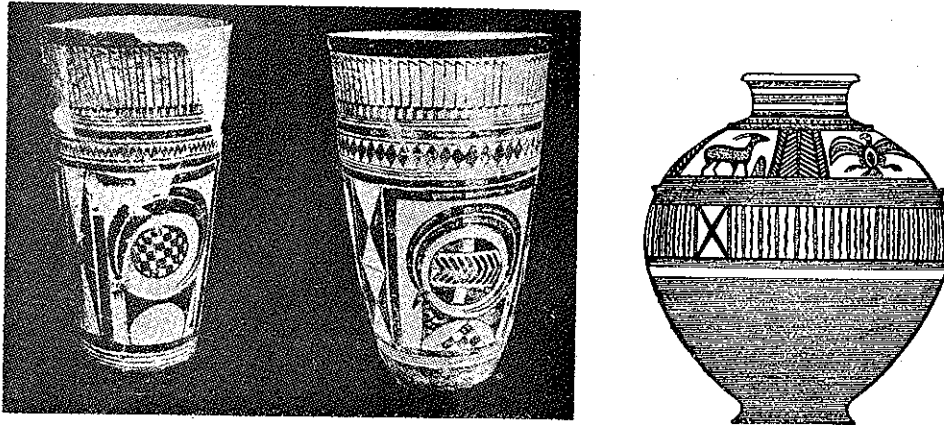
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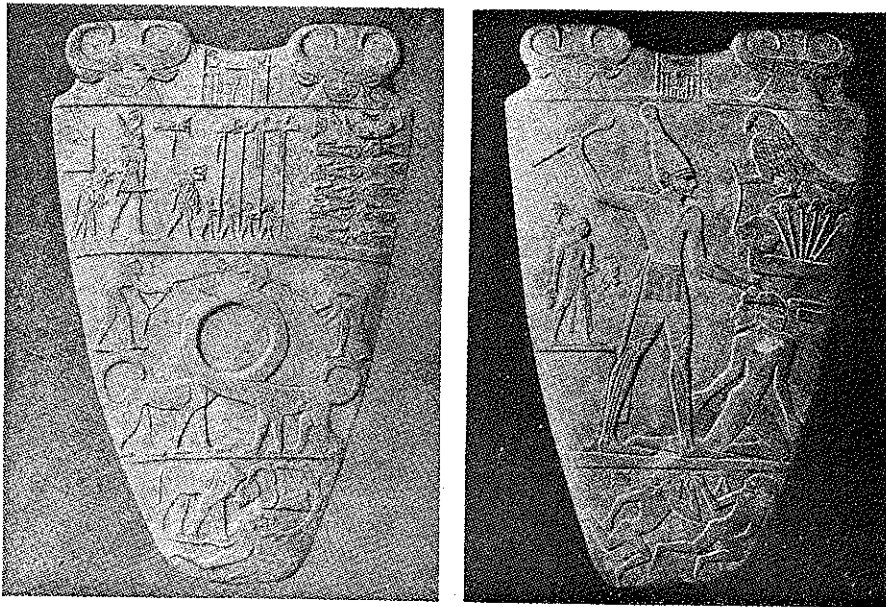
*The mind of the planter more than the mind of the hunter was encouraged to develop a coherence of condensed magical images. Such an image was the spiral which developed into elaborate systems and became an image of higher certainty enforcing the repetitious continuity of growth upon the vague uncertainty of direct sense impressions, thereby transforming the meaning and appearance of these impressions. Everything seemed to perform obedient movements to this omnipresent image of fertility that unified the world in a floating and vague way. Thus began the detachment of a higher steadier daemonic image from the lesser and more uncertain images. (The dotted lines represent the sensuous reality transformed by the vision of a higher repetitious order.)*



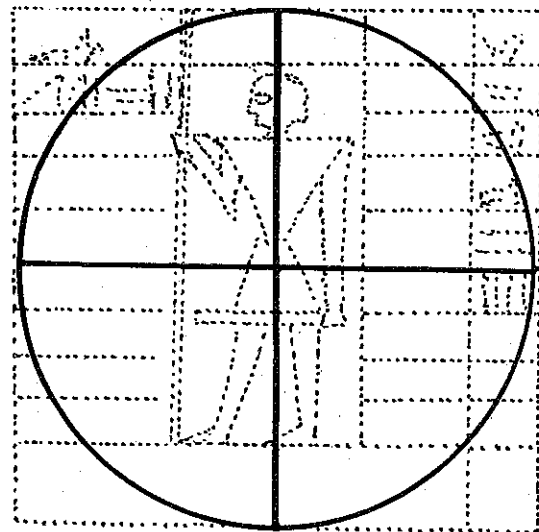
15. Magical signs of fertility arranged in the symmetrical order of the four directions. Pottery, Susa, Fourth Millennium B.C.



16. Images of fertility forced into a squaring system. Pots from Mussiam and Susa. Fourth Millennium B.C.

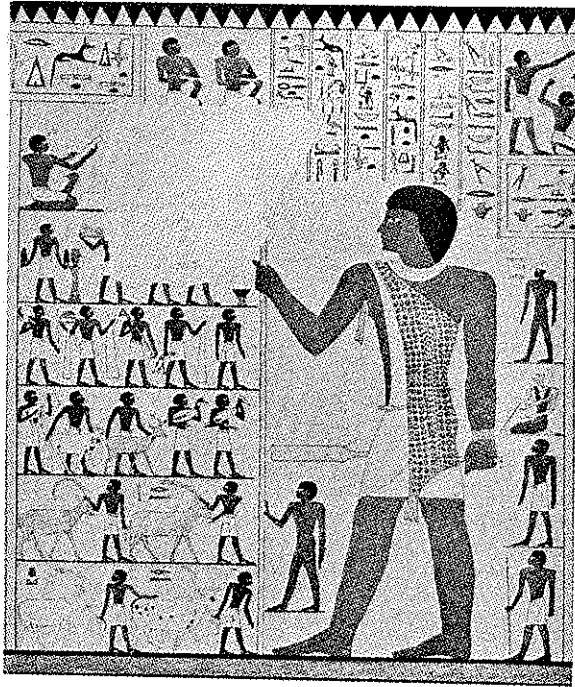


17. Symmetrical and rectangular design. Cosmetic tablet of Narmer, Egypt, about 3200 B.C.



*Diagram of the reality created by the later magical mind together with organized agriculture.*

*Experience transformed the vision of the ruling daemon into an image of almost abstract rigidity — the magic, for example, of the four directions of the sun. This development pressed symmetry and rectangularity upon the lesser daemonic images and created the ability to detach increasingly one image of certainty from the many images of uncertain change.*

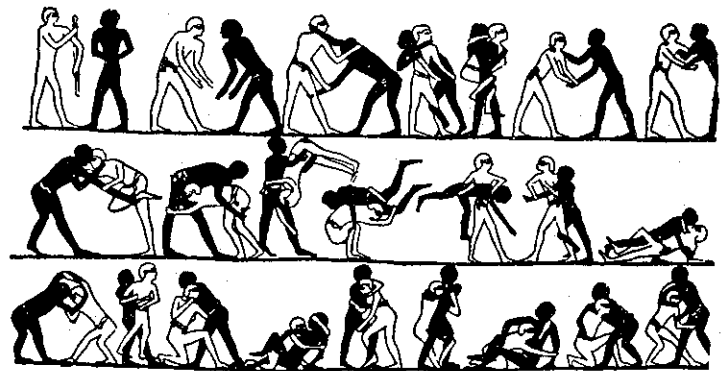


18. Mural, Tomb of Prince Mereb, Gizeh,  
4th Dynasty, about 2670 B.C.

*The Egyptian figure is still a loose addition of single signs, chosen according to their power. The front view is the strongest for eye and breast, the side view is the strongest for face and limbs. The difference from the cave-man's picture of a bison lies in the rigidity of the rectangular sign, the major force of which brings a higher security into the ubiquitous uncertainty of the magical world.*



19. "Scribes," Tomb of Ti at Sakkara,  
about 2500 B.C.



20. "Two Wrestlers," Tomb of Baket  
at Beni Hassan, about 1800 B.C.

*The Egyptian mind, not yet able to visualize immutable extension behind the flux of sense impressions, made no distinction between a simultaneous spatial status and a temporal sequence: the same rectangular system and the same framing house-sign signified either or both. There is no way of telling whether we are looking at different scribes or at the same scribe in different attitudes; and at the same pair of wrestlers in different positions or at many different pairs in one room.*

with its identical extension, SPACE, and that unchanging receptacle of all change, TIME. It cannot surprise us, then, that the Egyptians used the same symbol for the representation of several scribes placed alongside each other in a municipal office, and for the various phases of a wrestling match. Both representations were held together by the magical power of the same *house* symbol. Egyptian representation is not a "picture" in our sense, nor does it have a pictorial "frame." It has no relation to either time or space.\* It lives in a reality anterior to all these things, without any anticipation of that which is to come. It lives in a wholly energetic sense-world and hence acts itself energetically, as an object which imposes its own potent impression upon the surrounding aggressive sense-experiences. Its whole existence is made up of a vital transformative sensuality.

The reality of magical man and of his pictorial representations corresponds closely to his interpretation of the world as *MYTH*. The myth, too, is anterior to time and space. It is a sequence of images and so could be part of the time sequence except for the fact that the sequence is repeated identically year by year. Like the relief it, too, is an aggregate of sense-impressions. It remains within the restless and uncertain zone of sense. Pictorial representation, too, must be either renewed or magically resuscitated. The Egyptian funeral relief expresses this fact in its very symbols: a thousand loaves, a thousand harvests. Life is composed of sen-

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\* A distance is not yet a spatial abstraction. It is a complex sense-experience, powerful in its changeability. The Chinese thought in different kinds of miles depending on the terrain of traveling. To extend into magical thinking the later concepts of space and time not only effaces the meaning of these terms but also forces us to assume that the magical mind anticipated the Einsteinian time-space reality. We are too much inclined to carry our temporal mode of thinking into such loose associations of images. One might interpret them equally well as spatial simultaneity. The whole magical world consisted of a vague emergence, disappearance and transition of sensory complexes. The latter were not yet supported by a common abstract principle remaining identical behind them (Space), nor by another that would pass evenly along, threading events like a paternoster (Time). The depiction of wrestling, then, is not a movie. A movie in our sense shows changes within a strict framework we call space. In order to conceive time we must conceive space first. Yet the magical mind had no conception of time. What we call "eternity" is an infinite aggregate of the same things: harvests, festivals, etc. There is no Time behind the Egyptian days and nights to divide events evenly. Day and night are properties of a live sense-experience called "sun"; they change their length with that experience and must be kept from changing spontaneously by means of magical performance. There is no difference between event and symbol, between an object and its behavior. The image of the points of the compass serves also for the depiction of the four ages of Persian history. The repeated performance of the same sidereal fertility rite serves to depict the history of the Aztec state, including its wars. Even in Persian historiography we find that additive association of one and the same vital image: the triumph of Ahura Mazda over Ahriman. Nor was the magical mind capable of forming clear ideas of distances and their mutual relations. Such ideas would presuppose a supreme principle of order: space. Savages address the moon to keep her from swallowing the sun. Even the Babylonians still saw the sun recline on the far hills, and the temple pyramids reached into the heaven of the sidereal deities.

sory experiences alone. The myth has to be sung or spoken in order to be effectual and ward off evil through its sensual potency. This performance is the only means at the disposal of the magical mind to create wanted effects.

Magic life, then, was governed by a duplication of conduct. Only in this manner, however cumbersome, could that human species maintain itself against reality. Whatever it wanted to happen had first to be performed by means of physical rites. The narration of the myth and the representation of the image were both parts of that rite, which had to be repeated to the point of exhaustion. Being a complex of sense-experiences the organizing power of the rite was necessarily limited. Each myth overflowed into the next, and all mythical figures were changeable. There were so many different ways of explaining and creating vital natural events. For all mythical explanations were based solely upon external resemblance, and each sense-impression allowed of more than one parallel.

Even as regards cosmology we thus have several coexistent mythical interpretations, each of which may be of equal value and efficacy. We find the same vague association of disparate truths in religion and in eschatology. The life of magical man shows not only a double but also a contradictory pattern of conduct.

### III

Today this type of thought and action survives only in traces which we usually classify as SUPERSTITION. For the last 2500 years the magical concept of reality has been engaged in a running fight leading to gradual attrition and transformation into a better working mode of thought and action.

What has caused that transformation? The magical mind changed itself, under its own momentum, by virtue of its experiences. (The magical mind was never the same but always changing. Treating it as a stable species — as we have done here — is, of course, gross oversimplification.)

But how did those experiences bring about a transformation of the magical mind? What direction did that transformation take? Magic thought and action had been directed toward the creation of vitally important certainty. As I have already said, the primitive huntsman had eventually learned that pictorial depiction of an animal did not actually produce that animal in the body. His creation had to be extended to include the pictorial creation of rain and fertility. The creation of certainty involved proceeding from one isolated depiction to further pictorial complexes. The transition became intensified when the intensive

change of surrounding conditions necessitated an emphasis on plant life. The desired sensory experience finally came to consist of a whole complex of images comprising the various events of the year. This evolution spelled a profound change in the character of magic. The decisive thing for the hunter had been his ability to create instantaneously his ever changing wish projection, while now the emphasis was being shifted to REPETITIOUSNESS. Not only each event but the whole\*interrelated complex was now intended to impress the mind with identical experiences.

So the magical impulse, the creation of desired sensory experiences, turned out to be a self-changing force. The amazing snapshot-like looseness of the prehistoric image gave way to the rigidity of Egyptian composition. And yet both were conceived in terms of suggestion and action, the only difference being that the emphasis was first placed on the swiftness of the image and later on strict regularity. Yet the evolutionary process had led irreversibly from one to the other. It would be impossible to imagine an Egyptian image prior to a hunting image.\* Those forces of nature which were able to impose themselves and their habits upon all others — by virtue of their paramount energy — became the most powerful daemonic objects in the course of the magic era.

This final phase of magic evolution contained an extremely important element of change. The daemon held superior in different places subsisted even though it transformed itself into different daemons. The eventual result was a fundamental and universally effectual main daemon governing a host of minor and changeable daemons. We may see in this a complication and DEEPENING OF MAGICAL-SENSUAL THOUGHT. The magical mind was developing the ability to imagine a *being* that acted indirectly from within palpable objects yet did not change with them. So the zone of vague magical collocation split into zones of varying depth: ABOVE, we find a surface filled with low, ineffectual, changeable objects; BELOW, the vision of a changeless all-powerful force is germinating. This polarity was bound to transform the nature of reality throughout.

This "deepening" process was slow and manifold. The Persians, for instance, had developed the myth of an original calm and orderly realm of light that would be restored after a struggle between the forces of light and those of chaotic darkness. It would not have required an abrupt jump in the tendencies of late magical thinking to transform this orderly realm of light into a persistent background behind the struggle and so detach it from the foreground. Yet the Persians did not drive the

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\* Not, of course, in terms of absolute time, but within the framework of the energetic process of transformation.

deepening process to the point of a polaric dualism between Being and Becoming, Spirit and Body. That is why we say they remained magical. Only Plato fulfilled Zarathustra's drive to this new depth. The archaic Greeks themselves had in their Mother Goddess a daemon who persisted whilst she was transforming herself into minor daemons. (Traces of this conception still existed in early Ionian natural philosophy.) It is worth noticing that the very vision of this detachment was impossible without the typically magical vague changeability of all things. For exactly this magical heritage will prove to be the great troublemaker in the rational separation of Being ruling over Becoming. The deepening process is apparent also with the Babylonians. But it never reached the stage of strict separation of Being from Becoming either.

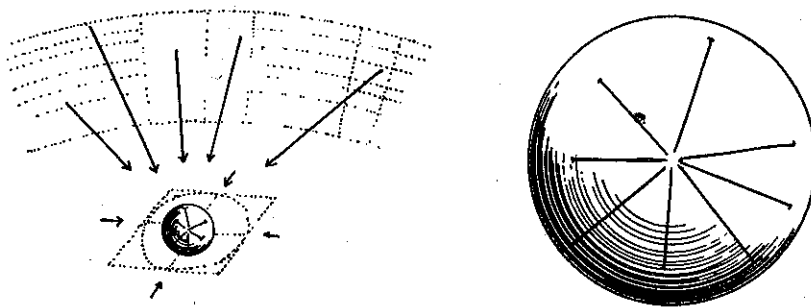
Even for the Babylonians of the seventh century B.C., the computation of sidereal movements was only a practical means of correcting the untrustworthiness of those all-powerful daemons.\* Yet, as the mathematical evidence regarding those fortuitous sidereal habits mounted, there developed a notion that perhaps certain numerical relations were after all more powerful than those arbitrary sky daemons. The numbers themselves had been considered magically potent for thousands of years. The supremacy of the number ONE over all other numbers had long been established. That number remained the same IN all others; indeed, it created them. So the identical numerical relations grew into main daemons enthroned above the changing phenomena, and in consequence contributed to that portentous "deepening" polarity I have mentioned,† that disassociation in the magical mind of an intrinsic BEING and a less real multiple BECOMING. At the same time these identical numerical relations gave the supreme natural Being a distinctness which it could not have acquired otherwise.

By their own momentum the energies of the magical mind were losing their identity and developing into the powers of what we call RATIONALITY. A fixed rational concept was detaching itself from fugitive sensory experience. We can see in Greek art the full import of that change. What we call Western civilization is just a further stage in the same evolution.

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\* That computation was used for magical ceremonies whose rites forced the daemons to continue their vitally important habits. The following advice given by one star priest to another shows how little convinced even the seventh-century Babylonians were of the trustworthiness of the constellations: "The moon should appear on the 29th day, but watch for it and see."

† Similar deepening polarities developed in all late magical cultures, e.g. in Persia, India and China. Yet they never became sufficiently intense to create a three-dimensional reality uninfluenced by Western concepts.



*Diagrams indicating the birth of Western rational thinking and its vision of a three-dimensional world.*

*The increasing detachment of a rigid ruling image from changing lesser images brought "depth" into the vision of the world. More and more purified and freed from sensuous changeability, the ruling image became an immutable system of geometrical relations born of one central idea. Thus, the changing sense images became the symbol of an inner idea of three-dimensional form. They were welded together into the continuous surface of that uniting, irradiating core. The surface bent around the inner idea of form. So, for the first time in human history the universe and all its single images became three-dimensional forms.*

*This transformation meant an open break in the daemonic interrelationship of all images in the magical world. Three-dimensionality is only possible through the polaric antithesis of spiritual Being and sensuous Becoming, and this again is the essence of rational thinking which relates all sensory changes to one idea as their cause. So, the birth of rational thinking asked for a new x-ray-like vision that saw form through changeable images, i.e., that saw "beauty" and created "works of art." The search for rational depth was the creative power behind the growth of Western civilization. Hence it is no accident that Western art became the only truly three-dimensional art.*

## 2 The Three-Dimensional World and Its Inner Change

### I

The detachment of Being from Becoming must be explained by the inner dynamism of magic behavior. It has led to a clear division between the RATIONAL and the SENSUAL. An immutable Being cannot be imagined by means of the senses. At the same time this development spells a complete transformation of man's world concept: the collocation of magical reality becomes the vision of a three-dimensional universe.

What do we mean when we speak of three-dimensional objects? Such objects are sensory phenomena held together from within by a rational core. This core is an unchangeable texture of fixed relations irradiating centrifugally toward the surface and thus ensuring unity. The core makes of the surface an expression of inner organization. The object gains "depth." It had formerly been an unbounded complex of unstable sensory signs. Now these unstable signs cluster as it were around a central idea of form, and that turns them into a unified three-dimensional solid. The unifying effect of such form depends on its detachment from extrinsic sensory changes. The form must be "absolute," i.e. absolved from change. The deeper the idea, the more strongly organized do we find the changing diversity of the surface. The magical image could create certainty only by imposing one outwardly potent sign upon all other signs. But now certainty can be achieved much more effectually by making surface the symbol of a rational idea. This idea remains apart, immovable, even though it is also contained in the palpable object we touch. The new mind sees with eyes we may compare to X rays. Whenever it encounters the changing world of the senses it penetrates that world and chains it to ideas of changeless forms. THE SINISTER TREACHEROUS POWER OF THE DAEMONIC OBJECT HAS BEEN RENDERED INNOCUOUS BY THE DEEPER MAGIC OF FORM. Each object — whether a human image or the whole universe — may come to feel the irresistible power of that higher daemonic principle called "reason." Each of the collocations of images which formerly had meant a plant, an animal, a human being or the cosmos itself, is now gathered around an inner core and thereby transformed into three-dimensional unity. Gradually the image of a spherical world emerges, together with the images of all physical elements as three-dimensional structures composed of atoms. We get the image of pure paradigmatic forms serving as ideal exemplars of objects; and we get the concept of the species as the essential form within all objects.

At the same time this transformation of the sensuous powerful im-

age into the new depth of the rational principle results in a tremendous liberation of human energy. The crushing weight of ritualistic imitation, which had been thought necessary for action by the magical mind, is about to be lifted. By thinking in terms of magic tradition we may be able to realize that it was as hard for the minds of the seventh and the following centuries B.C. to conceive of a new and deeper reality as it is for us today to imagine a supraspatial universe. It was a tremendous challenge to these minds — prepared though they were by the late-magical phase — to debase the live, suggestive experience of the senses, to see beyond it and to see it anew as related to something different — something that could be neither seen nor touched. Yet the transforming power of life is so strong that a few centuries sufficed to make the man in the street see a three-dimensional world governed and held together from within.

We call this new type of thinking, which relates all external change to a changeless rational core, *THE RATIONAL TYPE*. To think rationally is to look for an "idea" behind all seemingly spontaneous and incessant change. That idea will be invariable and form the common source of all external diversity. Diversity begins to cluster around a rational core, which reaches its ideal distinctness in geometrical and numerical relations. Rational thinking is thinking in three-dimensional forms. It liberates man from his continual fear of a spontaneous change of mind on the part of the daemons. The Greeks considered as their great feat the expulsion of daemonic forces. Man had become *FREE*. Whether in war or in social exchange, whether in economics, ethics\* or religion, everywhere his actions had been freed of the anxiety-ridden imitation of daemonic habits and signs. He now obeyed the rational idea of form as the source of all things and so became master of all things. Rational man became, in a manner hitherto unknown, reliant upon himself and his new understanding.

The formal principle of Being now dominated the changeable sensual flux. Rational man was able to develop from the concept of form the concept of three-dimensional *EXTENSION* which covered each solid form like the skin of a balloon. It was reserved for him, too, to imagine the stable supporting medium within which all changes took place: *TIME*. The dimension of time split off from the three dimensions of extension. *THE EXISTENCE OF THIS RATIONAL UNIVERSE DEPENDED UPON THE SUPREMACY OF FORM-PRESERVING EXTENSION OVER CHANGE-CREATING TIME.*

This new rational thinking may be called a *THREE-DIMENSIONAL*

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\* To be *good* meant no longer to perform effectual rites but to act according to that harmoniously balanced form which, being a strong and unifying basis, made possible a securer existence among men.

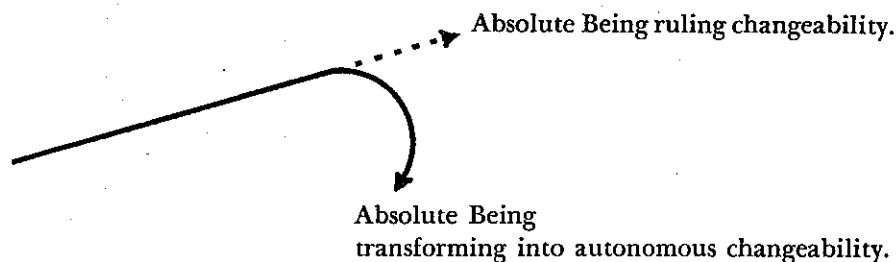
MAGIC, for it perpetuated the traditional drive toward the conjuration of change. Yet this drive had changed its own nature. It had become a faith in the existence of a rational, immutable core and hence a faith in the actual possession of an ultimate static truth. Now the big question arose: How were the forces of life going to react toward this new mental energy? Were they going to confirm it as the ultimate true course of thought and action? The answer was in the negative. The history of Western civilization shows that this new way of life which was based upon a changeless truth was bound to change that truth and by so doing disavow it. One might even say that this new rational world was born with a congenital deformity.

That deformity lay in the polar antagonism between Being and Becoming, which involved the supremacy of Primal Being over the powers of change. How can something so essentially opposed to change be at the same time the source of all change? How can the One create diversity without ceasing to be One? How can it conspire with change and yet preserve its changelessness? How can the water of rationality mix with the fire of sensual matter and yet keep from evaporating? Only by maintaining alongside of itself a power of change which it is yet unable to dominate and with which it still struggles in the magical sense. Or else by continuing to preserve the magical property of energetic change and hence not being ONE. A dilemma started within the Divine Being. That Being had to combine two irreconcilable properties in order to maintain its new sway. It had to be wholly detached from Becoming and yet contain that Becoming. So the Absolute was driven into ever-profounder depth. It grew more and more abstract, rational, universal and all-embracing. Yet the same transformation which made it comprise all change opposed its action in the sensuous context. The transition from the rational to the sensuous pole became ever more violent and the solution of that tension ever more difficult and miraculous. Finally, the static aspect of Being grew so vague and its mutability so strong that man slid automatically into the dissolution of the three-dimensional concept. This process became manifest in the eras of Enlightenment and Romanticism.

Let us not forget the following: the three-dimensional concept grew out of a vital desire on the part of magical man to argue, as an energy, with the other energies of life. The three-dimensional concept was the best available expedient for coming to terms with the dynamism of change. Is it so strange, then, that the concept should have been an attempt to find an ally proof against the terror of changeableness? And is it not natural that the experiences of that quest should have developed

the human mind to a point where it would relinquish its fear of instability and venture forward into a world without fixed identical source, especially since all renewed attempts to prove such an identical source have ended in failure?

The history of three-dimensional reality could be represented graphically as a straight pursuit of trend pursuing the Absolute — a pursuit which became deflected from its goal by dint of its very drive. The interaction of all the energies involved in the drive deflected it.



Absolutism was no effectual way of conquering those energies. Their mutability was too strong for any stable principle to obtain. Even the Absolute itself changed continually throughout its reign.

It will suffice for the purposes of this study to clarify briefly this self-changing process of the Absolute. We shall see how today it is turning of necessity toward a plastic creation which is no longer a symbol of the Absolute and, in consequence, no longer "art" in the strict sense of the word.

## II

Classical Antiquity saw the Absolute as a closed, finite form detached from magic sensual boundlessness; i.e. it visualized the Absolute still as something that could somehow be sensually seen in spite of its spiritual abstractness. Quite naturally classical thinking was still close to the sensual thinking of the magical cultures. That is why we call classical thinking "esthetic thinking."

To the ancient mind the sustaining depth of the Absolute could therefore never go beyond the individual, discrete organism. Such thinking in terms of individual organisms was the first natural result of the thrust from the diversity of separate daemonic things toward inner unity.

The world assumed the solid shape of the sphere, which could be further decomposed into an aggregate of separate solid forms. Throughout

classical thinking these forms are immutable beings and at the same time moving powers. The more the forceful movability grows, the closer we come to magical uncertainty and change. This becomes rather conspicuous with the world of the Atomists, who represented the left wing of Greek thought. With them form assumed a Protean character. It was the daemonic desire of atoms to move in immutable figures. Although these desires constantly collided they still culminated in a tendency to create the purest form, the sphere. Between these various moving forms we find the boundlessness of the irrational, NOT positive vision of Space.\*

Only where this vague boundlessness did not mingle with forms, but where every form was a solid thing and had direct contact with equally solid surrounding forms could a concept of EXTENSION develop that had any positive cohesion. Aristotle visualized such a contact inside of his finite form of the Spherical Universe. Hence to him extension ended with the limits of the world sphere; it formed the skin of this solid universe and was itself made up of an aggregate of form-skins. This Aristotelian image is the most advanced attempt made by the Ancients to conceive Extension.

What would TIME look like in such a world? Extension and time are Siamese twins. The form of extension determines the form of time. Thus time, the container of all changes, developed as the surface of the unchangeable core, represented by extension. Since that core was but a self-enclosed form or an aggregate of such forms, time could only be a revolution around them and so be an aggregate of cycles. Only much later, after extension had been conceived as Space, i.e. one homogeneous three-dimensional Oneness, independent of any solid form, could time become an even, unitary flow instead of an aggregate of closed cycles. The ancient concept of time then shows still traces of magic repetitiousness; it is partly absolute time, detached from concrete events, but partly repetitive imitation of sensory complexes. Even if we knew nothing else about antiquity than its concept of time as an aggregate of self-enclosed cycles, this fact alone would be sufficient proof that the ancients never conceived Space.

Corresponding with the concept of time, HISTORY is for the ancient world a repetition of one and the same comprehensive form.

HUMAN SOCIETY, too, was conceived as "form," as the organic Solid of the *polis*; society did not develop beyond an aggregate of such single organic forms. Classical political life described the cult of the ultimate truth of this esthetic form. The ancient citizen had value only in

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\* The Ancients therefore were yet unable to see "movement in space" which is the presupposition of seventeenth and eighteenth-century science.

as far as he identified himself with that divine idea. He was not free in the sense of the political personality of the Enlightenment. Both the ancient community and the individual were concerned solely with the self-sufficiency of this form idea, with their holding firm against the boundless and spontaneous daemony of destiny.

The development of this concept began with figures like the early lyrical poet Archilochos of Paros (ca. 650 B.C.). Archilochos saw himself as a spiny hedgehog rolled up to ward off the powers of change and to make of the Here, Now and Self an immutable central form. The process ended with phenomena such as the apotheoses of the Roman emperors. The individual figure of the divine emperor as symbol of the state is the highest political form of the Absolute available to antiquity. Once the emperor could not prove that he had mastered Fortuna, he brought about the collapse of the ancient world, which was identical with the solid form of the *civitas terrena*. Beyond gods and men hovered the *moira*, the old magical power of transitoriness. Wherever we look at the ancient world, we invariably receive the picture of a more or less solid form that has broken away from magic boundlessness. Insecure formlessness always looms in the interstices between separate forms.

What we call ART had its origin in the rational world. Painting, sculpture and architecture wished to perform the new magic of the inner Being. The picture began to express the new, deep certainty vouchsafed by the inner rest of harmonious form in layout and subject matter. So subject matter developed into a set of timeless ideas which rested behind the surface flux of happenings. In the same way one searched for ultimate ideal forms. So artistic reality, too, began with the development of solid organisms, and ended with aggregates of them. The illusion of depth, too, geometrically represented, never went beyond the depiction of egocentric separate forms or a loose aggregate of such forms. The unifying depth was never developed into Space by the ancient artists. Ancient perspective never became spatial perspective, i.e. perspective in the modern sense. Such a concept would have been completely alien to ancient thought; it would have required a superhuman evolutionary power.\* Light and shade were likewise seen as egocentric properties of separate bodies; they never traced back to a common spatial source. In architecture, too, the magic images were "deepened" and transformed into types, i.e. symbols of changeless geometrical thoughts which shaped life from within and ruled all forces. These thoughts were represented anthropomorphically throughout the field of ancient esthetic thinking.

\* When art history has smuggled Space into ancient thought, it has done so to prove its own inherited belief in an Absolute or in an eternal Adam-faculty of seeing Space.

ESTHETICS is also a product of the rational universe. Actually the "disinterestedness" of the esthetic experience is simply a less obvious, a subdued magical, purposiveness. Its purpose is to confirm an inner static condition and so it serves the needs of the rational mind. BEAUTY was the new charm which confirmed the belief in an intrinsically harmonious world condition.\* Neither the art of antiquity nor that of the Middle Ages, the Renaissance and the Baroque could have done without a rational canon of concinnity or ordonnance. Nor could there have been any *décor* without such a rational canon. No longer did a pot and its images function magically as immediate sensory signs. These signs became *décor*. *Décor* symbolized the inner structure of the vessel.

Classical antiquity died of the narrowness and closeness-to-sense of the Absolute as esthetic form. The ancient Absolute lay still too close to the surface of the sense world. Neither the communal form nor the *ataraxia* nor the *scientia* nor the artistic vision of the individual could prove their supremacy over the spontaneous forces of change.

Quite consistently then we meet toward the decline of antiquity an ever growing desire to reach a divine Absolute which would CONTAIN all forces of change. This tendency brought with it a withdrawal of the form to such a depth that it could be no longer described in positive terms. The polaric dualism of visualized form and the vague forces of sensual change had led antiquity to erect a hierarchical aggregate of form ideas. Plato's *Summum Bonum* raised the peak of this pyramid to greatest height. Now the Supreme Idea began to withdraw from distinctness in order to be able to embrace and contain all diversity. This new position involved a great strain on the Absolute. The Absolute was removed into new distances detached from all motion; and at the same time was to create and to participate forcefully in all possible changes. Small wonder, then, that the Absolute was forced to draw upon the resources of the magical world.

In NEOPLATONISM this transformation of the Absolute into an all-embracing total overflowing One became complete. The One remained intact — a magical miracle — although it flowed out again and again into the changeable Many. Neoplatonism translated the daemonology of the Persian light-cult into the depth of rational thought. Light deepened into the spiritual One. A picture of the universe emerged which was to remain of supreme significance for more than one and a half millennia of Western civilization. All that time this civilization is unthinkable

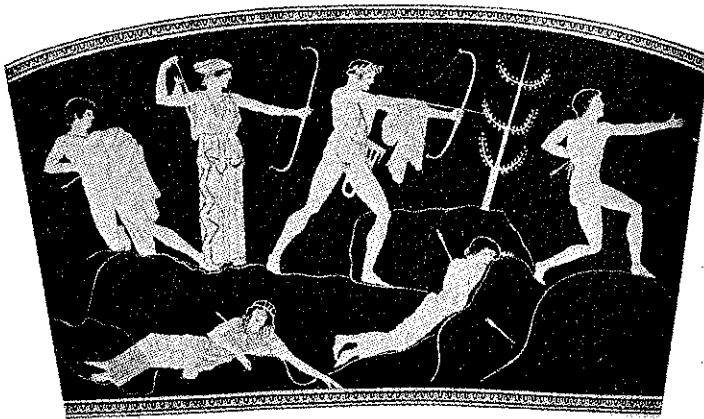
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\* Hence it was not until Antiquity that man began to COLLECT ART WORKS, i.e. objects which were receptacles of the secret formal beauty.



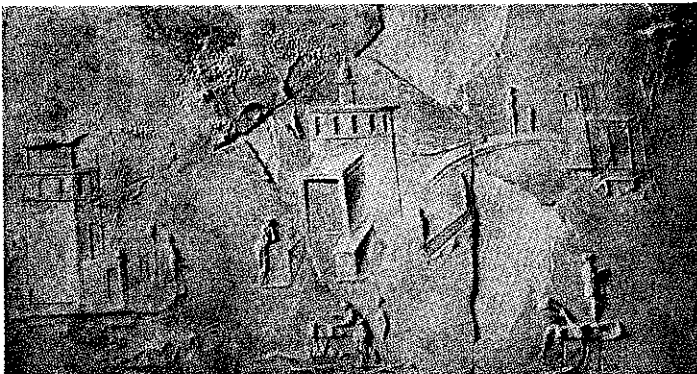
21. "Burial scene," Geometric vase, Attica, 8th Century B.C.

*Early classical painting still represented the late magical vision of a rigid systematization of changing images by the ruling daemonic image.*



22. "Apollo and Artemis killing the Children of Niobe," Vase from Orvieto, about 450 B.C.

*Later classical painting transformed this magical "flatness" into the rational organization of individual three-dimensional forms.*



23. "Landscape," Stucco from ceiling, Roman, about 20 B.C.

*Even much later classical landscapes, although sometimes they may seem different at the first glance, did not reach beyond a vision of aggregates of solid forms exposed to irrational boundlessness.*

Geometric vase, At-

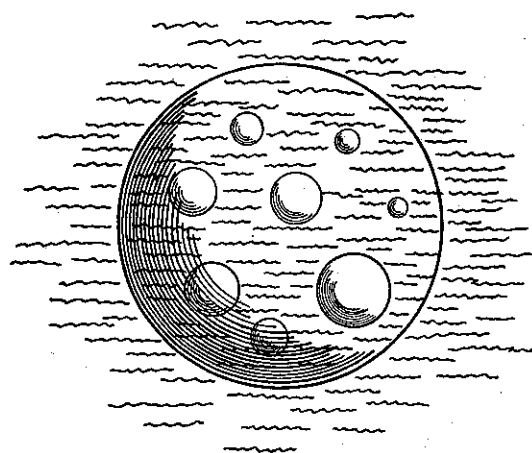
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*Diagram of the classical vision of three-dimensional reality.*

*The pioneering drive of classical antiquity for the rational core did not proceed beyond the hostile juxtaposition of the absolute certainty of self-sufficient finite forms and the daemonic uncertainty of boundlessness. The universe became a more or less firmly knit spherical formation exposed to vagueness. The same opposition of form to vagueness repeated itself inside the globe of the universe. Thus, classical rationality was not detached enough from sensuous visions and hence not strong enough to "subdue" the forces of change.*

without a vision of a universe totally embraced and penetrated by immutable divine Oneness.

Now the world is drowned in the superessential Light of the One spiritual Being which flows toward its antipode, the darkness of sensual non-being, thus forming a graduated cosmos. The superessential Light is Spiritual Form which creates forms universally but at the same time Motive Force which creates all changes. Being gradually peters out in the darkness of matter which has been degraded to something inert, malign and negative. The creative power of light, then, defines the boundaries of the positive world.

### III

The Christian MIDDLE AGES introduced into that world the desired positive life. The driving force behind later Greek philosophy had already been the need for a deeper and stronger inner unity of all mankind and of the whole world. With Christianity this desire found a profound and vital fulfilment. The harmonizing supreme light became a personalized loving God who maintained His changeless Being in the community of all spirits.

Even this new phase of three-dimensional thought failed to account satisfactorily for a number of conflicts between Being and Becoming. In Antiquity the individual form had been both at the same time: preserver and changer. Now the same thing happened to the all-embracing Superlight. Why had this absolute Being broken away from itself into extension and time? Why was the One at the same time a Trinity? Why could He become the Fall and lower Himself to partake of history? The change of the changeless was as inexplicable to the Middle Ages as it had been to classical Antiquity. It lived on as a myth that was now deepened into a mystery. The irrational, mysterious act in which the One transformed itself was the very foundation of the Middle Ages. In its expansion toward totality the Absolute was now forced to absorb much magical changeability, but this magic was embedded in a profounder absolute than it had been throughout Antiquity. Compared with the ancient world the Christian medieval world meant indeed a deliverance.

Man and state were no longer isolated as ultimate forms but embedded in an all-embracing God. The unity of the Supreme Light contained all the spontaneous change of history. HISTORY had come to assume a new and deeper meaning: it was now a single normative direction, a single passionate drive toward redemption, toward the celestial unity of eternal Being. All separate forms emanated from the overflowing One and returned to Him. So all separate forms became fused in a

HIGHER, SUPRAINDIVIDUAL UNITY, just as all separate spirits became one in the Christian communion.

The universe, too, assumed a new and larger structure. It was no longer isolated and suspended in boundlessness but reposed in the shell of the empyrean of the divine superessential light. The power of that loving spirit unified the universe in a wholly new way: in a supraindividual body, a MASS. All individual forms were kept in continual tension by their desire to repose in the ultimate One. The medieval world was informed with a novel, enthusiastic, unifying dynamism. EXTENSION reached — as in Antiquity — only as far as the globular world, but like the nature of solidity, the nature of Extension also grew into the higher notion of supraindividual unity.\* Besides, the solid world was no longer the symbol of ultimate truth but was itself an emanation of the higher spirituality of revealed religious truth; it reposed in that spirituality as in a supreme light. TIME had likewise abandoned its aggregation of separate cycles and grown into the higher unity of one closed cycle which emanated from static eternity and finally returned into it.† This fact alone — the transformation of extension and time — proves how senseless it is to speak of the medieval world as the “Dark Ages,” implying a negative period during which nothing happened.

The medieval world realized its emanative character in an hierarchical pyramid composed of timeless, typical ideas and figures. The latter were taken both from Christian doctrine and ancient myth and then compounded into a massive symbol. This cathedral-like hierarchy led from the dark chaos of the sinful world upward into the unity of the all-embracing superessential light. Medieval reality pushed in unending high-tension vibrations toward the creation of a total, rigid and massive unity. The picture of the universe as an emanation of the unitary divine idea was reflected in the medieval feudal system. That system was no longer an individual state struggling in isolation against uncertainty but

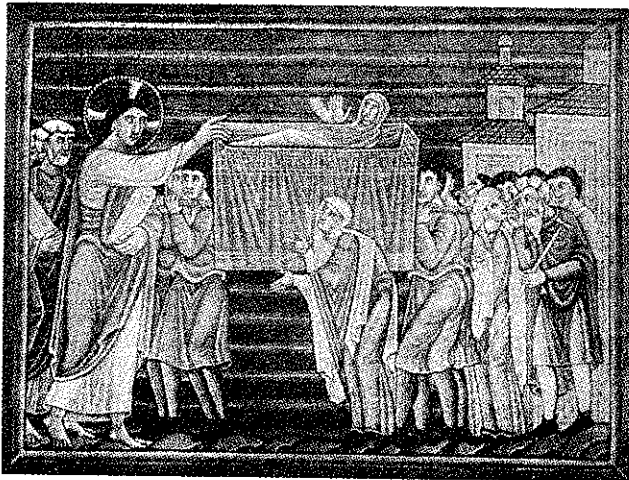
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\* A very interesting example of the change in the vision of Extension that took place in the Middle Ages is Witelo's (ca. 1270) remark that Heaven seemed much farther away, looking toward the horizon, where the eye could feel along the solidity of things on the surface of the earth, than it did looking above, where there was no massive continuity to create the vision of depth. This remark — together with others — shows that the Middle Ages had developed an unclassical concept of unified solidity, but had not reached the Renaissance concept of empty, homogeneous, three-dimensionality. Space was not yet born. To people after the Renaissance, extension above has seemed much deeper than at the horizon. They actually see, then, a different and more advanced reality than did medieval man, because in the meantime a species of mind developed which was able to see extension detached from solid massivity.

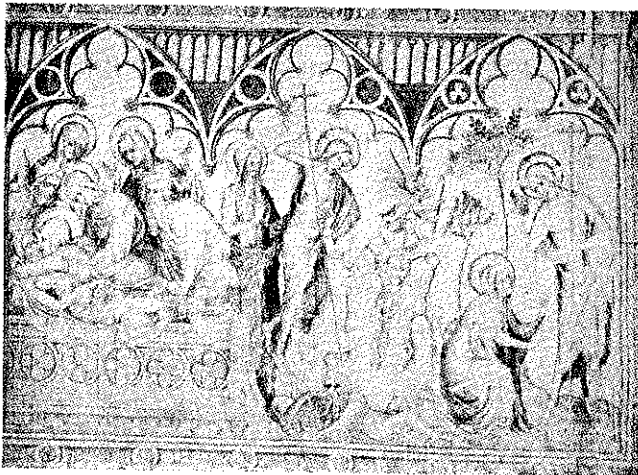
† All temporal change now reposed in the all-embracing Now of the divine spirit. Past, present and future were to St. Augustine emanations of the eternal Being in man's spirit. Whatever “becomes” is always permeated by Being.



24. "Justinian and Maximian," St. Vitale, Ravenna, before 547 A.D.



25. "Raising the Youth of Naim," Miniature, Codex aureus from Speyer, between 1043 and 1046



26. "Entombment" and two other scenes, The Parement of Narbonne, about 1375

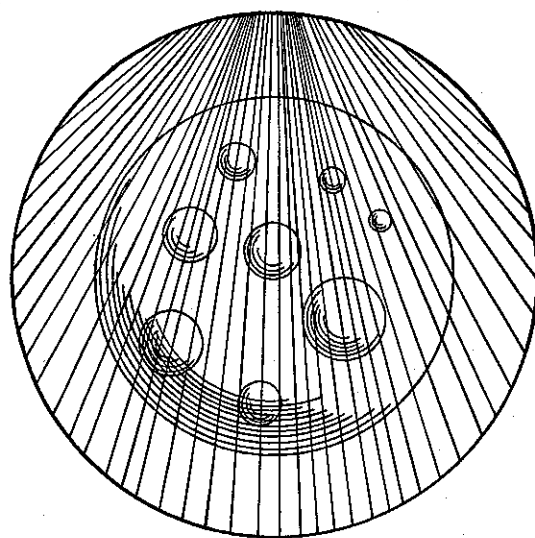
*The new total character of the form-idea introduced three characteristics into medieval art: the concept of supra-individual mass, the elongation of forms, and the golden or otherwise semi-abstract ground.*

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*Diagram of the vision of reality created by the medieval mind.*

*The evolution of experience from classical antiquity into the Middle Ages changed the divine Absolute from a finite form into the more spiritual vision of a unifying principle that extended beyond all finite distinctness. The all-permeating super-essential light of Love emanated into individual forms. It merged the forms into a supra-individual unity, and transformed the boundless uncertainty between them into a coherent embedding medium.*

a created unity comprising the whole of Christian humanity.\*

The emanation idea also helps explain three novel characteristics of medieval art. Where hitherto the void of non-being had yawned between all solid forms, now the GOLD GROUND appeared as a unifying, permeating principle. The gold ground was like the divine light, a semi-magical, semispiritual medium. It corresponded to that emanation which penetrated all things. The doctrine of emanation gave birth to the medieval concept of beauty, which demanded glowing colors and saw the edifice embedded in the divine light of multicolored Christian symbols, in the semispiritual, semisensuous light world of the stained-glass windows.

The aggregate of ancient forms became fused into the higher unity of MASS, just as in philosophy the individual became "something more than an individual" (Anselm of Canterbury). Nothing was real now but the spiritual unity of all separate beings. Depth existed in medieval art only as far as that unitary mass reached. That mass had become a wider idea in which all separate forms fused. The symbols of Christianity and antiquity survived in this new shape. Medieval man still saw things esthetically, although in the deeper sense of emanating superessential light. Their unity was still relatively concrete and massive. The restless desire of the sensory world for the source of light found its expression in the tendency of all medieval works of art to reach beyond classical inner balance and self-sufficiency. Practically all medieval figures display that tendency by an ELONGATION and the true classical central plan is mostly avoided in medieval architecture. But all this dynamism in medieval art was stilled in the silence of ultimate Being.

The motive forces behind this medieval evolution were the products of ancient thought. The classical drive for an absolute foundation of reality had resulted in the medieval vision of the world. But this result could in itself be nothing else but an open process of transformation. The very development of Dogmatic Absolutism contained the progressive spiritualization of the religious structure. That development strained and thereby intensified the spiritual forces of the individual; so the energies of medieval dogmatism evolved into the energies of Medieval Mysticism. Mysticism in turn gave birth to the world of the Renaissance, including the Reformation and Humanism. The Renaissance was only a link in the chain of several renaissances, in which the Middle Ages transformed the thought of antiquity. The Christian world, too, was a world of spiritual depth and therefore a "formed" world. It was unable to live

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\* It doubtless afforded more security and human dignity to a larger portion of society than Antiquity had been able to afford.

without rationality. It had to strive for a progressive liberation of the total Christian structure from its magic-mystical vagueness. The vital medieval drive led of necessity toward a spiritualization of its own massive and graduated cosmos.

The medieval cosmos needed the individual and his rational activity for the construction of its edifice. This live rational energy had first of all to overcome ancient individualism with its semi-magical diversity and to erect in its stead an all-embracing solid unity. But the erection of that unity led of its own momentum to the gradual abandonment of sensual, concrete massivity. This development spelled again a dual movement: the Absolute was being removed to less sensual depths but at the same time the forces of change were being released. The result was a heightening of the tension between the two.

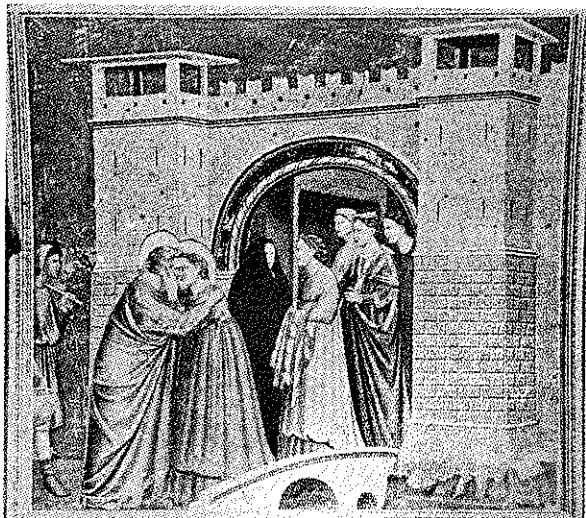
#### IV

The struggle of the medieval world for a purification and a deepening of the spiritual, together with a contempt for the mundane, led to the late phase of mysticism in which the individual sought direct contact with the divine. The cathedral hierarchy began to crumble. The concept of individual spiritualization now took on a simpler yet profounder meaning. It dissociated itself from the myth-laden medieval mystery and its symbol, cathedral hierarchy. God became the spiritual light which irradiated the world in a new and deeper way. God now lived directly in the organizing, life-creating power of the individual spirit. Mysteriously, the divine, superessential light was still both source of all form and source of all movement. Now northern Europe experienced more strongly God's latter property, i.e. the total boundlessly overflowing force of the Absolute, while the South (Italy) fell under the spell of the idea of total form. Both movements were further transformations of the Neoplatonic total unity of the world.

SPACE is the purification of the idea of total form. It grew out of the symbols of medieval "light metaphysics" and cannot be conceived separately. It was a product of the inner — still half sensuous and mystical — unity of mass and gold ground and, like the superessential light, was both a formal and motive agent. To the men of the Renaissance — Leonardo, Reuchlin, Copernicus, Cardanus, Bruno — space and the total unity of its pure formal relations was the ideal source of all motion.\* Space still preserved its mystically emanative character and was

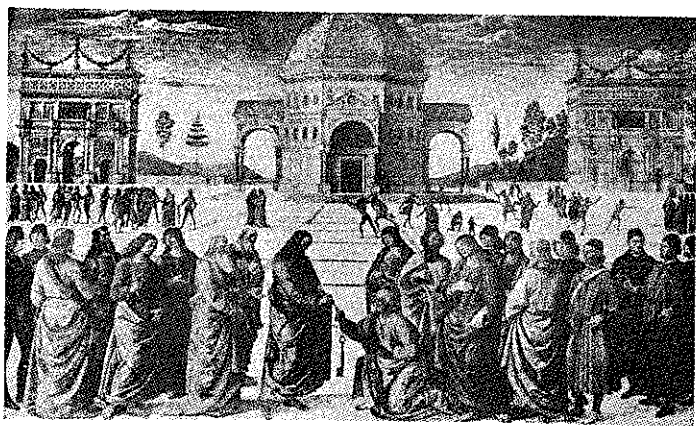
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\* Until Kepler, astronomers were satisfied with a cinematographic description of planetary movements, i.e. they still saw the harmonizing idea of form emanate mysteriously into motion.



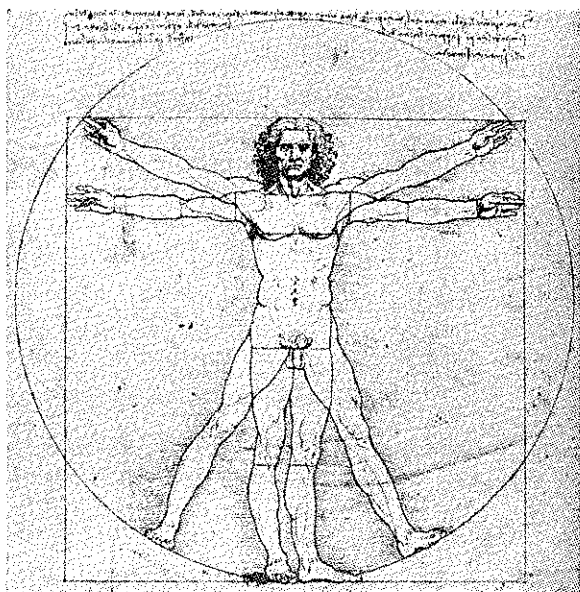
27. "The Meeting of Joachim and Anna," Giotto, Padua, Arena Chapel, 1305

*Space in the embryonic stage of a narrow cube developed from surrounding homogeneous mass.*



28. "Christ giving the Keys to St. Peter," Perugino, Vatican, Sistine Chapel, 1480-82

*Space grown into the perspective framework containing and unifying all solid forms.*



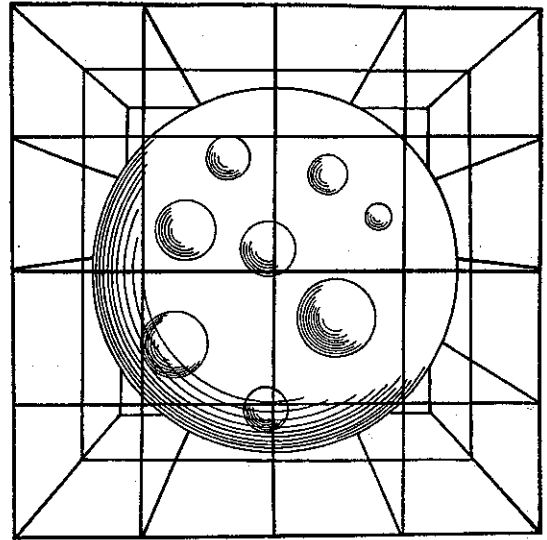
29. "Proportions of Human Figure," Leonardo, Venice, Academy, about 1500 (?)

*To Leonardo "the natural condition" of the world is the harmonious aboriginal Being of the form of Space. All force and movement are only "fortuitous" disturbances "with brief life." "Force" is intelligible to man's mind only as "a spiritual power" ruled by the mathematics of "proportions." So, as in classical antiquity and the Middle Ages, the Absolute is still wrestling — half magically — with its self-created counterpart. The Renaissance science of mechanics is therefore the victory of the idea of rational form over irrational — daemonic — disturbances.*

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*Diagram indicating the vision of reality of the Renaissance.*

*The inner tension in medieval reality produced the urge of the Renaissance to create the vision of a world that was better unified than the medieval world, because it was united by the all permeating, rational principle of absolute Space. The immutable condition of Space is the ruler of reality. Art — including perspective construction — extracts from the sensuous reality the pure truth of never changing spatial proportions and ideas. Time cannot interfere with the total rulership of spatial form. Time can always be reduced to timeless points. "An instant has no time . . . and instants are the boundaries of time." (Leonardo)*

bound up with Neoplatonic mysticism. It was a higher, purer and more total image of a spirit of light emanating into extension. Extension was now purged of the concreteness of ancient corporeality and medieval massiveness. The space concept was less esthetic and farther removed from magical thought than all previous concepts. Space was a purer demonstration of the omnipresence of a spiritual godhead. It showed convincingly that the loving *communio* of the Christian God could be more rationally expressed than it had been in the massive structure of medieval symbols. Space was the most complete embrace and penetration of changeable diversity by a stable spiritual Being. The means by which this spatial unity imposed itself upon the sense world was CENTRAL PERSPECTIVE. Small wonder, then, that the greatest Renaissance artists busied themselves with perspective to the point of making a cult of it. To believe in space was a form of religious activity. The spatial world represented a hitherto unknown triumph of spiritual union, for the world now became one blessed static harmony. He who had faith in space could see the blessed governance of eternal three-dimensional relations in each natural or intellectual change. It was no accident that during the Renaissance the Christian mysteries were spiritualized into a single, simple and ever-present deification which strove everywhere from chaotic sensual multiplicity and change toward the condition of spiritual unity. The omnipresent rational idea of geometrical form had loomed in medieval art works behind the representation of Christian dogma. It now emerged as the new unitary principle from their mass. The total unity of reason grew into space and enveloped the Christian edifice. Faith and intellectual inquiry became reconciled on a deeper level. The massive cathedral-world developed into a spatial symbol, i.e. the symbol of a deeper omnipresent God whose spirit penetrated and unified all. But we must not forget that without the totality of the Neoplatonic Absolute, without the all-embracing unity of the spiritual superessential light, neither a gold-couched mass world nor a spatial world could be imagined. The rationality of the intellectual superessential light was the womb which gave birth to space.

The concept "space" became possible only through the conception of a rational scaffolding which exists anterior to all solid extension and may be perceived without it. This vision evolved gradually over several centuries, and developed toward the Renaissance.

Psychology has taught us that even today our brain repeats this biogenesis of Space by developing the spatial concept through abstraction from the surrounding mass surface. (The same process can be studied in the art of Giotto and the Trecento.) Yet this new, even extension of space

did not become infinite until the Baroque. It was too frightening an expansion to see infinite emptiness where there had been the certitude and safety of a solid sphere made of bronze and later of crystal. Even Kepler still bounded space with the spherical crystal cup of the zone of fixed stars, thus opposing Bruno's vision of infinite space. Time, too, could not abandon its circular form until space became infinite. But as soon as the step toward infinity had been taken certain difficulties arose, regarding not only the Christian universe whose heaven was endangered but also the concept of the mundane world as infinite space. For it is almost impossible to imagine infinity as static balance, i.e. as a Being which "maintains" its inner unity.

Thinking in SPATIAL terms involved a systematic organization of all pictorial content according to a great norm, and the erection of a new unifying structure of types. It involved forcing all change into the condition of a balanced harmony which penetrated everywhere. This, too, was part of the new spiritualization of the world. The nature of the Absolute was so deepened, and the concept of a new, more permeating stasis was reached.

The Renaissance established, like the Reformation, a democratic autocracy of liberated minds. Out of the massive unity of the medieval feudal order grew the National State and the Free Individual. Yet an objective, generally recognized truth was still hovering over all individuals. Individual states and persons became the representatives of the One and Only Truth\* and this awareness developed in time into autocracy and, again, hierarchy, a development amply demonstrated in the history of both Renaissance and Reformation. Both led of necessity to a new kind of hierarchical absolutism.

## V

The Renaissance contained seminally the BAROQUE. Its conflict with the energies of its milieu made the species, Renaissance, change into the species, Baroque. The national state was transformed into world empire. The individual — banker, condottiere, merchant, artist — was driven by his own dynamism to assume the role of the sovereign. A new hierarchy developed from the medieval hierarchy of estates, which had become loose and individualized. The old hierarchy had been founded

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\* This goes to show once more the typical inner discordance of the One Absolute, which was made to contain individual diversity and dynamic change. Each artist of the Renaissance considered himself a possessor of the right proportions and ideas, and absolutely superior to the medieval artisan who had worked manually. The Renaissance gave birth to the drawing-table architect, the "pure designer."

on religious dogma. The new hierarchy was established more and more on pure "rational" thought. Religions were explained by the working of an eternal divine reason. The Baroque dictatorship of right thinking, which decreed THE RIGHT organization of political, social and economic life, was the direct outgrowth of Renaissance philosophy and conduct. The Renaissance academies presaged the academies of Baroque rationalism which determined the eternally correct norms in all walks of life by means of purely logical speculation. Life and its energetic change had now to submit to the total pattern of mathematical logic. God, formerly the master geometer, became the master mathematician. Space and space-supported time were no longer ultimate. From the unextended matter of mathematical thought emanated the extended matter of time and space; from the latter, in turn, inert solid matter. This overflowing of purely logical thought into extension and the concomitant material solidity of mobile reality became the new divine miracle on earth. Nothing was true and right except the primal One; everything else meant gradual degeneration.

The mysticism of this purest phase of rational thinking shows how strongly magical concepts persisted even in the profounder form of three-dimensional thought, and how much the static basis of reality relied on the dynamism of change. Leibniz, whose philosophy represents the peak of this way of life, explained in his *monadology* the mobility of the universe in terms of Neoplatonic emanation. Together with the greatest philosophers of his era he traced, in his *Mathesis Universalis*, all action to the efficiency of mathematical thought.

Yet perhaps the best illustration of this total supremacy of spiritual Being over material Becoming is furnished by the way in which that era rationalized the surface structure of the earth. "LA GRANDE PERSPECTIVE" of the prince's castle, which extended beyond the geometry of the formal garden, beyond the formal town layout, beyond the formal road pattern, even beyond the horizon into infinity, was a projection of the one right thought, starting from a center which represented God. Nowhere does the brutal fanaticism for a static unitary foundation of life show as clearly as in this "geometrization" of natural and human life. All creative energy of change was crushed in the embrace of this timeless and distinct idea. Planned economy (mercantilism), planned society, state absolutism, compulsory education and empire politics — all these uniformities are reflected in that artistic total form of the earth-surface.

All the things which we today consider "fake" in that art: the deceptive perspectives, the violation of the functional, the forcing of ideal sym-

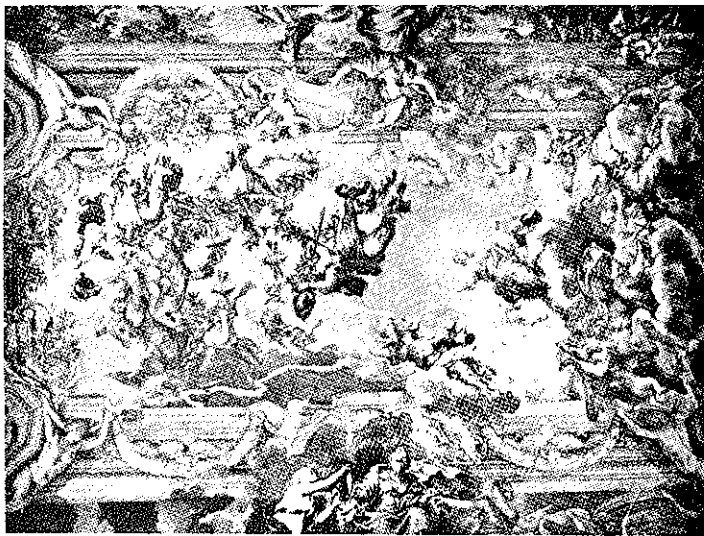
metries and classical proportions and structures upon the actual structural material, the bloating of the body into a superbody, the artificial exaggerated mobility, the demonstrative gestures, the transformation of historical life into a system of timeless allegories, symbols and types — all those things can be understood only as the universal power of a spiritual idea overflowing into sensory life. The whole movement of garden, edifice, sculpture and picture is ultimately frozen into the immobility of one master-idea. The gushing and spurting fountains of the garden and the automata which populate it are, like the laboring *canaille*, moved by the static idea of the intellectual architect.\* The planning elite hardly move. The mystical emanation of their minds overflows and creates space, and with it the even baser deception of physical motion. Physical power is no first-rate truth; it is only indirectly real. What is real is the purely mathematical idea which moves the universe and contains every conceivable irregularity and change. This never changing idea takes all possible novelties in the iron tongs of its predetermination. It regulates all change, *a priori* and for all times to come. The absolute idea indeed has reached a peak of strangling omnipotence. It was this terrifying power which Leibniz supposed to live in his idea of the calculus.

England had seen the rise of another great thinker with a more modern brain: Isaac Newton. He, too, had discovered the calculus, but to him this mathematical formula was no mystical emanation of a divine super-essential light cascading down to physical energy. He said, "I don't go in for such hypotheses" ("Hypotheses non fingo"). Two world concepts collided at the beginning of the eighteenth century, concepts which had long been moving against each other. The eighteenth century considered Newton the father of ENLIGHTENMENT, the movement which was to shatter the dictatorship of rational Being over sensual Becoming. The hour had struck for the dissolution of three-dimensional reality.

There was yet another movement which helped toward that dissolution: ROMANTICISM. In order to imagine clearly the tense atmosphere around 1700 we must add to the names of Leibniz and Newton the name of young Lord Shaftesbury, who may be called one of the first representative figures of Romanticism.

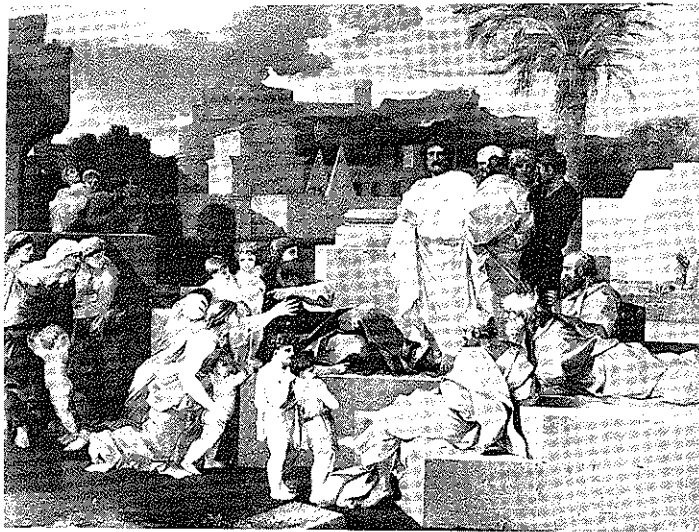
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\* This kind of mobility is reflected in *Occasionalism*. Here the mystical miracle of the total dominance of the spirit still survives. In medievalism, the supreme light of love and reason informed physical extension and physical motion. In *Occasionalism* extended form and its movement attend inexplicably a pure mathematical thought. Indeed, the supremacy of absolute spiritual unity over diversity and the forces of change had reached a degree of violence that could not last.



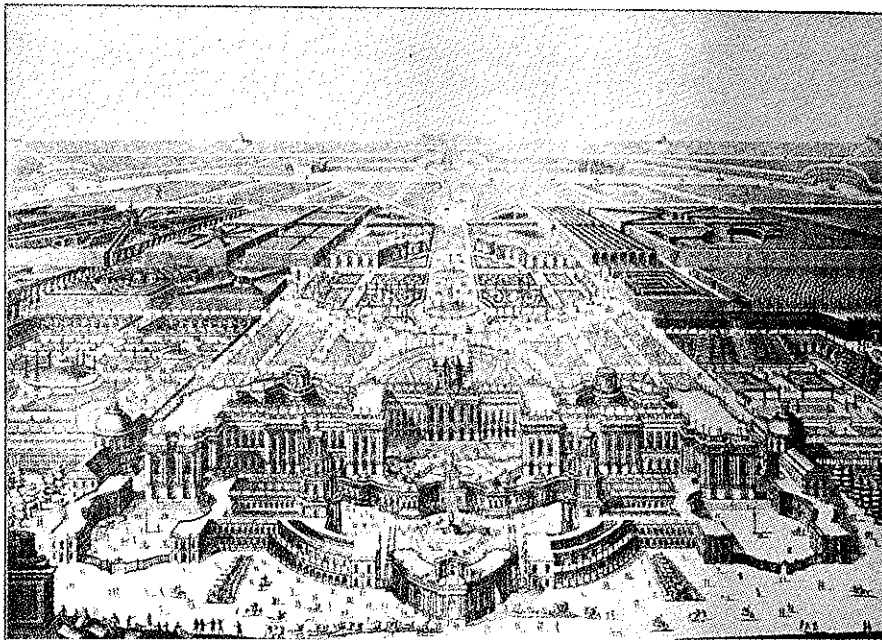
30. Allegory representing "the triumph of the Barberini family." Pietro da Cortona, Ceiling Fresco, Rome, Palazzo Barberini, about 1636

*To the Baroque—as to the Renaissance—the ideal subject matter was the allegory in an "ideal landscape." Both symbolized the timeless unity under the rulership of absolute Being. In the Baroque this Being was no longer the static balance of Space but the dynamic perspective sweep toward infinity.*



31. "Christ and the Children." Sebastian Bourdon, 1660's

*Mathematical thought was at the same time rigid and dynamic; so was rationalistic Baroque art.*



32. "Ideal Palace." Paul Decker, 1711

*Peak of rational dictatorship subduing all life on earth.*

ating "the triumph of  
Pietro da Cortona,  
e, Palazzo Barberini,

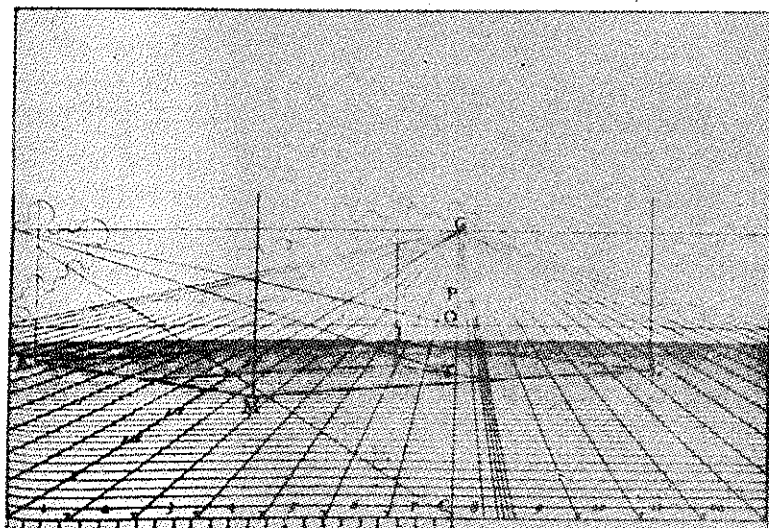
as to the Renais-  
subject matter was  
"ideal landscape."  
e timeless unity un-  
absolute Being. In  
eing was no longer  
f Space but the dy-  
sweep toward in-

Children." Sebastian

ht was at the same  
namic; so was ra-  
art.

deal Palace." Paul  
r, 1711

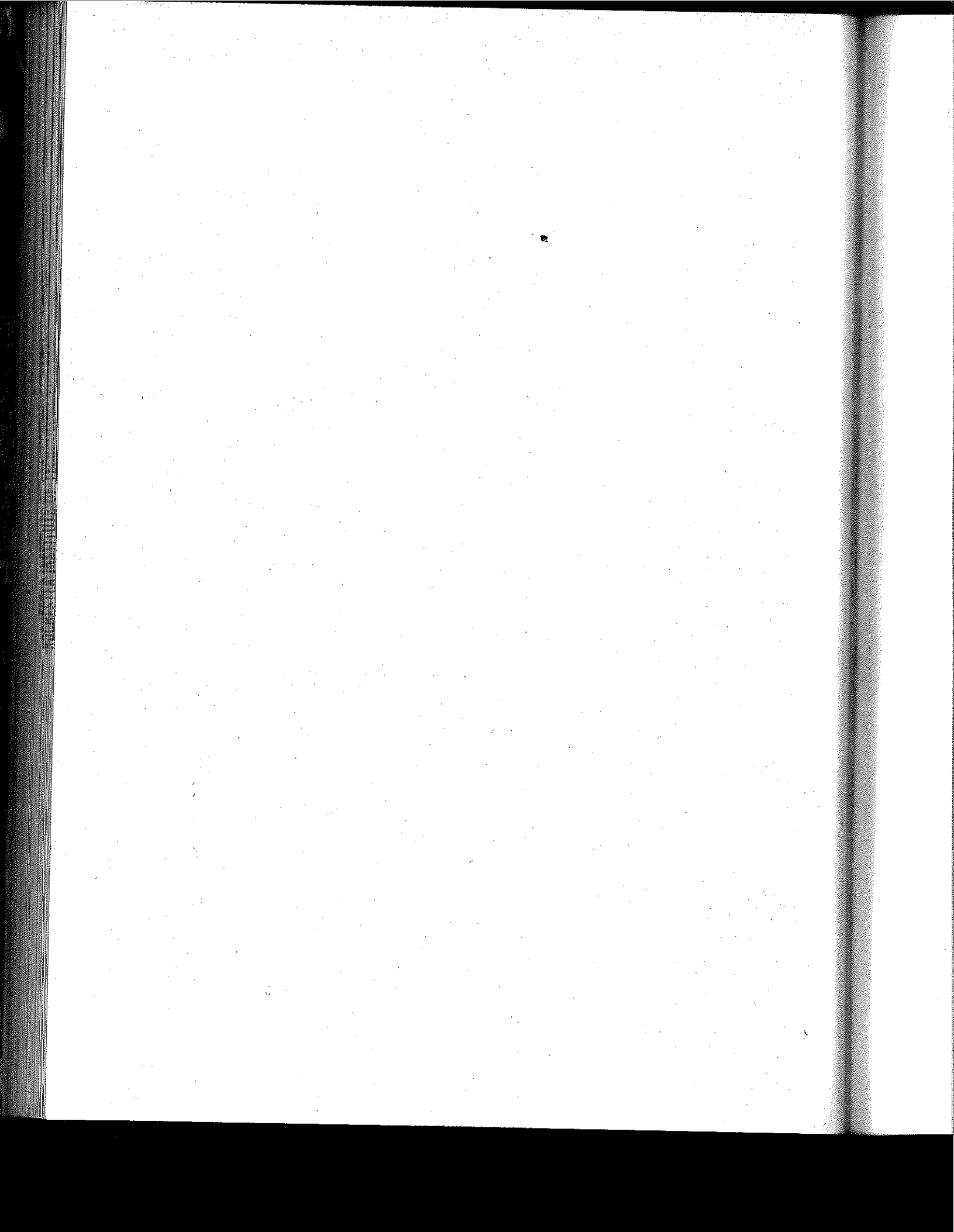
of rational dicta-  
p subduing all  
n earth.



*The Baroque represents the growth of the Absolute to the peak of its coercive power. The utter purification of spiritual Being and its totalitarian power of predetermining and creating change forced the Absolute to encompass such a degree of mysterious dynamic changeability that this total victory of Being over Becoming actually destroyed the static foundation of rational three-dimensional reality.*

*Perspective construction lost more and more its Renaissance attachment to extended matter and became finally (as with Marolais) a purely mathematical procedure, which projected unextended absolute thought into extension and movement, predetermining both.*

*We use Desargues' perspective construction (of 1636) as a diagram of the spiritualized concept of reality of the Baroque. Here the new dynamics of infinitesimal mathematics produce at any optional place the point of infinity where all parallels converge and thus build up perspective space as a purely spiritual creation without the help of the sensuous world from which the Renaissance still had to extract its perspective.*



### **3 The Dissolution of Three-Dimensional Reality: the Split-World of Enlightenment and Romanticism**

#### **I**

The impulse of Western civilization, from antiquity to the Baroque, toward an unchangeable divine truth governing all change, had been inherited from the magical way of life. This western drive was identical with the evolution of RATIONAL THINKING, of THREE-DIMENSIONAL VISION and of the notions ART and BEAUTY. These four concepts are indivisible since they all express the search for an inner spiritual cause of the changing phenomena on the sensuous surface. People believed that it might be possible to crystallize this spiritual idea in a definite, ultimate form. They believed that God existed in a definite form filled with a definite content. In this deepened form survived the all-powerful desire for security which had been the vital energy of the magical world. We have tried to intimate how each form assumed by the Absolute turned out to be too narrow and rigid for the forces of life and how in consequence the inner polarity of Western reality drove the Absolute into an ever remoter abstractness. But this removal only increased the tension inside the ultimate Being as long as it remained also the force of change.

So the vital energy of the Western mind created a drive which threatened its own universe. EXPERIENCE, called upon to confirm the existence of the Absolute, actually pushed the Absolute into an ever-receding distance. It divested the Absolute progressively of its sensual mundaneness and so changed its identity. Throughout two thousand years every individual was driven by this fundamental urge, was led by this will-of-the-wisp, toward affirming an ultimate Being. Even movements like those of the ancient Sophists and the medieval Nominalists, whose passion was transformistic observation, treated induction only as a means for establishing a purer God. Such movements were the offspring of their respective worlds and transformed their inherited realities only piecemeal. The two movements, Enlightenment and Romanticism, which fought to change the Baroque heritage and so dissolved three-dimensional unity, were likewise but champions of a further purification of the Absolute.

ENLIGHTENMENT had its sources in medieval Nominalism and in the Empiricism of the Renaissance. Newton, the "father of Enlightenment," stood on the shoulders of Galileo, Francis Bacon, Kepler\* and

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\* Kepler was the first astronomer not merely to speculate on the form-idea of Harmony, but also to search for a dynamic-mechanical source of planetary movements. Here begins the open split in the absolutistic unity of the universe.

Locke. They all represented a more modern mental species than Descartes, Spinoza and Leibniz. Yet all Newton really wanted was to remove God into a purer sphere. He wished to free God of the rigidity and narrowness of rationalist distinctness. He saw in the rationalist neglect of careful inductive observation an insult to the live power which manifested God in nature. God could be found not only in pure ratiocination but also in observable change. His reign was to be truly supreme. PHYSICAL ENERGY which moved atomic matter became yet ANOTHER expression of the ABSOLUTE. Temporal forms were now no longer contained in one creative timeless idea — the old tenet of emanative mysticism — but God also thought directly in physical changes. Energy created ever-new forms through a ceaseless redistribution of matter. True, God still had an ultimate idea about the world, but this idea could no longer be fathomed with closed eyes and through pure speculation. Incessant testing observation now joined the efforts of pure thought. The objective distinct ideas became eternal intellectual energies, struggling in each individual with his sensory observations and eager to build a rational world. But that meant that ultimate truth receded into an unfathomable distance. Alongside the spiritual formula of ultimate truth we now find the energy which will transform it. Any ultimate statement regarding the Absolute had become impossible, thanks to observation.

So the exclusive reign of the spiritual form-idea collapsed. Out of the very trend of Western civilization that had established that reign a movement evolved which was destined to destroy it. The intense static unity of the Baroque world was cleft and became a hybrid SPLIT-WORLD, IN WHICH THE SPIRITUAL ONE HAD TO SHARE THE REIGN WITH THE POWER OF CHANGE. But this meant that the INDIVIDUAL had to become, in a radically new sense, the vessel of truth. While in the Renaissance\* he had subserved a definite absolute truth, he now became a CREATOR OF EVER-NOVEL FORMS OF TRUTH. These truths were born of the perpetual struggle, in each individual, between his pure speculative power and his sensory observations. Autonomy was accorded to the historical subject, i.e. the always different particular representative of that new deity, in which Being and Becoming were fighting for supremacy. The Being of Space was wrestling with the Becoming of Time. God began to struggle against Himself.

We all know the tremendously enriching and liberating effect this new philosophy of an energetic universe has had upon life. What would our civilization be without autonomous man who feels a much greater responsibility toward himself than did the servant of a given dogma?

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\* And in Antiquity and the Middle Ages.

He is able to develop much higher transforming energies; he is morally obligated to stand on his own feet, to grapple with his problems, and he conceives society as "fair play" among various and autonomous personalities. Our civilization is bound up with the classical sciences and the industrial revolution which grew out of them. The invasion of static ultimate truth by transforming energy has revolutionized every field of human endeavor. For everywhere life had been stifled by the complete subjection of transformation to the pattern of pure reason — the *esprit de système* — and receded into depths leading to a new split reality. The new rationality which was represented by the "systematic spirit" of Enlightenment no longer followed — according to Voltaire — one guiding light but two: reason AND experience. The enlightened mind believed in the powers of change and saw in them an adjunct of the ultimate stable unity of reason. The planned economy of mercantilism made way for a "self-regulating economy," for the "free enterprise" of the autonomous individual. The absolute state receded in favor of the voluntary contract of the individual; compulsory education in favor of the development of a free personality and its particularities. The autonomy of one idea ruling all individuals turned into the autonomy of all individuals. The unchangeable One could now be apprehended only in the changeable Many. It was indeed a divided world created by a divided personality.\*

This world was still held together by the traditional but now somewhat effete belief in an ultimate static unity which was assumed to create harmony in spite of movement and change. But since observation had to prove an ultimate unity, this harmony became more and more shadowy, for observation demonstrates new phenomena every day. The road of the Enlightenment has led from a belief in the existence of a supreme law to a doubt in such an existence; from a belief in basic units to a questioning of such units; from a belief in timeless spiritual energies proper to the individual to a distrust of the individual's autonomous value. It could not have happened otherwise. For, once the passionate need for an unconditional Absolute had changed — through the experience of two thousand years — into an urgent belief in the powers of change, all the Absolute could do was engage in a running fight. LONG AND BITTER EX-

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\* It is quite natural that the individual now freed from the embrace of the Absolute thought to find his semblance in ancient man and his reality. Antiquity had NOT YET had that all-embracing unity which Enlightenment had relinquished. In this distinction lies the profound evolutionary difference between the two cultural phases — a difference that could not be fully grasped by Enlightenment because it still believed in always identical energies of the human mind. It projected into antiquity an ideal collaboration of those mental energies with sense-experience, looking upon that collaboration as exemplary. Even today the Enlightened Individual is prone to regard himself as reviver of antiquity — a phenomenon which can be studied in our present educational system.

PERIENCE FINALLY FORCED THE WESTERN MIND TO LOOK FOR AN ULTIMATE CAUSE WHICH WAS ITSELF LIABLE TO CHANGE.

In art, this change produced by Enlightenment led to a transition FROM FORMAL TO FUNCTIONAL THINKING, and consequently to a profound transformation of the esthetic experience. In keeping with the split character of the enlightened world this change was at first hemmed in by traditional absolute notions. To Newton and classical physics all movement is still "movement in space." Even though observation had shown nothing beyond a wholly relative movement of points toward each other, the existence of an absolute space with fixed geometrical points was still maintained as an ideal framework. Here again we may see an expression of the same split character. Rigid space guaranteed the "preservation" of an unchanging matter and an unchanging energy; it admitted only one normative thought which was supposed to contain its absoluteness and the absoluteness of its relations. The static life principle, symbolized by space, was still clinging to its ancient dominion and unwilling to abdicate in favor of its arch-enemy, transforming energy. Function, then, remained a mere redistribution of solid atoms which led to ever-new spatial forms. This energetic world could be arrested at will, and be seen as a static space structure.

We find a perfect parallel in art. The revolution of Enlightenment affected, above all, the concepts of architecture. The energetic approach toward matter led toward the use of more energetic materials and so toward new forms. But it also overthrew the academic dictatorship of the One and Only Form in the ground plan. Function demanded, for instance, that the irregularity of changing shapes should replace symmetry. In America functionalism led in the seventeenth century to furniture that could assume different shapes. In painting it prepared the way for IMPRESSIONISM. Already in the fifteenth century the empirical spirit of Nominalism had led to a gradual transformation of the mystically emanative golden "supreme light" to the mechanical phenomenon, light. Hand in hand with this went a transformation of the dogmatic-symbolical concept of daily life and its diversity into an observation of life as energetic change. We can study this rift in the work of Rembrandt and Franz Hals.\* The road leads from the Empiricism of the seventeenth and eighteenth centuries to the Impressionism and Pointillism of the nine-

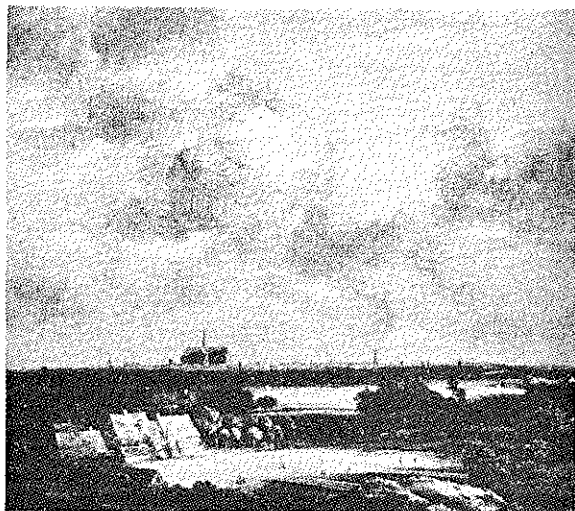
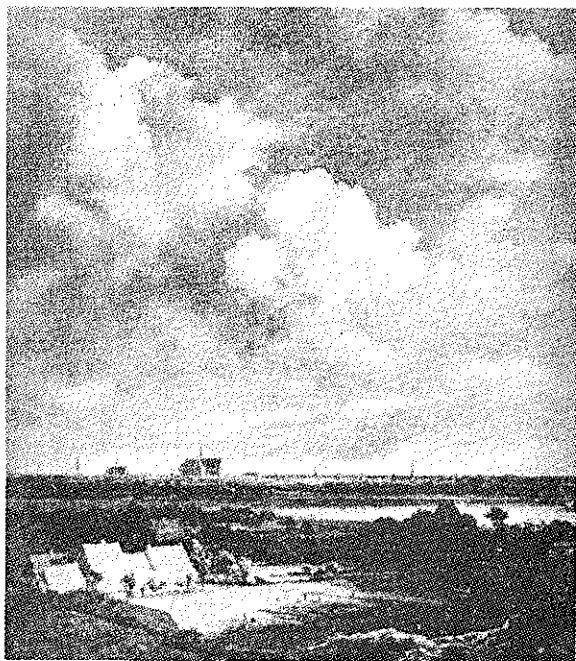
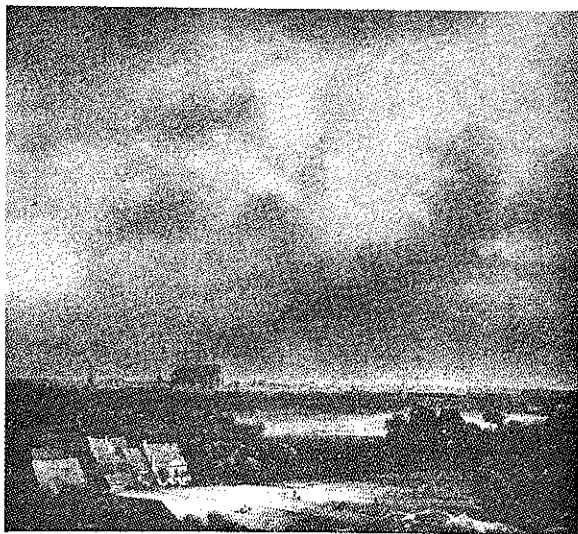
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\* Rembrandt's light is still the emanative spiritual light which generates the universe and then flows on into darkness. The light of Franz Hals seizes the fugitive moment of mechanical movement in space. So Rembrandt's images which symbolize the illumination of hapless matter are transformed by Hals into snapshots of unspiritual material commotion.

teenth and twentieth centuries. What this painting demonstrated was the new "truth": a world in which material particles are unceasingly redistributed. Like classical physics, which had developed Newton's concept of reality, painting, too, gave us an "impression," artistic this time, of an instantaneous cross section through "movement in space." But, as little as classical physics, did Impressionistic painting undermine the principle of an absolute framework. Monet's series of the "Cathedral of Rouen" offered a series of snapshots, each of which gave a different form to the same spatial stage. The emphasis of artistic observation had shifted to a grasp of ever-new forms which energy created amidst matter by redistribution. Impressionism was no longer interested in the absolute types of subject matter evolved by earlier epochs. But Impressionism, despite its revolutionary character, was clearly divided in itself. It did not attack those types, after the fashion of Romanticism and Modern Realism, but remained simply indifferent toward them. Nor did its setting-in-motion of matter go very far. Matter became specks of dust and motes in the air, while the transforming power did not extend beyond the changes wrought among those particles reflected by the sunlight. Impressionism was indeed the product of a SPLIT-WORLD which craved change yet would not let go of Being, which veiled the solid structure of the universe till it became unrecognizable yet would not attack the static existence of space. Impressionism and Pointillism represented stages of the formal and substantial dissolution of three-dimensional reality. But that dissolution stopped at a certain point. Moreover, the energies of change were held in check by a kind of cautious observation reminiscent of scientific experiment. Yet the artistic imagination could not be confined forever in such a domestic playground. It should hardly surprise us that most of the leading Impressionists soon decided to thrust toward a deeper dynamism — usually in a direction which had been explored by Romanticism for more than a hundred years.

## II

ROMANTICISM was a sister movement of Enlightenment. The boundaries between the two movements often grow extremely vague. While Enlightenment was developing a new rationality controlled and dynamized by sensory observation, Romanticism tried to find a more direct and revolutionary road to an energetic world concept. To the Romantics the transforming power was more than a blind redistributor; it was a meaningful will directed toward ever-new forms. Thus in Romanticism TIME performed an even more positive task than in Enlightenment. Time became an even more essential part of the basic idea



33, 34, 35. Three versions from a series of "Views of Haarlem," Jacob Ruysdael, about 1670

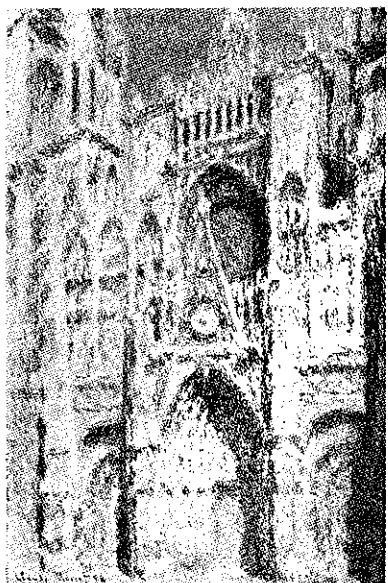
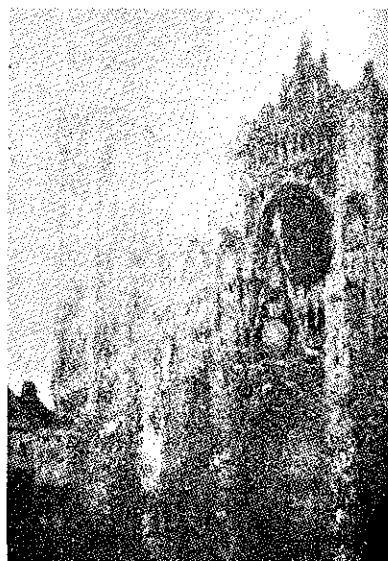
*Empirical observation floods the inherited ideal spatial framework with material energy. In 17th century Impressionism "Movement in Space" did not yet seriously endanger absolute spatial rulership. It merely concealed the formal system by the representation of changing arrangements of aerial particles. The three pictures only differ in the redistribution of clouds, light, and shadow.*

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36, 37, 38. Three versions from a series of  
"Views of the Cathedral of Rouen,"  
Claude Monet, 1894

*Nineteenth-century Impressionism  
simply intensified the speed of the  
"Movement in Space" introduced by  
seventeenth-century Impressionism.  
Hence, it shortened the temporal dis-  
tances between the snapshots and  
thickened the veil of aerial particles;  
constantly re-arranged.*



of reality, because this idea had taken in the forces of change. While to enlightened Empiricism the idea of function was the most important idea, Romanticism acknowledged THE FORMATIVE ENERGY as the fundamental fact of life.

But how did Romanticists conceive this formative energy? There was no longer such a thing as an objective dogma of truth and beauty hovering as it were over all beings. The individual subject, changeable himself, had to become the creator of ever-new form-giving ideas. He became the container of the divine formative energy which made him transform constantly old formal principles into new ones. Romanticism made the step from the Renaissance and Baroque individual, whose freedom had consisted in propounding an objective truth, to "INDIVIDUALISM" in which the new freedom rested on a new message of truth and beauty varying with each individual.

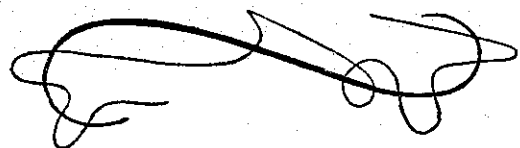
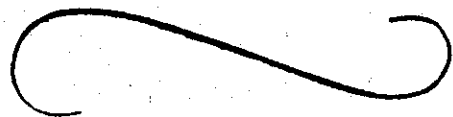
But how was the validity of this novel concept to be established? What was now the unifying common ground of life? In Romanticism, that ground could not be objectively tested (as in Enlightenment). The only proof of the existence of a unifying common ground lay in a vague fellow-feeling for all mankind. Every man — from the beginning of time — was a new manifestation of divine creative energy. Romantic subjective vision found its only guarantee of absolute value in the existence of an absolute divine creative urge. Yet this creative urge was no longer distinct and definable. It was supported solely by a mystic belief in the action of divine energy, always the same, yet appearing in constantly new ways in ever-different individuals.

Small wonder, then, that Romanticism had its origin in late Mysticism, which it subsequently transformed. Already in Jacob Boehme and his predecessors and successors we find the same search for a God who is too energetic to be contained in any finite form and who expresses Himself in the act of transformative growth. Here we find already the autonomy of the SUBJECTIVE IMAGINATION which reinterprets freely the old dogmatic formal scaffolding and which is accountable only to the pure flame of the divine spirit active in each individual. Romantic genius was an offspring of Mysticism. William Blake, Runge, C. D. Friedrich and many later Romanticists were the successors of Boehme and Swedenborg. Romanticism had that same character of mystical belief even where it was closer to rationalism, as in Shaftesbury's philosophy. There God's boundless creative power manifested itself in forms which, despite their novelty, could still be rationally defined as true and beautiful. Yet while Enlightenment proceeded slowly and thoughtfully without ever abandoning the control of observation, Romanticism exalted the belief in an

omnipresent divine creative power which it saw active in each spiritual INTUITION. So the road of Romanticism soon branched off from that of Enlightenment. THE INCREASINGLY RECKLESS TRANSFORMING POWER OF ROMANTIC INVENTION BEGAN TO ATTACK THE VERY STRUCTURE OF TRADITIONAL FORM, I.E. PERSPECTIVE SPACE, ITS FORMAL RELATIONS AND THE DISTINCTNESS OF ITS SUBSTANCE. The form-supported universe was growing SUBLIME. It was one of the main tenets of Romanticism that the divinely inspired individual must erect a new form in the place of the old. God was still the ultimate unifying condition of the world, but at the same time He was the power of transformation. So the new form, conceived in the artist's divine vision, became likewise a split structure. The powers of change now informed all Romantic structure, which may be called IMMOBILIZED MOVEMENT. THE FREE CURVE was perhaps the most characteristic product of the Romantic split-world. It appeared in the Romantic parks as a corrosive of the static form-system (the geometrical garden) and governed even the esthetic investigations of a modern artist like Paul Klee. We lack the space here to examine the Romantic parks, which were already in the first half of the eighteenth century a veritable compendium of Romantic possibilities. They introduced not only the "free" form of the undulating path — expressive of a subjective urge for transformation — but also the "locally curved spaces" of historical styles

39. Designs by Paul Klee,  
1924

*"An active line strolling about freely;  
a walk for a walk's sake without aim:  
The agent is a point moving itself."  
(From Klee's "Pädagogisches Skizzen-  
buch," Munich, 1925.) The absolute  
Being of a mathematical point fused  
mysteriously with its counterpole, the  
force creating random Becoming—  
indeed a perfect example of the split  
world of Romanticism.*



and botanical symbioses. A comparison with the local spaces of the physicist's time-space continuum is not as farfetched as it may seem at first glance. Romanticism indeed merged Being and Becoming a long time before physics did. That merging was the basis of the split-world. The transforming energy of TIME was represented by the forces of ever-changing personal intuitions which PENETRATED the timeless rigidity of THE ABSOLUTE SPATIAL FORM and warped it into the different local spaces, called "styles." The precursors of our moving pictures, such as the Eidophysicon, Panorama, etc., are also immensely interesting as pioneers of a four-dimensional reality, and so is nineteenth-century caricature (cf. pp. 123/4). Like the undulating path, they are perfect examples of that split-world which, while aiming at form, aimed also at changeability, and let time invade the absolute scaffolding of space.

The free curve was the earliest type of the Romantic "hieroglyph."\* As "expressive line"† it began more and more to dissolve traditional spatial form with its overlapping contours. This may be said of all stages of Romantic evolution, of Fuseli, Flaxman, Blake, Cotman, Friedrich, Runge and the Nazarenes. It may also be said of the Pre-Raphaelites, of Boecklin and Thoma, of van Gogh and Gauguin, of Whistler, Beardsley, Klimt, Munch, of "Art Nouveau" and Expressionism. It even applies to Kandinsky and the Romantic Surrealists. The Romantic expressive line left behind the old spatial contour and developed into a new autonomous form, which now hovered strangely within the spatial frame. The picture began to acquire a new and disquieting mobility. It began to express wistfulness, that magic of "mood" which "carries us away." EACH ROMANTIC PICTURE IS A MOVEMENT leading from perspective reality to the new reality of an immobilized formal urge. Yet this new form could no longer prove its timeless validity by rational means. It had to be *felt*. All that was left of the iron unitary basis of the Absolute was that vague notion, empathy.

As we have already pointed out in our introduction, the esthetic experience of a Romantic painting no longer confirmed an objectively given idea that existed for itself in total immutability, but it rather required the spectator to participate in a painful procedure which transformed the old idea into a new one. Hence Romantic dynamism resulted

\* The early Romanticists themselves applied this name to their new form. They also called it "arabesque."

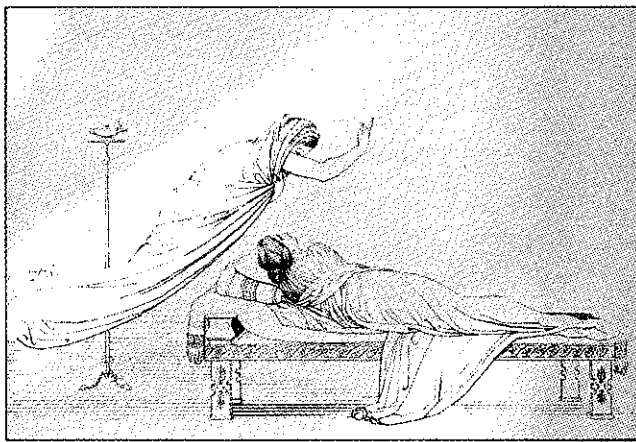
† Romanticism found many other means of setting the static unity of the perspective picture and its distinct types in motion. In their struggle against the constricting influence of rational symbols, the Romanticists developed an amazing imaginative skill. They all show time invading the old spatial notion. It is in this sense that Romanticism may be said to prepare the reality concept of Abstract Art and the Modern Realism.

from the tension between the old perspective reality and the new stylistic reality of the hieroglyph.\* It resulted from the distortion of space and its symbols, which nourished expressive form as a tree does a parasite. Like a parasite, that new form drained the supporting growth of all its sap, and so Romanticism led logically to a pictorial type without spatial depth, which seems to be close to magic art and also — the same thing for all practical purposes — to the art of children. The progressing dissolution of the rational framework of space could have restored to the Romantic symbol the old magical aggressiveness. Yet the world of the late Romantic hieroglyph is separated from magical reality by the evolution of two and a half thousand years. The magical world consisted exclusively of sensuously concrete signs which could be understood by everybody. The Romantic world, on the other hand, consisted of ever-new signs grasped, at first, only by the individual who created them. The Romantic sign derived strength from its *OPPOSITION* to an already existing static unity which could be universally understood. It expressed a progressive deepening spiritualization, the solitary vision of creative power that no longer could be contained in definite and accepted spiritual forms. While the magical sign, sensuous and primitive, had been fairly bursting with life, the wistful suggestiveness of the Romantic sign with its spiritual subjectivity was ailing from the start. From the evolutionary point of view it seems that the magical sign, in its urge toward freezing of mobility, shows greater affinity to the perspective space form than to the Romantic hieroglyph.

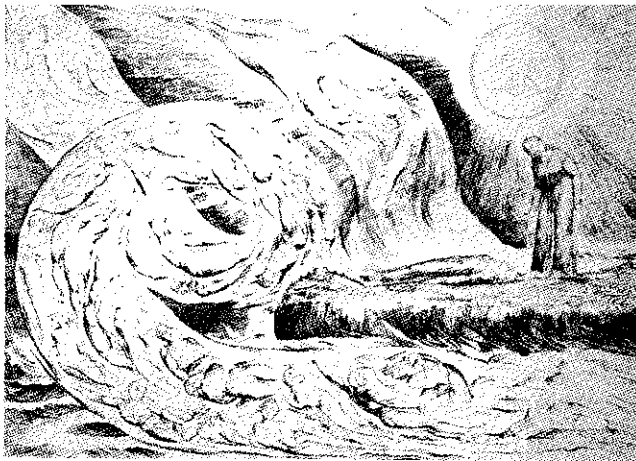
All this goes to explain the tragic character of the Romantic movement. The Romantic attempt to free the traditional Baroque world from its fetters was bound to result in loneliness and incomprehensibility. Romantic art never became popular, nor could it have become so. It represented man — in sharp contrast to the optimism of the unity-conscious Baroque — as a lonely figure with his back turned or as a seeker of unity. The Romanticist was unable to attain unity, for that unity lay in the *SUBLIMITY* of eternally different and novel forms. So he remained lonely in the infinity of his energetic world. The same loneliness is expressed by the Romantic edifice, overgrown by sublime nature. The rea-

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\* The Romantic stylized picture furnishes another parallel to four-dimensional reality. Each picture is a temporalized space, curved by subjective and local transforming forces. We shall see later how art history, ever since it became a history of styles, has developed a historical reality of local spaces and local times. The local Time-Space of Peru about 1560 and that of Europe at the same time have no longer an absolute time or space idea in common. All they supposedly have still in common are certain timeless spiritual faculties and types which are said to experience local changes. Hence the "timelessness" of style, the "art without epoch."



40. "Penelope's Dream," John Flaxman, 1792



41. "The Whirlwind of Lovers," William Blake, 1827



42. "Nocturnal Landscape," Vincent van Gogh, 1890



43. "Moonlight Cove," Albert P. Ryder, about 1900

*The sequence of pictures on this and the two following pages illustrates the growing dissolution of the spatial foundation of Romanticist reality. The expressive lines, colors and subject matter distort and finally dissolve the distinct system of spatial lines, space-supporting colors and idealized subject matter which symbolized the traditional ground of static Being.*

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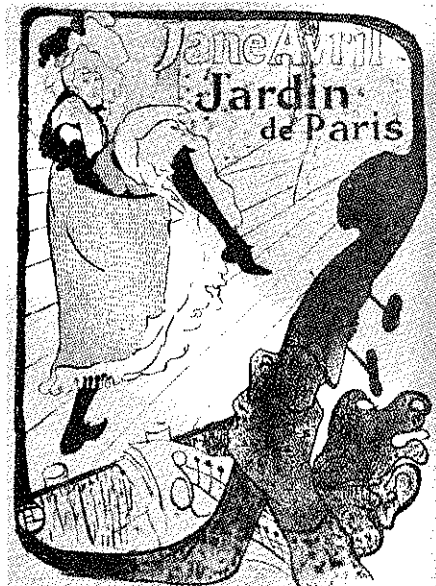
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44. Jane Avril (Poster),  
Henri de Toulouse-  
Lautrec, 1893



45. "Third picture of  
Rheingold," Aubrey V.  
Beardsley, 1896

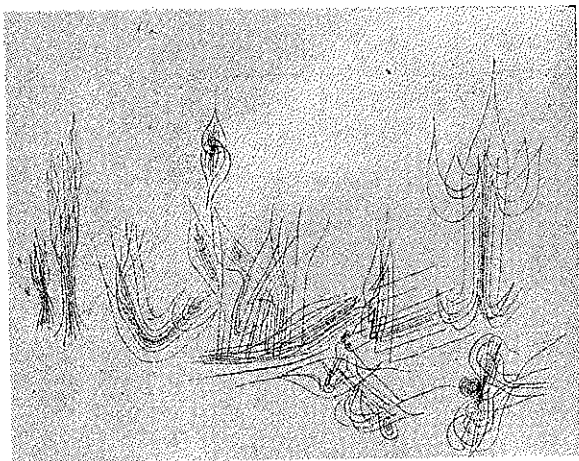


46. "Jurisprudence," Gus-  
tav Klimt, 1909

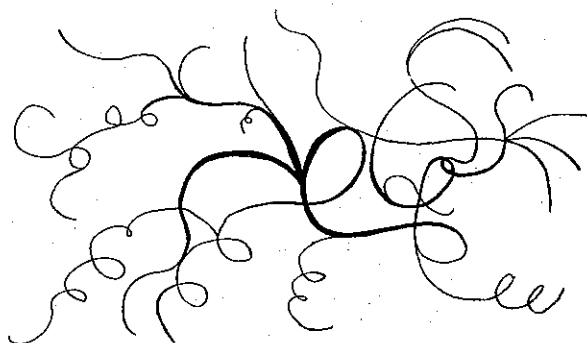




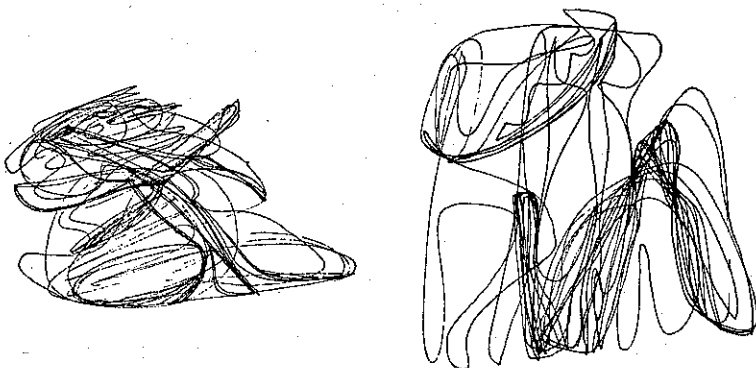
47. "Man reading in bed," Paul Klee, 1910



48. "Prickly Current," Paul Klee, 1928

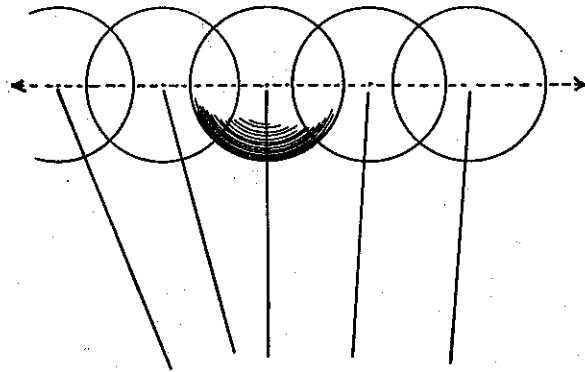


49. Non-objective expressive design. Wassily Kandinsky, 1934



50. Pen drawing (detail). Stanley William Hayter, 1944

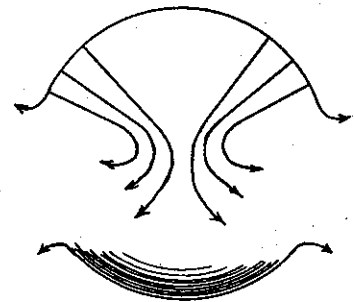
*Enlightenment and Romanticism had to dethrone the static idea of form by admitting its hostile counterpole, the force of change, as co-ruler. Thus, the container of change, Time, entered as a fourth dimension the kingdom of three-dimensional Space, causing a split-reality. Once admitted as an ultimate truth, change-creating energy ultimately must have corroded the very essence of eternal Being. (Cf. the 5 preceding pages of impressionistic and expressionistic paintings.)*



*The arrow indicates that the traditional world of the ultimate form-idea spreads into the infinite variety of worlds of ever novel style-ideas.*

*The unifier of Romanticist reality is the — never united — split-idea of the “formative energy” which at the same time freezes matter into form and melts all forms into movement.*

*The energization of the form-idea broke up the unifying center of the three-dimensional world, and thus exploded the traditional form symbolizing the three-dimensional static unity of reality.*



son for the loneliness we find in every Romantic individual and his world lies in their split character, in the continued belief that ultimately God embodies a static unity, an Absolute. This absolutism of Romantic philosophy froze subjective vision into a timeless self-sufficient revelation of ultimate truth. Each individual stood alone in his ultimate self-sufficiency; each different yet each a vessel of the One. This hybrid juxtaposition in Romantic art of an ever changing creative power and an immutable absolute idea of form spelled its failure. Despite the depth and the dynamism of their experience, all the Romanticists really did was substitute for the one Absolute a multiplicity of always new Absolutes. These Absolutes, by being different and changeable, were of necessity indefinite and hence corrosives instead of unifiers. The Romanticists substituted a bewildering host of timeless styles for one timeless form.

The curious phenomenon of "Historic Revival" was really just another "split product" of that dissolution of three-dimensional reality. The historic revival was bound up with the personal self-expressive style of the living artist, for here, too, we find a mixture of the absolute autonomy of the Eternal Spirit and the changeability of imaginative energy. The revivals, like free artistic style, were bound up with change. What was decisive in both was not the element of preservation but that of change. The artist had to be always new and so the revivals had to change the historical styles, lest they become mere archeological models. While all designers of the revivals emphasized theoretically the accuracy of their historical imitations — thus trying to establish their timelessness — the real importance of the revivals lies in the unconscious way in which they transformed that supposedly eternal stylistic idea.

The main feat of the Romantic Movement was the dissolution of the ancient fixed pattern. In this the Romantic artists were akin to their less radical allies, the Impressionists. Yet neither movement was able to push that liberating advance toward a changeable world concept far enough. They both ended up in a paralyzing semi-absolutism which represented an ultimate belief in form. They prepared the milieu out of whose tensions grew the new movements which abandoned the remnants of the absolute static cause and pushed forward into the greater depth of a self-changing universe.

The pioneers of this thrust are the ABSTRACT ARTISTS and their offspring, the MODERN REALISTS. THEY ARE THE FIRST TO SUBSTITUTE A TRULY DYNAMIC UNITY FOR THE OLD STATIC OR SEMISTATIC UNITY.

Before bidding farewell to the split-world of Enlightenment and Romanticism we must examine a movement which goes by the name of

SURREALISM. Yet Surrealism is actually a double movement: one component pushes the process of subjective isolation — begun by the Romantics — to its logical end, the dissolution of space; while the other component represents a retrogressive tendency to escape from isolation and to take refuge, once more, in perspective space.

ROMANTIC SURREALISM, as represented by artists like M. Duchamps, A. Masson, W. Paalen and S. W. Hayter, can already be found in Klee and Chagall and even earlier in Toorop and Klimt. We might even trace it back to the fantastic visions of Blake and Fuseli. We may find a criterion for distinguishing between Romanticism and Surrealism in the degree in which these artists have tried to reinterpret the traditional space concept and the universally comprehensible pictorial contents. Some have even tried to substitute for the latter their own subjective and unique experiences. Blake, Toorop and Klimt distorted still recognizable classical allegories or biblical and mythological types. The paintings of Klee, however, can no longer be comprehended without explanatory titles. Communication between artist and public has become reduced to a wholly vague traffic in personal experiences which are never unequivocal. The common God and the common belief are now attenuated to an infinitely rarefied dream. All energy now goes into an effort to bring that free dream-flight once more to life. Such an artistic experience leads even farther away from life than the Romanticism that preceded it. It can never lead to a directive reinforcement of action. The reason is — let me clarify it once more — that this art still sees the unifying truth in an ultimate stasis, even though the latter becomes blurred in the impalpable dissipating distance of always new and different dream visions. All romantic artists have believed in their prophetic mission, even when they invited us to follow them into a paralyzing dream world. They have believed that the “purified” and inspired forms of expression and the non-objective colors of their visions were a new hymn in praise of the infinite creative energy of the timeless cause; that their subconscious dreams, in their freedom from all rational constriction, were leading us closer to a divinity which was the overflowing source of everything new.\*

\* The following quotation will explain better than any analysis the deeply serious belief of Romantic Surrealists in the purifying mission of their dreams:

*The Minotaur and the Poet*

“The poet is the purest of men. It is only when he replaces the dangers of adventure by the cult of form that his sacrifice is turned into a ritual. Then, what ought to have been his message degenerates into an advertisement. As long as he is still interested in the alchemy of color — he may bring us power. It is only through deeper understanding that new energies can be mastered. Art is on the road of a life beset with sacrifice. Only when you sacrifice your life instead of going back to idolatry — in art idolatry is called beauty — can your initiation begin and pictures begin to reveal their meaning to you.” (Quoted from: Nicolas Calas, Preface to an exhibition of Kurt Seligmann, Nierendorf Gallery, April/May 1941.)

Yet can the same thing also be said of the RETROGRESSIVE BRANCH OF SURREALISM,\* which searches no longer for new symbols to express an ever-growing truth but which falls back upon the old static language of perspective space? Can it still be said of a kind of painting which no longer considers dreams as ever-new truths leading to heightened forms but as phenomena which may be displayed on the dissecting table of rationalistic logic? Are not dreams thereby degraded and exposed like sleights-of-hand? Whoever places his daydreams in the limelight of three-dimensional logic no longer believes in their saving and deepening moral power: they are to him merely pathological phenomena. By forcing upon his irrational dream images the methods of the Renaissance tradition he invites us to analyze them by means of traditional logic. The only conceivable aim of such an artist is to project his dream irrationality against a rational foil and by so doing disavow it. This means the final abandonment of the Romantic belief which had seen the working of a higher creative rationality in the teeming images of dream. Retrogressive Surrealism thus becomes a model report of destructive obsessions made by a docile patient to a psychiatrist.

The paintings of these retrogressive Surrealists are the best proof of the fact that "art" has run its course. "Art" had grown up as a symbol of a world which had its anchorage in the depths of a spiritual form idea. That idea dwelt beyond all sensuous change, in a secure distance. On this idea reposed the strengthening power and beauty of art, its divine loftiness and its unifying value in an energetically changing life. Experience led to a new concept of the universe. Change invaded the static basis and created a split-world. The work of art turned into a hybrid which increased its pretense to a higher truth while it lost the ability to prove this truth, except by pointing to the energy of subjective changeability. This development was bound to end in the blind alley of chaotic and distorted dreams, and a dissolution of all traditional forms and concepts. The artistic dream lost its sanctity and thus its self-sufficient spiritual value. Both modern psychology and art history look at the artistic dream now as a temporary product of the evolution of human consciousness.

It is no accident that retrogressive Surrealism invokes the teachings of Freud. The manner in which it does this is likewise characteristic. These artists see only one aspect of Freud's psychology, namely the "involuntary impulses"; and, in the old absolutist fashion, raise those impulses into the only legitimate objects of art. They ignore the fact that these impulses have conspired for ages with the energies of the milieu toward the creation of ever-new forms of thinking, and that these impulses are

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\* Their principal representative is Dali.

forcing our so-called rational thinking of today to transform itself further. They fail to see that there is consequently no justification for any attempt to interrupt that process of mutual transformation, a process in which subconscious drives and conscious energies share equally. To make a fetish of the former in their present stage is absurd. These artists forget that our time is outgrowing the cult of any changeless spirituality — conscious or subconscious.

The "object [of psychoanalysis] is to strengthen the *ego*, to make it more independent of the *super ego*, to widen its field of vision . . . so that it can take over new portions of the *id*. Where *id* was, there shall *ego* be."

It would be hard to imagine a more complete repudiation of Surrealism than these words of Freud. According to Freud, the *ego* arose from the interpenetrative actions of the unconscious animal drives of the *id*, the experiences conveyed by the outer world and the paralyzing pressure of the traditional norms of the *super ego*. The *ego*, then, is no identical condition but a never-ending process of autonomous change. Speaking of the present stage of the *ego* in terms of art history we might say that the *super ego* consists of the inherited norms of the Baroque absolutist vision. Under this pressure, combined with the pressure of the *id* and that of external experience the *ego* has developed into the autonomous self-expressive individual. But the further interaction of the forces of *id*, milieu and *super ego* leads toward a final victory over the vestiges of absolutism, i.e. to an abandonment of "free" egocentricity and a development of a new species, *ego*. In this process the new *super ego* would become the concept of autonomous individuality; then, at the same time, a new transformed *id* would have to be assimilated by the new *ego* in a fashion that would make for better cooperation with the milieu. What we need, according to Freud, is an intensification of the "experiences of the perceptual system" and, concomitantly, a stronger integration of the forces that conspire in each *ego*.

Yet what does Surrealism do? It forces the inspired image of the Freudian psyche once more into the obsolete frame of eternal duality. It makes absolute again one of the two poles as the eternal basis of life, and substitutes for the absolutism of the rational that of the irrational. By falling back upon the *id* it simply reads the Black Mass of rationalist idealism. Surrealism forgets that modern reality is beginning to leave behind every form of absolutism. We cannot close our eyes to the fact that the whole Surrealist movement is becoming rapidly obsolete. We remember well enough that it acted as a liberating force in the 1920's, but what was then true and liberating is today no longer so. On the con-

trary, today it must be regarded as a stumbling block. Today not only has the Renaissance and Baroque cult of an absolute form pattern become obsolete but also the Romantic cult of an always new and surprising ego drawing upon an ultimate source of Being. The semi-absolutism of the Romanticist split-world is also dying.

### III

How deep the paralyzing division can go in a way of life which acknowledges two diametrically opposite leaders, such as Idea and Energy, or Being and Becoming, is clearly demonstrated in the world concept it creates.

Newton's world of energy and matter had made of form the accompaniment of transforming energy. Long before Darwin the idea of the species, which ever since antiquity had been assumed to be the stable principle behind all natural change, began to disintegrate. One species changed into the next under the blind pressure of the mechanical forces of the milieu. Yet this billiard game was unable to account for the fact that primitive species lead to more complicated ones. Thus with Lamarck the absolute form idea began to run alongside the mechanical change in the Romantic belief that a creative idea intervened mystically in the mechanical transformation. The same notion was held with regard to the human individual. As body it was a helpless plaything of mechanical forces, a redistribution of material atoms. Yet as spirit it was endowed with free will and able to see and understand all. To gauge what a tremendous conflict was wrought in the life of the individual by this hypothesis of an hybrid essence of man — a seeing spirit and a blind mechanism — we have only to ponder Kant's perfectly sincere double morality. Behind his lectern Kant regarded himself as the blind instrument of the state mechanism, while in his study he preserved the freedom of his spirit. Like God, His child — man — became split in himself. The effect of this paralyzing split can be seen even today in every walk of life.

The man of "free enterprise," too, was split in a curious way between his "freedom" which allowed him to act as a transforming center of change, and the necessity of blindly obeying a law that opposed insuperable obstacles to that freedom. Like the mechanical law of the conservation of matter and energy in physics, so the economic law of "demand and supply" kept the world in a static balance. It made economy "self-regulating" and gave it a static unity. So the free employer pressed continually toward expansion, toward a transformation of the economic

whole, yet remained at the same time subjected to its absolute Being. Thus that expansion amounted actually to nothing more than a redistribution of static matter, i.e. to that exploitation of the worker by the employer which constitutes even for Marxism the rigid, mechanical law of capital.\* The struggle among nations for exploitable stretches of extended matter has its exact correlate in the classical notion of mass movement in space. Here we are at the source of economic warfare.

Yet the split goes even deeper. Only the unifying force of personal morality can now save the free economy of autonomous individuals from being a blind "free for all." A timeless divine unity is assumed to be of equal strength in all men — usually in the form of a Christian community of all spirits. But a man cannot possibly conserve his Sunday spirit — the static spirit of Christian unity and brotherly love — throughout the week, if he has to obey the law that rules the blind forces of economics in order to survive. So the individual disintegrates further.

Before Enlightenment art had been the medium through which the Absolute revealed a pattern for life. But now art has become something apart, something that belongs to the "better things of life." Man has grown divided in himself; only in his leisure hours can he follow the artist's flight toward divine unity and find relaxation there from the mechanical power-struggle of economic reality. People go to the museum to escape from the hardness and dreariness of daily life and to feel reassured that there exists, after all, something higher. But art, like religion, has lost its old meaning as the voice of ONE TRUTH, the norm of the WHOLE LIFE. Both have become split because they themselves can no longer believe in the fixed form of the One; they have outgrown that form, irrevocably, and daily experience pushes them ever farther away from it. In both religion and art the transforming power has become part of the divine One. So both still search for new forms to embody the Absolute. Apart from their new isolation they offer the refuge-seeker but a divided and confusing image of contradictory variety. The light of art, as offered by our art museums, is oppressive in its vast inner contradictoriness; it creates doubts similar to those created by our multiple religious truths. Yet each attempt to escape this paralyzing dilemma by returning to the distinct, changeless One is as doomed as the attempt to return into the womb.

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\* We have learned through experience that this economic split reality is still too rigid to come to terms with the dynamism of life; that it leads to the absolutism of monopoly, to the perpetuation of an oligarchy of the few, to the static policy of scarcity and so from one catastrophe to another. But we have also learned that capitalism need not be a victim of this mechanical law. It may develop forces of autonomous change which will alter its identity and with it its predicament.

The "free personality" is today actually a Romanticist in feeling and an empirical "realist" in practical pursuits. He tries to escape the vicious circle of economic catastrophes and the wars caused by those catastrophes. He tries to escape from the war of all against all, from the Babylonian variety in all walks of life. All the forces of history urge him toward a better contact with the source of life. He pushes with all his energies toward unity, integration, order and certainty. But the ancient road of Western civilization to this goal is now blocked, for it has proved a failure.

The need to survive forces upon the Western mind a new transformation. The equivocal role assigned to energy by semistatic reality has proved ineffectual. So the desire for unity has become a desire for a more energetic foundation of life. The mind which had first seen a static and then a semistatic unity in the depths of life is changing into a mind which presses toward a yet profounder depth. That mind presses toward a wholly dynamic unity which can be reached only through the conception that life's source is the force of autonomous change.

## 4 The Supraspatial Reality of Pure Energies

### I

The evolutionary forces in the present phase of Western civilization press toward integration on a dynamic basis. This is shown by the most recent developments in all fields of research, most spectacularly in PHYSICS. Here too the inner ambiguity of the Newtonian reality concept had resulted in a hopeless split. Two irreconcilable concepts of matter had developed alongside each other. There had been the concept of the wave moving through space — essentially a phenomenon of Time — and that of the particle, which was seen as a Spatial point. If physics wanted to prevent a relapse into the magic notion of sensual change without inner identity it had to look for a deeper unity. This unity could no longer be rigid space. Michelson's unsuccessful attempt to describe light as an ether wave within static space led to the first effort to overcome the latter.

The new solution lay in the concept of a mobile space containing light velocity as a new absolute, the concept achieved in the light geometry of Einstein (Restricted Theory of Relativity of 1905). This time-space continuum recognized only mobile points and the events resulting from their contacts. Then in the General Theory of Relativity of 1915, the continuum expanded so as to include all energies. The presence of mobile energy units curved absolute space into local spaces with local times. Absolute infinite space (whose grand symbol, ever since the Renaissance, had been the starry nocturnal sky) was now being divested of its changeless majesty by the energies of transformation. It was growing into a complicated system of variously curved spaces, which penetrated each other.

Einstein built this time-space around Planck's "quantum matter." Planck had bridged the gap in classical physics by establishing a new fundamental unit: he had fused the wave-ray and the matter-particle into a unit of radiating matter, the indivisible ultimate quantum of the photon. The world of Planck and Einstein may be regarded as the last attempt to preserve the ultimate absoluteness of the universe despite its continual flux.\* It was the highest degree of unification available to a split-world. The old irreconcilable poles of Space and Time, Being and Becoming, now divided the realm almost equally.

Yet Heisenberg, de Broglie, Schroedinger, Dirac and others have proved incontrovertibly and through observation that such a hybrid

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\* This characterization by Jeans of the four-dimensional universe of Planck and Einstein is doubtless justified.

time-space reality was incapable of accommodating the real transforming powers of nature. The four-dimensional concept had admitted light velocity into the rigid spatial scaffolding but still hoped to preserve a balanced world by assuming the mobile light unit and its velocity as ultimate realities. Close observation of the light emission of the atoms showed, however, that the concept of these units as building stones was still too narrow and rigid. These supposedly ultimate units — the last vestiges of a basically changeless static world — exploded into energetic processes of tremendous power which burst the frame of the four-dimensional concept. (Heisenberg's "Uncertainty principle.") This concept was replaced by the much profounder concept of a supraspatial reality. All time-space events turned out to be crude and tame surface reflexes if one assumed, as Dirac did, a substratum which consisted of much richer and more intense transforming powers. These powers were forever interactive.\* The light units (Planck's *quanta*) which had been regarded as the irreducible ultimate cornerstones of the four-dimensional world concept were now reduced to by-products of processes which occurred beyond the time-space. This meant that identity and static unity were over and done with: they had literally exploded into complete SELF-CHANGEABILITY. The substratum processes of pure energies could never be directly observed in space and its light phenomena nor did they ever maintain a static equilibrium. TIME now became the overlord of the universe, but it was no longer the old uniform Time, that helpless twin of absolute Space, which could not touch the eternal basic form or could only rearrange the never-changing basic elements inside of Space; now it was a new active Time consisting of the irreversible, purely energetic processes that transformed the very essence of those elements. Thus Time lost its abstractness and detachment from historical processes. Only this new species of self-changing Time had the strength to subdue the traditional ruler of Western civilization, the "being" extension.

The logic of pure numbers — that backbone of three-dimensional reality — could no longer yield the ultimate truth concerning the universe. Since the ultimate units had lost their eternal identity the notion of an immutable law governing temporal and spatial change had also grown meaningless. This law changed into a statistic notation trying to keep up with the observed higher mobility of life. In a deepened form we find here again the "wait and see" of our Babylonian moon-priest.

Absolute space and absolute time are no longer true. Even a relativistic space conception that depends on photons is necessarily superficial be-

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\* Instead of ONE cause for many phenomena thought now began to assume MANY causes for one and the same phenomenon. Three-dimensional reality has thus literally exploded.

cause the higher energies of the substratum may at any time either enlarge space or reduce it, may create space or else consume it. What had presented itself to the human mind, first as magically moved sensory images, then as an aggregate of solid three-dimensional bodies, then as a unitary mass, and then as infinite space, all vanishes now before the much vaster conception of a wholly self-changing world of pure energies. Infinite space and the complex world of interpenetrative time-spaces have actually become SURFACES of a much deeper, more spiritual, more energetic and more unified world concept. The old polarity of spirit and body, of spirit and nature, has thus lost all meaning. Only now can we conceive the universe as an indivisible unity,\* consisting of pure energies in constant mutual transformation. The realms of spirit, sense and nature are composed of kindred energies, and these energies are supra-spatial. Their interaction can no longer be conceived as "movement in space." Their creative interplay constitutes the indivisible unity of the universe.

But how could this higher unity develop? Only because a new species of mind is in the making, eager to relinquish the last vestiges of magical daemonism, which lived on in the hostile supremacy of a spiritual Being over a sensuous Becoming; only because we are beginning to relinquish this spurious unity, in which the fearful projection of a fixed immutability kept the forces of change under control. What primitive man in his flat thinking had dimly divined — the tremendous creative energy of the world — now returns in a deeper form, as the concept of a purely energetic world of autonomous change. Its new unity lies beyond spirit and matter. It is no longer spiritual, because it is liable to change; no longer material, because it is unextended matter. This unity lies in the concept of natural forces whose interaction becomes manifest as a creative growth which flaunts all absoluteness. So ever-identical nature has become PURELY HISTORICAL NATURE, a nature of energies, each of which may change its peculiar intention through permeation with the intentions of other energies. This historical nature has ceased to be blind. It is a free growth, directed and irreversible in a much deeper sense. Nature becomes a process that changes autonomously. It includes all human energies and actions, and even man's visual observations may contribute to that inner change. Natural history and cultural history become united on a deeper level. So we cannot be surprised when we find a very similar trend in cultural activities.

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\* At least temporarily for us. Whether future minds will use the term UNITY even in this self-changing sense is an open question — as open as growing life itself.

There are three movements in the field of art which are trying to overcome the traditional split-world. All three are integrating movements and their new unity is going to be based on a wholly dynamic principle. They all are pressing — prompted, one might almost say, by biogenetic necessity — toward an elimination of the last vestiges of static absolutism. They can no longer be explained by a hypothetical eternal will to form, to spatial unity, to structural balance or by a search for supposedly eternal basic elements. Neither does the old "movement in space" explain their intention. They all have the typically modern power to outgrow these atavistic modes of thinking and feeling.

The three movements in question are ABSTRACT PAINTING and SCULPTURE, MODERN ARCHITECTURE and the REVOLUTION IN THE ARTS AND CRAFTS. They are all conscious of their integrating mission; they all take the inheritance of Romanticism and Enlightenment as tools to work with and material to transform.

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ABSTRACT ART would be inconceivable without its antecedents, Enlightenment and Romanticism. It grew out of these two movements without any noticeable break. It was undoubtedly encouraged in its audacious pioneering by the moral élan of Romanticism and its distortion of the rational world of perspective space. But from the beginning Abstract art had a base less vague than the visions of subjective emotion. It wanted a new certainty as objective as the three-dimensional truth of the Renaissance and the Baroque. The new certainty was to come through a kind of registering of observed changes that was almost scientific in its methods of representation. Thus it was no accident that the new system of form took off from the scientific attitude of Impressionism. But there existed in the Abstractionists an unconscious desire for a reality more intensive in its mobility and at the same time less vague in its formal expressions than was possible in Impressionism, where the energy of change was caught in the rigid net of constant redistribution of atmospheric matter. We say "unconscious desire" because the written theories of Abstract artists speak in terms of absolute forms, which at the same time are supposed to be purely energetic. Consciously Abstract art still lives in the split-world of two opposing absolutes.\* But where the

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\* Typical examples of the polaric discrepancy in Abstract theory are the definitions by Malevich: "Space is a container without dimensions," or "dynamic rest." Cézanne, too, oscillates in a similar manner. So do many more.

Abstract artists think really creatively, i.e. in their artistic work, they are driving toward a system of signs that is no longer absolute. They have spoken theoretically of re-creating "the idea," the eternal forms of "cylinder, sphere and cone," of rediscovering the basic elements and of re-creating space in a new dynamic way; yet in practice they have set the immutable identity of space itself in motion and have gone beyond spatial concepts. This development had already become clear in the compositions of Cézanne and Seurat. It has also been the driving power behind the Cubist movement, Suprematism, Constructivism, Stijl, Purism and the more recent movements of Abstract art.

In his theory Cézanne sometimes seemed eager to restore the academic clarity of the absolute geometry of space and its forms. In practice he destroyed it, for he replaced the three-dimensional system by an entirely new one of Abstract forms. These new forms, far from preserving the changeless identity of the old forms, but overruled that identity, hovering in an atmosphere of changeability and so becoming changeable themselves. They were no longer dependent — as the Impressionistic "movement in space" had been — on an outer static framework within which movement had been arrested as in a snapshot. Cézanne's vision was also much intenser than the Romantic vision which had still oscillated between the spatial milieu and a vaguely hovering milieu of free lines and images. The Abstract system was much less equivocal and much more open to testing observation; in this it had affinity with the scientific spirit of Impressionism. Abstract art was indeed an integration of the two movements from which it descended, Impressionism and Expressionism. But while they had given us arrested movement, Abstract art now gave us liberated movement itself.

We cannot follow here the evolution of Abstract art, but we may hint at it by commenting on three examples: first, a section from Cézanne's "Avenue of Chestnuts" (ca. 1890), then a composition by Peri (1923) and finally, as a specimen of the full development, Joseph Albers' "Interim" (1943).

How did Cézanne handle the foliage of an avenue? The traditional concept of a picture was the material to work with. But what has happened to the contours of objects? Where we might expect a mutual overlapping, i.e. a clear three-dimensional interruption between one body and the next, we actually find a straight diagonal running through the foliage from the lower left to the upper right, which, contrary to three-dimensional seeing, unites the lit up zone of leaves in front and the shaded zone in back. This line then no longer has one meaning, but two. It is a straight line yet at the same time broken in itself, i.e. it explodes

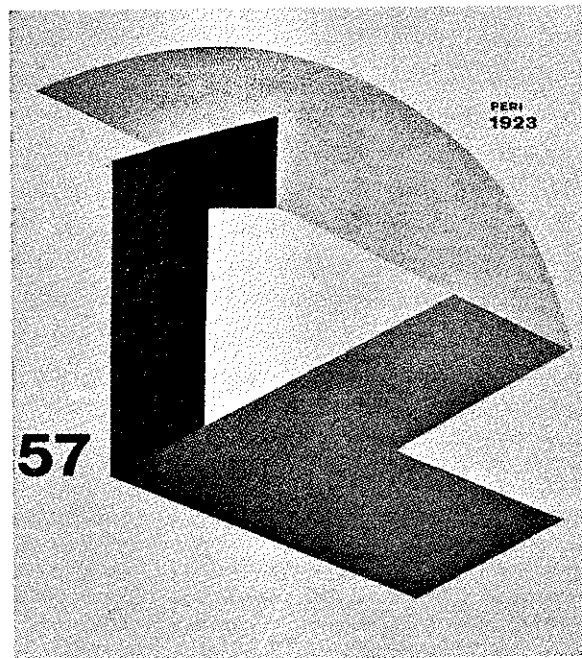


51. "The Chestnut Avenue in Jas de Bouffan" (detail),  
Paul Cézanne, about 1890

the very basis of space, the identical geometrical line. The same thing has happened to the vertical line intersecting the diagonal. It defines the tree trunk and thus confirms the three-dimensional overlapping of the trunk and the dark mass of leaves behind it. Yet at the same time it cuts off the light foliage section abruptly and by so doing prevents that section from overlapping the darker foliage behind. The line, then, loses its overlapping character and recedes toward uncertain depth. It is simul-

taneously in front and behind; it divides even while it joins.\* The same thing has happened to the dark and light zones between this linear cross structure. Their ancient fixed relationship has been exploded. The light zone of leaves now moves freely toward the dark. If we concentrate upon the latter we see it stand out against the light zone and advance toward us; if we shift our focus we have the opposite sensation. These zones have also lost their three-dimensional identity and become engaged in a never-ending open play of autonomous change. Thus Cézanne's new solidity is really the exact opposite of that "something solid like the art of the museums" of which he spoke sometimes in his theory. It is a binding force

\* This phenomenon which at another occasion I have tentatively called "supraspatial contact" had already occurred in Romanticism, although in a more rudimentary and static stage. Then it was indicative of a transition from the spatial system to the new expressive system. The resemblance of this phenomenon to certain phenomena of "Mannerism," let alone to Picasso, is spurious. In "Mannerism" the joining of contours had been used to intensify the illusion of depth. The line had never ceased to be a contour of three-dimensional forms. This principle of composition is of course not the only one used by Cézanne. He also expands contours and by so doing eliminates three-dimensional overlapping; remoteness thus appears at the same time as nearness. The reason why people speak of works by Cézanne and the Abstractionists in terms of "space construction effected by dynamic means" may be found in our traditional notion of an eternal category, space, i.e. in our traditional vision. No explanation is given of how space can exist after its fixed points and relations have been transformed into an unceasing, "uncertain" motion. This clinging to the old space notion may be explained by the attitude of spectators who are still unable to dispense with it.



52. Abstract Composition.  
László Peri, 1923

of pure energy whose strength no longer lies in absolute rigidity but in self-changeability. Such is the new unity Cézanne achieved in his compositions.

Thus, at the very beginning of the Abstract evolution we are confronted with a concept of reality which represents the SPONTANEOUS ACT OF AUTONOMOUS CHANGE. Consequently this movement proceeded more boldly than the four-dimensional concept of reality dared to. From the beginning it displays, not a balanced interplay of diversely curved time-spaces,\* but a much higher, never-balanced, ever-active change. From its very beginning the Abstract picture is an open process. It is wholly absurd to try to describe the evolutionary energy of the Abstract movement in the old static terms, such as "surface," "space," "balance," "*Gestalt*," etc. All these form concepts† not only stay on the surface of the world of the Abstract picture but also drain it of its life blood.

There is a very simple constructivist composition by the Hungarian Peri, made in 1923, which is like a primer lesson in spontaneous self-changing energy. We approach this composition with our traditional three-dimensional apparatus. We see an "L" shaped plane extending into the depth of space. At its left corner another "L" shaped plane is erected, thus creating the third dimension of space. At the far end of the horizontal "L" plane another obviously not warped plane in the shape of a circular segment is attached. So far the three-dimensional static reality is preserved, but here the trouble starts. According to our traditional interpretation the segment plane also touches the vertical "L" plane, although normal three-dimensional considerations would never allow such a contact. The hood of the vertical "L," reaching into depth, is much too short ever to be able to touch the segment plane. As a matter of fact, that segment plane rather bends farther into depth, away from the end of the horizontal "L." As soon as we cover up the part of the picture containing the vertical "L" we see this beyond doubt. And still, if we cover up the other part of the picture, the vertical "L" and the segment plane obviously touch. What evidently happens is that a HITHERTO UNKNOWN KIND OF SELF-MOVABILITY enters all the formerly static spatial forms. It constantly prevents any final balance, any final unity of the composition from establishing itself.

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\* The evolution of art shows no exact parallel to the four-dimensional world concept of the physicists. Romanticism did not quite reach it, Abstract art passed it.

† Even Delaunay's statement: "Form is movement" still fails to clarify the new situation, for form cannot continue to exist once it has become movement, i.e. its former opposite, just as the matter-form of the atom cannot continue after matter has become energy. For the definition of Delaunay we may substitute the following: "Form dissolves into autonomous change. The new unity of the composition lies in the BINDING FORCE OF SELF-TRANSFORMATION."

In Albers' compositions the new reality becomes quite unequivocally manifest. We need only compare his "Interim" with the pattern of three-dimensional perspective still used by thousands of artists today. In Albers' design we see only bundles of lines which already weaken their own identity by changing their thickness. Now in the traditional approach our seeing begins by erecting three-dimensional pyramids of these lines, pyramids that project from the depth toward the observer. Starting, for example, at the lower right corner and proceeding to the upper right, everything goes well until we make the left turn. Then the pyramid collapses into the reverse pyramid. The uppermost lines become the lowest and vice versa. The same thing happens everywhere and finally the whole composition describes a state of contrast and total vibration, in which lines interpenetrate and points and lines are here and there at the same time. They have exploded their three-dimensional identity and have become a new and wider reality of self-changing energies. The two diagonal empty white strips between these vibrating lines are the most convincing expression of the fact that the milieu of this composition is no longer space or even a plane. These two white fields are actually so surcharged with the energy of the adjacent fields that they invite a comparison with Dirac's substratum.\*

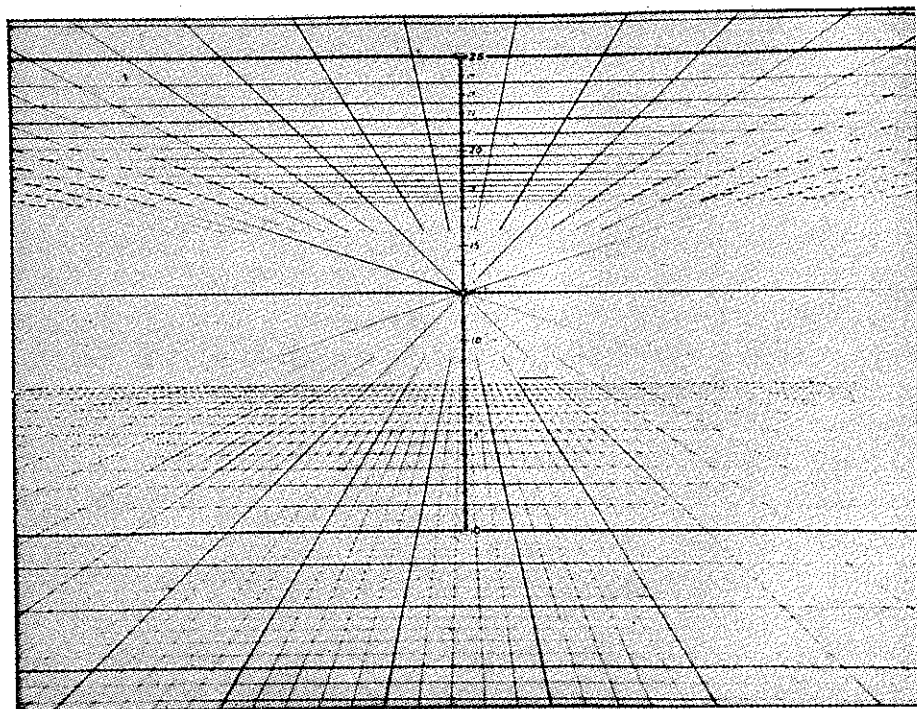
Now let us look at the perspective framework of space and think of what Leonardo said of its lines. "The air is filled with an infinite number of lines, straight and radiating, intercrossing and weaving together without ever coinciding; and they represent for every object the true form of its reason." In other words they exist inside a three-dimensionally extended medium, the air-filling space. It is precisely this static framework and its timeless identity which have now disappeared. They have shrunk to a springboard, from which we jump into a new reality. In this reality the lines are no longer the absolute lines of Renaissance geometry, intercrossing "without ever coinciding," because they *do* coincide, i.e. they have become identities with the power of changing themselves. A line is no longer the ideal thing, ABSOLVED from the changeability of surface matter and withdrawn into the depth of eternal immutable identity. A line now has grown beyond being such an Absolute. The lines of the three-dimensional world of the Renaissance could never coincide because they had been drained of that daemonic insecurity, the power to change. A line was always one; it could never be another line too. If one added one line to another, the result was eternally two lines. But now two spatially separate units, two points or lines, can merge into one; and in the same fashion a point or a line can be two places at the same time, i.e. be two

\* See p. 104.

different points or lines. Here the same thing happens that happens time and again in modern science: when we combine several units we no longer get a static quantitative sum total but are liable to get either less or more. Two and two are no longer four but may be either less or more. The eternal rules of pure mathematics have been overruled, because the old three-dimensional reality has become obsolete. The world can no longer be understood through the static concept of an eternal identity which has been "freed" from all transforming energy, but that energy has returned and set the static base in motion. To think in energies is to think in terms of self-transformation.

It cannot surprise us that the makings of this new concept were contained in the Romantic concept as I have described it. The difference between the two is that the Romantic picture fed on the dissolution of space and on its modifications, such as "energetic form," "expressive line," etc. But Abstract art has opened the gate to a new reality beyond all form. Consequently our experience of an Abstract composition is a much more dynamic experience than Romantic empathy.

Small wonder, then, that the inner mobility of Abstract composition



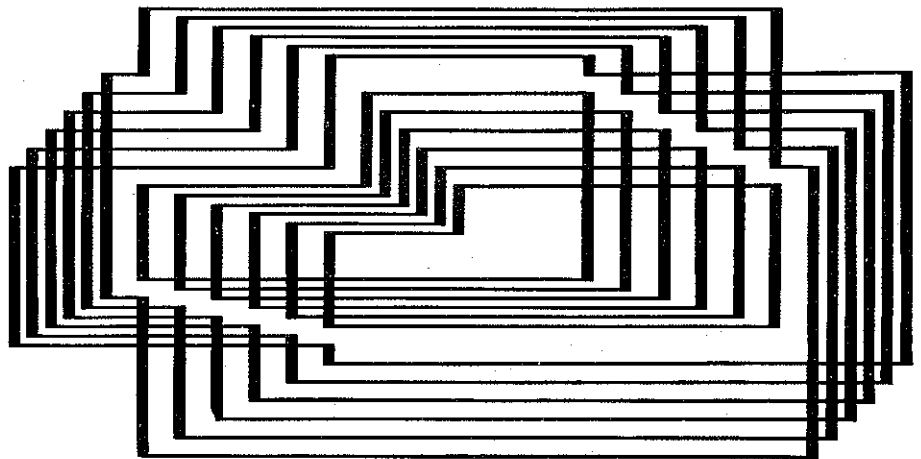
53. Perspective Chart, by Philip I. Lawson

has dismissed the picture frame, that symbol of a rigid space world. It leaves behind, literally, the rigid confinement of the frame.\* The frame determined the absolute plane between the physical space occupied by the spectator and the illusionary picture space. This rigid space structure has now been exploded by the Abstract painting. The latter's dynamic relations can no longer be absolutely determined. They draw us into the composition and, at the same time, push us away from it. Here as everywhere in our modern world, the full relativity of energies determines how much space is to be created or annihilated, as a temporary by-product as it were. For both form and space have come to be superficial by-products.† They play today an ineffectual role similar to that played by the collocation of magical reality in the evolution of the three-dimensional concept. What appeared formerly as ultimate depth appears shallow to the contemporary mind.

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\* This process, too, we find partially foreshadowed in the Romantic painting whose expressive lines were already beginning to ignore the frame or to overrun it. (See, e.g. Kleist's analysis of Friedrich's "Monk by the Sea.")

† Cf. the identical situation in modern physics.



54. "Interim," Joseph Albers, 1942

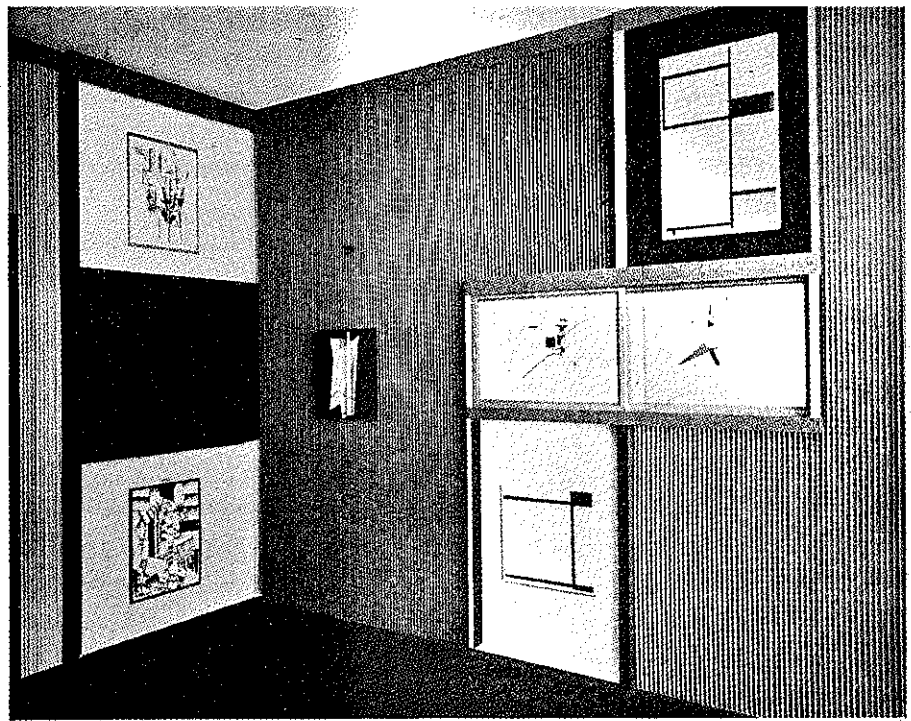
The space-shattering character of Abstract composition helps explain another phenomenon, the intrusion of TEXTURE. Ever since the Cubist "collage" texture has been used to destroy perspective surface illusion. Here too we become involved in the new play of energies; our rigid detachment from the framed slice of static space has exploded. In our minds we seem to be touching what actually we are looking at from a distance. The introduction of texture only makes obvious the change that has taken place with all forms in Abstract art. By becoming part of a new self-changeable reality they cease being forms in the three-dimensional sense. Lines, planes and cubes are still there, but now they mean something entirely different. They have a much deeper meaning in so far as they are no longer symbols of an absolute inner Being, called Space. They are no longer abstract, but concrete,\* in an energetic sense. Engulfed in the high tension field of self-changeability they become transitory and volatile, dim and imperfect surface reflexes of a new depth of pure energetic interactions. That is why their behavior is now so strangely explosive. Indeed just as a Greek statue at the first glance seemed to have the same characteristics as an Egyptian statue, but at a closer view had transformed the Egyptian aggregate of sensuous images into the new security of a three-dimensional form — so Abstract art has now reduced the three-dimensional form to an unreliable reflex of a new and deeper truth.

One of the leaders of the Constructivist movement, El Lissitzky, once demonstrated the new milieu in which Abstract compositions function. The scene was THE ROOM OF ABSTRACT ART IN THE HANNOVER ART MUSEUM. The walls of that room were sheathed with narrow tin strips set at right angles to the wall plane. Since these strips were painted black on one side, gray on the other, and white on the edge, the wall changed its character with every move of the spectator. The sequence of tones varied in different parts of the room. This construction thus established a supraspatial milieu for the frameless compositions. This visual mobility was further increased by placing a sculpture by Archipenko in front of a mirror. The mirror reflected the reversed side of the metal strips, not the side seen by the spectator. Thus the mirror effect extended the elusive wall construction in such a way that that construction changed its identity in continuing.† All display cases and picture mounts were made

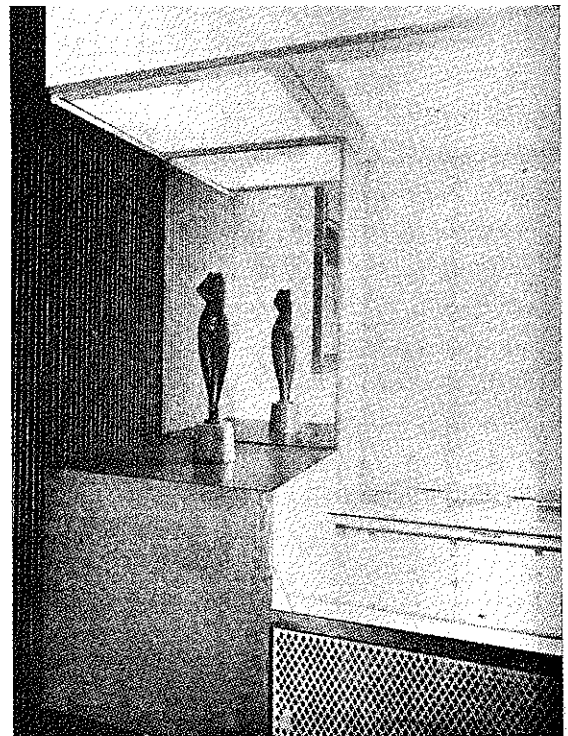
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\* That is why Kandinsky and later Le Corbusier opposed the term "abstract" and wanted it to be replaced by the term "concrete." To call these forms "absolute" is perhaps the most irritating determination possible.

† This feature is indeed a true symbol of the new concept of CONTINUITY AS SELF-TRANSFORMATION. In contrast the mirror effect of the Baroque created a balancing replica of a static space arrangement.



55. Abstract Room, Hannover, Landes Museum, El Lissitzky, 1925 (destroyed)



56. Abstract Room, Hannover, Landes Museum, El Lissitzky, 1925 (destroyed)

movable to reveal new compositions and diagrams. This room contained many more sensory images than could have been accommodated by a rigid room. Mobility exploded the room, as it were, and the result was a spiritual intensification, proportionate to the evolutionary content of the display cases, which tried to demonstrate the growth of modern design in its urgent transforming power.\*

The self-changing character of Abstract art pushed it in the direction of the MOTION PICTURE — not the prevalent type which is simply a photographed play on a rigid stage, nor the type of expressionistic movie (cf. Disney's "Three Caballeros") which is merely a free leaping from one self-expressive form to the next, but a movie in which forms and colors transform their identity by mutual interpenetration.

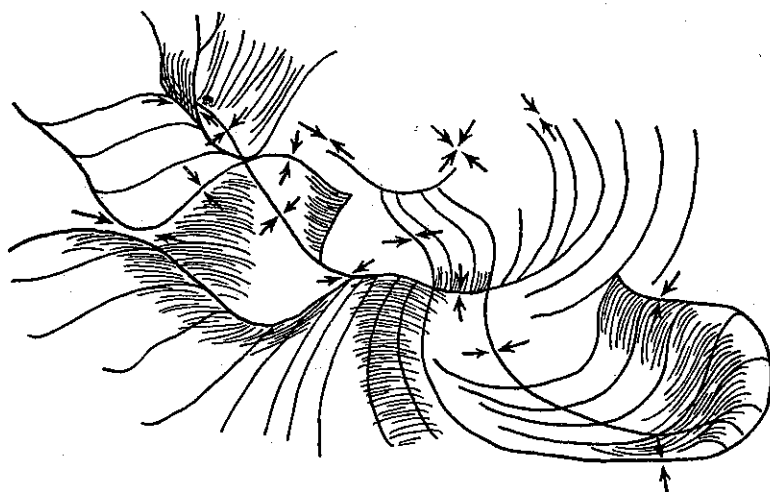
The intrinsic changeability of Abstract composition brought about an explosion of SUBJECT MATTER. The image, having been freed of the rigid absoluteness of form and space, was able to regain its suggestive vitality. This vitality was no longer that of the magical sign nor that of the Romantic arabesque. It was a deeper vitality, made up of the pure energies which lay in form and color and of their mutual relativity. In order better to express this principle of autonomous change, Abstract art changed traditional subject matter step by step into ever more abstract signs. Abstract art is now no longer "art" in the traditional sense because it has integrated, for the first time, the old polarities of pure form and energetic change in the pure vision of autonomous mobility. Abstract art is really the first step toward a new and much more intense interaction between art and life. The composition has ceased to be a symbol of an absolute, self-sufficient world that exists separated from us, an unperturbed Being.

The evolution of Abstract art offers a curious and seemingly contradictory spectacle. Its inner mobility brings it close to the dynamism of modern life, yet this dynamism could only be reached through a complete divorce from the old static contents of the three-dimensional picture, i.e. by becoming abstract.

Abstract art, then, is like a powerhouse without practical use. It is bursting with energies which, once set to work in the practical context of life, might well influence life on a tremendous scale. Abstract art is like a theorist who has ideas of vast consequence but who is unable to put them to use. The Abstract movement is developing a wholly new

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\*This room was, as far as we know, the first attempt to overcome the fixity of the gallery and the semistasis of the period room, and to introduce modern dynamism into the museum by representing a vision of the respective reality of the style (see final chapter). The Nazi government destroyed that room and its contents as "Jewish-Bolshevist" and "degenerate" art in 1936.



*The admission of the energy of change into the static core of three-dimensional reality was bound to result in a wholly energetic world of total changeability. The traditional static ground deepened into the substratum of pure energies. The result is a wider and freer vision of a world with the stronger unity of irreducible open growth. That new vision of the world sees space and its ultimate identical units permeated by the new explosive force of self-changing energies. Thus, the traditional sensuous surface, symbolizing three-dimensional static depth, appears as flat to the modern mind as the magic picture of reality once appeared to the rational mind.*

*To see with modern super x-rays through the spatial surface and to transform it into a symbol of self-changeability is the privilege of the creative designers of today. Therefore we reduce a section of one of Herbert Bayer's mountain pictures into a diagram indicating by opposing arrows the places where the spatial order explodes and transforms its own identity into processes of self-transformation. This constant supra-spatial self-changeability has become the new dynamic truth of reality replacing the traditional immutable truth of spatial relations and turning that truth into a crude and superficial image of secondary value.*

energetic world concept but it is still suffering from the after-effects of the form-idea. Potentially it is pure functionalism, yet in actual fact it still looks upon itself as an exclusively artistic discipline. The impotent side in Abstract art is its "art" side. Abstract art still preserves "l'art pour l'art," the purely experimental studio character of Impressionism, and at the same time contains the moral dynamism of Romanticism. So the inner split of Romanticism and Enlightenment continues and presses of necessity toward further integration.

Filled as it is with transforming energies, the Abstract movement has exploded into the concrete content of the life process. This integrating encounter with practical life has separated, as it were, the Abstract sheep from the goats. Those artists to whom Abstract art is still a free exercise of imagination by autonomous genius will express THEMSELVES, i.e. they will produce an ABSTRACT SURREALISM. Those who see in the Abstract movement a means for expressing the new dynamic vision in simple and universally comprehensible symbols will create a new symbolic language of Abstract art. This language which is addressed to and may be understood by everybody we call MODERN REALISM. To the former group belong Arp, Miró and, especially, the later Picasso. The most striking examples of Picasso's surrealist bent are his "Crucifixion," his "Minotaur" pictures, the "Dreams of Franco" and, above all, "Guer-nica." To the second group belong the main representatives of modern commercial and industrial design, such as Cassandre, Carlu, McKnight Kauffer, Herbert Matter, Herbert Bayer and others. These two movements are bound to develop in opposite directions. The former stands doubtless for an earlier phase, while the latter represents a more advanced stage in the evolution of contemporary art. The former is more "artistic"; the latter expresses a harder kind of integration which may at present seem a trifle dry.

When we trace the BIOGENESIS OF THE COMMERCIAL DESIGN, the poster, we find at its source, too, the typical polarity of Western reality, the old antagonism between spirit and sense which finally led to the split-world of Enlightenment and Romanticism. As we have seen, in this hybrid world the spiritual pole was represented by the free Romantic imagination and the sensuous pole by enlightened experimental observation and, linked with it, the industrial revolution.

Free enterprise demanded a stirring appeal to the emotions of the free individual. The poster reflected that cooperation of Enlightenment with Romanticism. The colored Art Nouveau lithograph — the archetype of

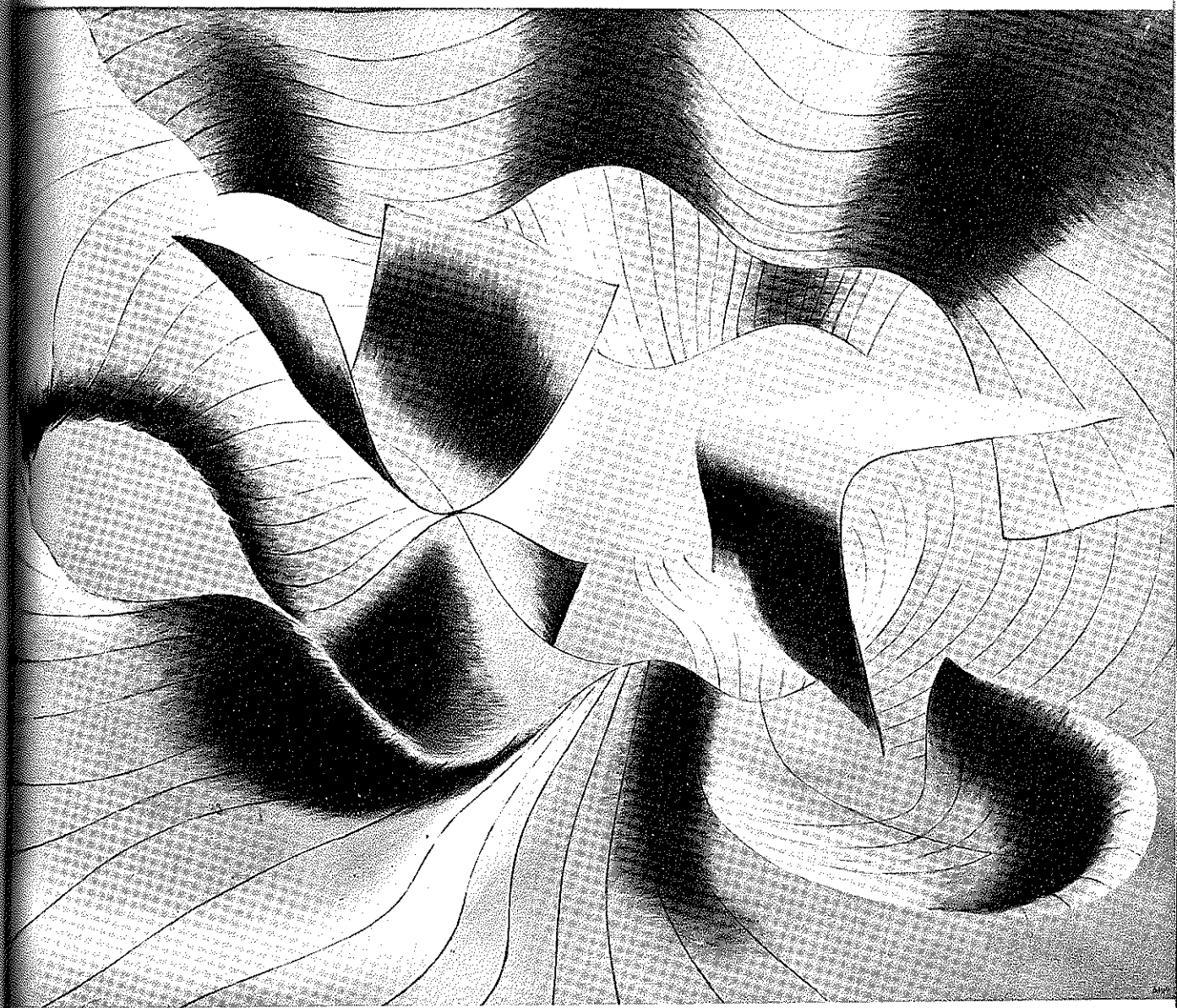
57- Cartoon from  
*The New Yorker*,  
Charles Addams,  
1940



What makes one thing **BECOME** another? What is the force behind change? The three-dimensional concept of the world gave the well-known answer: Something that remains always identical; the intellectual law of an eternal form or a never-changing law of movement. Classical physics still believed it could catch the force of change by chaining it to the rigid form of space. An absolute law, represented by a rigid formula of space and time relations, reduced all changes to a continual redistribution of ultimately static atomic pellets within the static framework of space. The motive force was also basically immutable. How much this traditional picture of a three-dimensional world has changed may be illustrated by an example which shows the similarity of the revolutions in physics and art: Some time ago a well-known physicist (Hans Reichenbach, in a lecture on "Three-Valued Logic" delivered at Brown University, 1944) used a cartoon from the "New Yorker" as an illustration for the behavior of an electron according to Heisenberg's "Uncertainty Principle." Here is a tree which in an unguarded moment must suddenly not have been a tree. The source of energy which enables the electron to behave like the tree in the cartoon, namely to change its identity derived from a spatial system, seems to be illustrated by Schroedinger's world of immaterial waves which explode the static point of the electron and with it the basic immutability of a spatial world. What now holds the world together is no longer the rigid framework of space represented by static material points, but the interpenetrative force of energetic waves, a force which results in self-transforming processes. When that force of transformation is pried loose—as in a so-called electron—it behaves like our unpredictable tree in the cartoon. When it is tied up inside a so-called atom it functions in the substratum and

defies observation. Only when the substratum processes produce photons and consequently light phenomena, do they disclose the power of the hidden energies to transform whatever has seemed to us immutable in the shallow depth of three-dimensional thought. The inner identity of one atom changes into that of the next, and the same thing happens to every biological species, as exemplified by our fir tree. This energy is active in any growth whatever. The tree changes its identity as a three-dimensional species-form in a sense much more radical than that of mechanical redistribution of basic atomic units. The explosive force of autonomous change affects exactly these space-forming ultimate units. However, the total self-transformation of the tree occurs much more gradually. Whether the tree itself will behave like the freed electron is thus simply a question of compressed time or, rather, of intensified energetic interactions. The fir tree in the wood where we are actually skiing cannot behave in the same way as the fir tree in the cartoon, but both enact the same basic processes of energetic autonomous change.

The whole development of modern art since the Abstractionists has moved toward such a picture of reality. A modern composition shows in a positive way what the cartoon with its traditional perspective reality could show only negatively as a miraculous encroachment upon the world of space and its "eternal" laws of motion. (Traditional reality was unable to push through to the source of Heisenberg's "uncertainty," because it approached it negatively. The fact that our three-dimensional house of fixed spatial relations has been riddled with uncertainty-holes proves that the old fixed spatial "here" and "there" has been thoroughly shaken. We must ask, then, what power it was that blasted our house, and if we wish to find out we must leave the house and search for forces sufficiently powerful to riddle our static or semistatic dwelling. Reichenbach's hypothesis of a "three-valued logic" seems to beg the question, for it just adds certainty as a third value to the traditional "here" and "not here" or "yes" and "no.") The closer modern art comes to Modern Realism the closer it comes to the new picture of the physical world because the less it is tied to pure abstract relations. This is why Herbert Bayer's "Moving Mountains" are such a good means of positively illustrating the physicist's new vision of the world. This fact is particularly interesting in the light of the insistence of some modern physicists that it is impossible to make a model of modern physical reality. This, as we see, is only true if the term "model" is identified with a three-dimensional model. But to see three-dimensionally is by no means the eternal way of seeing but only an evolutionary phase.



58. "Exfoliation," oil, 1944  
("Moving Mountains")

the modern poster — was the result. Here we see a merging of the subjective forces of free self-expression, of free enterprise\*, and of the technical possibilities of our modern reproductive methods. Cheret, Toulouse-Lautrec (see ill., p. 93), Steinlen, May, Beardsley and Penfield were the representatives of the Art Nouveau lithograph. But free enterprise carried with it the narrowness of the autonomous ego. Personal success was the final goal of economic activity. So the free artist found his scope circumscribed and banal. Romanticism and Business were still uncorrelatable. This may account for the faked mood which hid like a mask the energies active behind the poster. The late Romantic poster pretended to improve the personality of the spectator while it actually furthered the ends of the manufacturer. Here perhaps we come to the root of the poster's spurious "keep smiling" optimism.

Yet the inner frictions of this split-reality created a desire for integration. The same forces which had led, in painting, from Art Nouveau and Expressionism to Abstract composition, now forced upon the Art Nouveau and Expressionistic ads the more matter-of-fact, more direct and dynamic language of the Abstract poster (cf. Cassandre — see ill., p. 33, McKnight Kauffer, *et al.*). The novel dynamism of the Abstract composition influenced the content and the philosophy of the poster. The liberating and life-transforming power of Abstract art had, at long last, been put to practical use.

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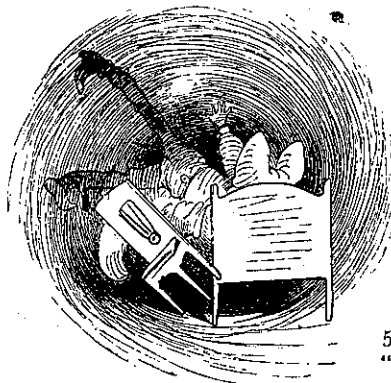
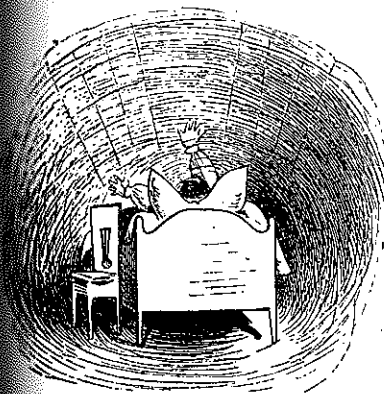
\*The term "free enterprise" is used here in contrast to an economy based on integrated cooperation which would create an increase not only in production but also in consumption.

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*The dethronement of Space by the growing admission of the force of change.*

*The Romantic vision of the force of change seldom went beyond the expressive power that distorted the spatial outlines and thus shook the unity of absolute space.*



59. "Adventure in the New Year's Night,"  
"Fliegende Blätter," Wilhelm Busch, 1863

*In these early drawings Busch dares to introduce time-created change into spatial Being only by adding the foreign bodies of circular lines indicating movement.*



60. "The Ungrateful" from "Haarbeutel," Wilhelm Busch, 1878

*In these later drawings Busch attacks the spatial forms and the spatial system itself in order to express the same kind of movement.*



61. "Old Knopp" from "Herr und Frau Knopp," Wilhelm Busch, 1876

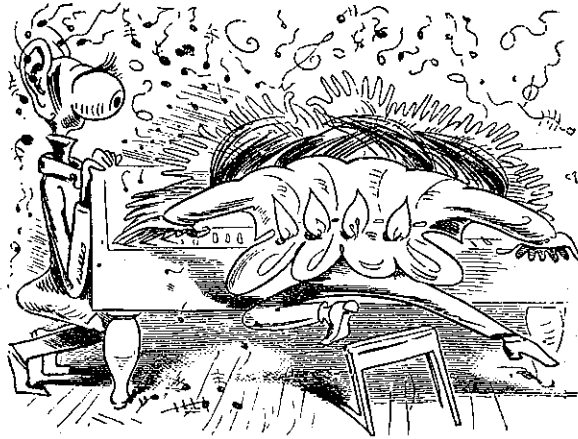
*Here the tottering movements of senility are expressed by distorting and dissolving in a sovereign manner the outlines of spatial form. But the romantic attack ends with the semi-static form of the "expressive line."*

*The dethronement of Space by the growing admission of the force of change.*

*The Abstract vision of the force of change was much more revolutionary: now spatial units interpenetrated. So where there had been the traditional static condition there were now self-changing processes. There is no Being left. This process naturally implied also a transformation of the concept of energy.*

62. "Finale Furioso" from "Der Virtuos,"  
Wilhelm Busch, 1865

*Movement indicated by multiplication  
of spatial outlines. This implies a dis-  
solution of spatial unity by Time.*



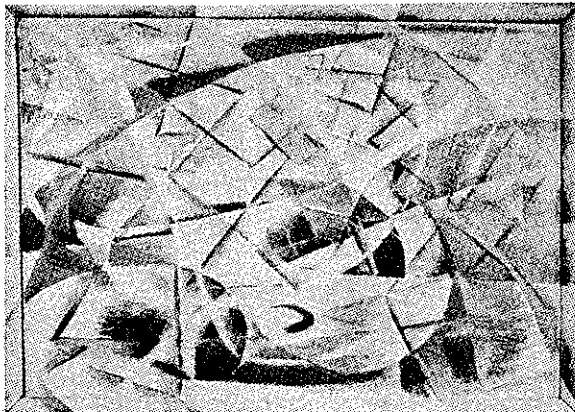
63. "Dog on Leash," Giacomo Balla, 1912

*Still the same principle of Busch's "Fi-  
nale Furioso."*



64. "Automobile and Noise," Giacomo  
Balla, 1914

*Here the spatial system has been over-  
ruled by the self-changeability of its  
lines and planes.*



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The integration of the old polarities, form and force of change, has also been the motive power behind MODERN ARCHITECTURE.\* The collapse of academic form-supremacy made for a hybrid condition, in which the subjective expressive form fought with mechanical function. Here, too, experience pressed toward integration, and integration meant a retreat of form before function, not only of the classical ideal form but also of subjective style form, whether in historical or new varieties. In the struggle between the autonomy of functionalism and that of form the latter was bound to be the loser. Its static character had to be consumed by the greater powers of function. This process was urged on by the technical development of modern materials, where extended dead matter was transformed step by step into energy. In this intensified integration, function could no longer remain the old semistatic "material mass movement in space" but had to become higher functionality in the sense of modern physics. It had to become a process of growth which could never be confined to any form, however transient. So in modern architecture, too, the very act of autonomous change became the essence of structure. Walls and furniture became self-changing; spaces interpenetrated, discarding, as in abstract painting, space as the standard of reality; the dissolution of walls into glass eliminated the static opposition of inside and outside space and multiplied the functions of space, exploding it as it were.

The building was no longer "beautiful" in terms of proportion, rhythm or design, for the truly revolutionary energies of modern architecture must now be evaluated according to their life-improving efficacy. Modern architecture was a collaboration of all life-improving forces, just as on a more primitive level a super-highway could no longer be judged in terms of form but had to be regarded as an energy which actively collaborated with the driving process and which became integrated with the energies of the driver and his vehicle. Here, too, we rise from the old polarities of form and function, of idea and matter, of spirit and body, into a dynamic realm of pure energies. In the individual building, as in city and all other planning, those energies — active in modern technical production, in physical and spiritual communication — effected two things at once: they shattered space and at the same time created more space. In architecture, too, space — and likewise extended matter — ceased to represent absolute values and standards. There is yet another fact which may illustrate this complete change which spared none of the eternal "basic elements": Renaissance and Baroque could still

\* Since architecture lies outside the scope of this study we must confine ourselves to a very brief summary.

devise an ideal ultimate city plan on the strength of an absolute intellectual structure. Today we have only relative plans born in, and changing with, the interaction of local energies.\*

The process of integration has gone farthest in the field of ARTS AND CRAFTS. This process first became conspicuous in the English Arts and Crafts movement. Morris, and before him Ruskin, had already foreseen the isolation of idealistic Romantic art, which addressed itself only to a small empathic elite, and which was leading even there to a paralyzing dispersal, a chaos of subjective autonomies. They also saw, on the other side of the fence, a brutal mechanical play of forces in the industrial revolution. They saw how in the latter the hypothetical law of "conservation of energy" resulted in a redistribution of matter, i.e. in wealth for a few and misery for the rest. Yet their epoch was still so firmly convinced of the existence of the Absolutes of the autonomous personality and the "inexorable" law of economic redistribution that they could see only one way to bridge the gap: the creative powers of the individual must be developed, the blind mechanics of the machine avoided at all costs. So the Arts and Crafts movement grew into a Romantic-idealistic movement. It was characterized by a fanatical hatred of the machine, a hatred which was yet unable to see the new liberating possibilities inherent in the world of the machine. Even after Morris and up to 1900 the English movement remained essentially hostile to machinery. The English failed to see that a new species of mind might evolve which would seek a new unity in the concerted action of energies. To them, the human mind still consisted of eternal faculties which had been destroyed

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\* The whole depth and extent of this new functionalism are shown by the modern methods of planning with their comprehensive statistics. All the energetic forces which constitute the life of a community are seen in their mutual interplay. Planning becomes a thinking in terms of energies, and the individual building their product. All self-sufficiency and ultimacy have been relinquished. The great thing about all this is that private preferences and the individual's desire to adapt the dwelling to his personal needs are by no means curtailed. The only assumption is that such desires must not be looked upon as autonomous ultimacies. Thus the house becomes more and more a pure function resulting from the self-changing functions of life — functions which determine the life of the community and keep its forms open. The mind of the new architect has developed a greater and more effectual depth than the three-dimensional mind of the architect who started thinking first in intellectual "forms" and later in terms of "movement in space." If we look for a specific house to illustrate this evolution tellingly we may find it in Gropius' and Wachsmann's "growing and shrinking house" of 1943. It seems almost certain that the progressive energization of architectural thinking will do away with what has been called the "international style" in modern building. That style still betrayed vestiges of the autonomy of "form" which architecture had taken over from Abstract painting. Form and function were still running parallel without real integration, creating the false impression that modern architecture was concerned with a perpetuation of "absolute basic elements."

and must be resuscitated. Where, they asked, had the powers of the imagination succeeded in reaching this ideal unity of spirit and body, this timeless beauty? The answer was: in the Gothic. In consequence, they advocated a return to the religious community of the cathedral, to the integration of craft and art, of body and spirit governed by an absolute idea. The result — a typical example of the workings of the Romantic split-mind — was the extolling of a supposedly timeless style which had grown out of a certain period, as the antidote to man's inner disunity. Mind and body were to be united under the absolute aegis of religious unity — except that this unity was now split in itself. It was no longer based upon an objective truth but upon the free imagination of the autonomous individual. The Arts and Crafts movement until this day has remained concerned with the inner balance of the personality, with the pursuit of subjective happiness. Distinct academic form has made way for the free form of stylistic reminiscences. Furniture, tools and buildings, all exhibit the free play of expressive form, intended to convey the subjective ideas of sitting, sleeping, drinking, etc. Here was, after all, still a romantic cult of formative energies in man and their empathy in the surrounding world. That empathy was also applied to the different characters of materials, in contrast to the way in which academic design had disregarded materials, forcing the eternally correct form upon them.

Romantic design did not attack the material as actual stuff, it merely wove fancies around it. But it was this freer, Romantic, changeable form which paved the way for a transition to functional form — a form that was to express a new concept of matter.

Later steps brought about a more serious rapprochement between the machine and art. But here, too the artist remained the "form-finder," whose free spirit tried to find a new idea and "ultimate" form for all articles of use. Function was still conceived as a "movement of mass in space" which could at any moment be frozen into a pure space form.

This struggle between the ideal forming power of the artist and a function governed by iron laws was still evident in the Deutsche Werkstaetten in Dresden even as late as 1910, when the first standardized machine-made furniture came out of that shop. It was also evident in the "quality idea" of the Deutscher Werkbund. It was with this open split that the Weimar Bauhaus started its career in 1919. Its founder and director, Walter Gropius, regarded himself as a disciple of Morris. He, too, started out by seeing in the building a cathedral-like, unifying idea at work, a purer form which harmonized technical function and artistic structure. The very name, "Bauhaus," indicated the strength of the Ro-

manticist survival. The Bauhaus started out loaded with Romanticism, which merged with industrial production no better than fire mixes with water. Nothing could give better proof of Gropius' genius than his creative drive toward achieving the integration of idealism and materialism, of form and energy. As is usually the case with visual genius, it was his instinct that showed him the possibilities of a deeper and more dynamic unity in this rapprochement of the two hostile poles. His instinctive knowledge was fomented by the pure energism shown in technical construction at a time when theoretical physics had not yet openly eliminated solid matter from the concept of nature. Iron, steel, reinforced concrete, etc., made possible massless constructions of such intense energy that "form" as ultimate truth was becoming less and less essential. This process of integration was spreading from industry and industrial methods to the social scene and its energies. These changes affected "art" and the "artist" to such an extent that — as the history of the Bauhaus shows — these terms came to sound obsolete. Small wonder, then, that they fell into disrepute. The Bauhaus succeeded in developing a generation of designers who looked upon their creations as powers functioning within the actual life process. Thus energy and function were raised beyond the status of blind force and blind mechanical motion. They grew into an open, directed process of transformation. Thus the two separate Absolutes that had still survived in Enlightenment and Romanticism, a blind force-matter law and an ideal formative energy, were finally eliminated.

As we have seen, these Absolutes were the preservers of a form idea as ultimate truth. Although the art work partook of the attenuated split character of temporary ever-changing forms, it was still the symbol of form. Form endowed it with the characteristics of art and beauty. So we cannot be surprised that the art work had to abandon its form character and so its innermost Being. Modern design became a process irreducible to absolute laws of function or formal quality (beauty). It had to be judged by a deeper and more dynamic standard. It had to be evaluated exclusively as active force.

Here we have again the old problem of magic reality although in a deeper sense. Yet while the pragmatism of the magical era had tried to stay autonomous changeability and thereby moved toward the vision of a basic formal condition, the functionalism of modern man is trying to set all stasis in motion.\* This stasis is represented by the "eternal necessity" of physical and economic laws on one side and the designer's eternal

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\* Pre-artistic production had also tried to encroach upon the life process, but it had done so in the ineffectual manner of sensuously imitative magic. Modern post-artistic production has grown into an energy which takes an active part in the life process and which improves its very basis. Its power is much profounder and hence much more intense.

vision of form on the other. Now the energies living in these two polaric fields interpenetrate. "Free design" becomes a useless ornament. Design is becoming more and more an energy that improves any static law in the actual processes of life. This energy improves any "eternal" natural condition — in short, any "idea." We do not believe any longer in any "given basic elements" or laws in human nature and human life. We have learned that these elements and laws are transformed by the activities of deeper forces. In modern artistic imagination these substratum forces are liberated. So we expect the designer to participate in a much more active way in the improvement of our practical life than the "freest invention of expressive forms" could ever accomplish. On the other hand we expect physical and economic sciences to provide artistic designing with visions and means to turn our life in a hope-inspiring process of open growth, untrammelled by any immutable concepts that chain and close growth. In his house, his tools and instruments, the worker senses the collaboration of a designer who plans for him and with him, while the designer senses the collaboration of the worker and the employer, both of whom help to improve his life-process and support his powers of transformation. Here we may catch a glimpse of a new dynamic unity of life, such as man has never been able to conceive before. By virtue of this energy the Bauhaus succeeded in bringing about an industrial mass production of functional furniture whose results were to be seen in every store and every worker's dwelling.

The individual remains a special energy whose values are respected and considered necessary; yet that energy must be kept alive through interaction and sharing with the community and with the total process of life's growth. Designing becomes a process of transformation. Nothing could be more misleading than to speak of a functional "style" which is supposed to have received its ultimate form in the Bauhaus, or to speak of the "growth of a new tradition." Such analyses of the Bauhaus movement are characteristic of an art philosophy still thinking in terms of eternal human faculties and of "basic elements of designing" which are now said to have rearranged themselves into a new "timeless" style. The Bauhaus movement is no stylistic concept but a transformation process of designing which has rejected all eternal "basic elements," identical methods and laws of production. In the ten years of its existence the Bauhaus changed its character much more strongly than the Arts and Crafts movement had been able to do over a period of fifty years.\* The

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\* This inner transformation of the Bauhaus has continued after its transplantation to this country (the INSTITUTE OF DESIGN in Chicago, under the direction of Moholy-Nagy). In Chicago the industrial designer was no longer being trained as a specialist journeyman but first

principal ideas of the sciences and hence those of industry are subject to continual change. These changes affect in turn the notions of designing. The concepts of economics are being likewise transformed by the modern economic movements. How, then, can design which has developed into a collaborating energy in this industrial and economic process cling to eternal esthetic laws and follow the credo of any fixed style?

The Bauhaus notion that every artistic design must contain a functioning, i.e. life-improving, force led of necessity to the abandonment of the self-sufficiency of the picture. We have seen that this new notion was potentially active in Abstract composition and that the evolution of industrial life could not fail to stimulate the artist into trying his hand at commercial design. Yet the urge for integration has led far beyond such a loose contact. In the 1920's it was at work in its most concentrated form in the Bauhaus.

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of all as a planner of design tasks in any material. There was also an increased emphasis on the biological needs of the human being and on his social and economic responsibilities.

#### **IV CONCLUSION**

We have followed here the development of Western concepts to demonstrate the forces that drive forward our visual production; forces that evidently lead away from what we are used to call "art." The "art work" as symbol of life's unchangeable core and as propagator of a belief in a static world has run its course. It has tested its efficacy in a struggle with the forces of the surrounding world, and in so doing has been constantly forced to change its nature. Today this transformation has reached a stage where a work can no longer be designated by the fixed term, "art."

We have begun this study with a close investigation of evolution, beginning with prehistoric times, for we believe that the forces active in modern art cannot be judged by the timeless standards of that three-dimensional reality which gave birth to "art." As long as we ignore the fact that the "art work" and the concept of reality it expressed were only passing historical solutions of a much profounder problem, we shall be unable to understand the scope of the revolution through which we are passing. Not only in visual production but in other fields, too, we shall violate the forces of life's growth and risk catastrophes such as the most recent one which has placed humanity close to the edge of an abyss. That abyss we are still trying to bridge.

The red danger signal of absolutistic thought is still up, because we are still unwilling to heed the lesson of history which teaches us that all attempts to build life on a static basis have failed and that they have been of only a temporary evolutionary significance. Those attempts must be taken for what they are: the product of certain experiences which the magical mind underwent. The experience of the world's vast changeability forced that mind to transform itself into a new species of mind which was better equipped to deal with the forces of life. It became a rational mind which developed an X-raylike capacity for seeing things "intellectually." It saw unchangeable ideas behind the chaotic and wearing interplay and counterplay of sensuously daemonic things. It explained that diversity as a surface phenomenon governed by absolute master ideas. This rational thinking was doubtless more effective than the magical type had been. Three-dimensional reality and the belief in the fundamental identity of all visible objects afforded a greater freedom and security. Its deeper magic — that of changeless ideas which gave birth to the cult of "beauty" and "art" — brought a better working order and unity into human life. Yet what entitles us to see in this improvement an ultimate solution? What entitles us to see in life such a narrow and short-term evo-

lution? The very drive toward the erection of three-dimensional reality could never maintain itself in strict absoluteness. It worked only by constantly changing its identity under the pressure of experience and the transforming energies active in that experience. The principle of a rational universe — the antagonism between spiritual form and the powers of sensory change — was still too primitive and too close to magical thinking. The mind which lived in such a reality and which had to play its role as an energy among other energies was forced in this struggle to devise always more inclusive concepts of the one central Absolute. This effort led to an attempted suppression of the transforming powers of life, until finally three-dimensional reality exploded into a less rigid, a deeper and more dynamic world concept. The powers of evolution themselves led to a deeper and more energetic unity of life and abandoned the fixed basis of three-dimensional reality. They developed eyes which saw more penetratingly than the X-ray eyes of three-dimensional vision. It became clear that no absolute concept was able to account for the creative transforming power of life. All fixity and codification appeared to be "premature" and an insult to life's creativeness. God grew gradually from an eternally identical spiritual Being into a never identical power of change. This transforming power we have seen active also in modern design: Enlightenment and Romanticism had paved the way for it.

In this modern evolution, artistic creation and esthetic experience have changed their character so radically that a search for new terms has become imperative. Abstract painting and the new architecture are no longer trying to confirm an identical basic condition but to create a spontaneous energy which may change that identity. All "form" belongs to a three-dimensional, solid world with a fixed extension. This is exactly what the modern vision is trying to overcome. It pushes ahead into a world of pure energism. So the words "art" and "artist" have come to sound stale; they create associations of eternal receptacles of "truth," of ultimacy and self-sufficiency, i.e. of something that stands still in an immutable life context. The modern designer wishes to work much more intensely. His product must be useful. The building and the painting must once more act and function as the magical image did, only on a much deeper level, for THAT POWER OF SPONTANEOUS CHANGE WHICH HAD ONCE BEEN A SOURCE OF ANGUISH IS TODAY A SOURCE OF HOPE. We expect it to free us from the rigid supremacy of a fixed principle. Modern design must itself take part, as a higher energy, in the life process which has abandoned the old, supposedly eternal laws. This means that modern design has become both a product and a producer of our modern reality.

We have pointed out how similar this evolution of visual production

has been to the evolution of modern physics, and how observation has led both to the concept of an overwhelmingly dynamic universe. Here, too, we can see that the forces of life are much too explosive to be forced into the cage of "space" or to be defined as a movement of identical solid particles which are actuated by an always identical power. Those hypothetical ultimate units which had composed "space" now explode in the Beyond. They blast the whole space world and overrule all its fixed relations and rules. They draw on a substratum world which remains never the same, since it consists of the ceaseless interaction of energies. No other concept of nature can account for the phenomenon of atomic energy. How could we ever hope to relate the latter to a nature which "conserves" energy and matter in a space-bounded stasis? \* What modern physics and modern visual production have in common is the spontaneous power of autonomous change which has superseded the old identity concept. Yet neither movement can be isolated from the rest of life. Each is shot through with new experiences gained in different fields. Who would now dare to separate physics from biology, psychology, philosophy, sociology, economics and politics? And how could architecture and designing keep alive if they were divorced from all these fields. In order to understand fully the forces at work in the present transformation of visual production we must cast a glance at the other fields of modern endeavor.

BIOLOGY would find it harder than physics to maintain the belief that all changes derive from the blind working of a mechanical force whose rules are eternal. The assumption of the Enlightenment, first made by Lamarck, that there also exists the metaphysical idea of a perfect form as a directive magnetic force, failed to furnish a satisfactory answer. The integration of this paralyzing contradiction was started by Darwin, who gave the transforming energy a new depth and thus raised it to something more than mere mechanical function. To him life was too creative to be explained in terms of blind redistribution of inert matter. His "living atom" already prefigures a volitional power of spontaneous change such as modern biology assumes behind all forms of life. Biology, too, arrived at the concept of an open irreversible growth which draws its strength from a substratum so teeming with energies that it can never remain identical. † Here, too, inert nature has come alive in a dynamic

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\* If — as Hahn says — the chief problem in gaining atomic power was to recreate by the very act of fission the energy that caused the fission of nuclei, then the classical law of a balanced exchange (movement in space) between cause and effect is no longer valid. We obviously no longer "preserve" an identical amount of world-energy, but break into a new inexhaustible substratum of force that explodes the static, identical foundation of traditional reality.

† This writer has had an opportunity to experience this new concept of reality by sen-

sense; here, too, the three-dimensional formal concept of the species has proved to be too narrow and superficial. The value of the individual now lies in something deeper than his ultimate self-sufficiency. It lies in his power to improve his alleged identity by taking part in the self-changing life process. Here, too, as in physics, something that had seemed identical to three-dimensional vision is now seen to be engaged in a constant transformation of its basic elements. Three-dimensional vision had regarded the genesis of a new species as an act that was inexplicable in its suddenness. But that act is no longer baffling to a mind thinking in terms of pure, extraspatial energies. To a biology thinking in such terms the wound of three-dimensional spirit-body polarity is no longer open: it has been covered with the new tissue of pure energism. Modern medicine has followed a very similar road.

In PSYCHOLOGY Freud has closed the gap (cf. p. 98). Both concepts of the soul, the old concept of total supremacy of form-idea over the boundlessness of sensual impulses, and the split concept of Enlightenment in which identical conscious form-powers always struggled with the flux of changing sense-impressions — both these concepts have been superseded by the deeper unity of an unceasing interplay of energies. The process of rational thinking arises from the interaction of subconscious drives and the forces of the milieu. So the individual abandons his supposedly timeless static basis and becomes part of an open process of growth which unifies life in a much purer dynamism. Here, too, the three-dimensional vision appears as a transitional phase between the primitive vision of vague "forces" and our own deeper and sharper vision.

In almost all its discoveries psychology is linked with modern philosophy, whose most vital expression we find in AMERICAN PRAGMATISM. There the same integration in logical thought, moral volition and esthetic experience takes place on a deeper, i.e. more dynamic level. Acting and being acted upon change the ultimate identity of the old basic mental elements and make them over into self-changing energies. "Growth

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sory means. The occasion was a demonstration of microphotographic fast-motion pictures on the growth of the fish egg, made and interpreted by Dr. Edward C. Roosen-Runge (now of Louisville University). There it became evident that a transformed time, i.e. an acceleration or retardation of the photographic process, created a completely different spatial reality. Moreover, it was brought home to the spectator that these wholly unstable visual processes of growth — interconnected by tensions only — were but faint and crude surface reflexes of purely energetic transformation processes whose tremendous intensity could never be accommodated in the four-dimensional cage. One was forced to realize that the concepts of FORM and Space including Time-Space are much too close to the sensory surface ever to be able to describe life's profound transformative energies. The sensory experience of these movies shows indeed such affinity to the vision of modern design that this writer makes their demonstration part of his courses on modern art.

itself becomes the only moral end" (John Dewey).\*

ECONOMIC THINKING, too, has been forced by experience to relinquish the semi-absolutism of the autonomy of the free individual. For that autonomy has not resulted — contrary to expectations — in a self-regulation based upon an absolute law which would conserve firmly the redistribution of identical units of extended matter (symbolized in the gold standard). It has led, rather, to a chaos of mutual exploitation on the part of autonomous individuals (monopolies and the nations which represent them). That chaos has constantly threatened — and still is threatening — to relapse into the absolutism of total government and imperialism. So there has developed within capitalism a new and more efficient species of mind to replace the old autonomous "I," and that new species sees deeper and plans farther ahead. The final ground is no longer the autonomous individual but an interpenetrative collaboration of all individuals to dissolve autonomy. The eternal law of demand and supply itself can be changed by creating new demands. Gold currency is no longer a static unit with the character of ultimacy; currency becomes dependent upon the mutual stimulation of national productions. It becomes a by-product of the open process of economic growth. This process itself, i.e. the very act of productive transformation, is now the never-identical foundation which supports life. Already, with Henry Ford, we could see this thrust into a new economic reality. This new reality became a world problem in Bretton Woods. Its new full-employment philosophy tends toward a complete flexibility of exchange rates in order to increase production and decrease its cost. It obviously drives toward the mutual penetration of national economies in order to stimulate the energies of production toward creative improvement (more and cheaper goods). Keynes' vision of economy is no longer interested in the preservation of a balance between import and export but rather in keeping that static foundation on the move. Here also we have clearly the new vision of a self-changing reality, a new thinking in energetic processes.

The powers which Enlightenment introduced into the economic process were still hampered by absolutistic notions embodied in the autonomy of the "free individual." Our big problem in economics and politics is to do away with those fetters so that national and world economy may work together without running the risk of being strangled by a total government or a chaotic oligarchy. The Tennessee Valley Au-

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\* The possibilities of Pragmatism have not begun to be exploited. To identify the first steps in progressive education with the *summa* of this philosophy is no less a misunderstanding than to identify the errors in the use of atomic power with the possibilities opened by the tapping of subatomic energy.

thority and, on an international basis, the international Danube power project and the idea of a true internationalization of the Ruhr Basin are the first examples of an economic and political philosophy which thinks literally in "supraspatial" terms. Atomic energy has dissolved the absolute character of solid matter, of the *Lebensraum* of raw materials and of borders. If we make use of the substratum of energies a small space may become a large space, in the same way that we have made absolute extension relative by means of rapid communication. It seems that in WORLD POLITICS, too, a thrust into supraspatial autonomous change is required for the establishment of the new unity among men.

So long as we continue to see in races, nations or states eternal styles which never change and so possess a divine autonomy and self-sufficiency, so long will we continue to impede any political unification on a world-wide scale. For then we run counter to the forces of life. Only when the political individual begins to think beyond himself and regards himself as an energetic process striving to improve himself through interaction with other energies — only then can that unification be achieved. Peace cannot last unless we learn politically that we are not here to confirm or conserve our individuality and our special interests but to transform individuality and interests through a mutual give and take. NOBODY CAN FLOURISH UNLESS HE KEEPS ON EVOLVING IN HIS VERY ESSENCE. PEACE IS NO STATIC CONDITION.

The terms which we have used in this brief summary of modern movements besides visual production prove how inseparable all these disciplines are. Modern planning and modern architecture are inseparable from a philosophy of real estate which has overcome the semi-absolutism of free enterprise, and Modern Realism and its tendency toward a life-improving language of symbols are integral parts of the modern community, of modern economy and modern world politics.

Yet in every field this evolution depends on the boldness of a few people. The overwhelming majority of men follow more or less obsolete concepts. It is true that magical thinking survives only in dying rites and superstitions; yet three-dimensional thinking, especially in the form of medieval or Baroque total absolutism, is still tremendously strong. Even stronger is the semi-absolutism of the "free personality" who does not think beyond himself because he still regards himself as a vessel of ultimate truths and values and hence as an end in himself. We have learned that neither an absolute transcendental idea nor a reliance on always identical divine faculties of the human individual is able to unite mankind.

Where, then, lies our hope? Only in individuals who think beyond

themselves, who feel alive with energies that press toward mutual penetration and so toward common growth. Then only will the individual feel responsible, in a deeper and more energetic sense, for the whole community of men. And this new unification must be achieved not only by a few pioneers, like the modern designers, but by everybody. The individual counts only as a lifelong process of transformation. The moral strength which is now needed must be drawn from the evolutionary thought embodied in the modern sciences, philosophy and visual production. This is the only way to reach a flexible, growing unity. And since no other experience is more impressive than the visual experience, the moment has come for ESTHETICS, ART HISTORY and ART MUSEUMS to develop into the ethical teachers of modern man and to help him outgrow his semistatic philosophy.

As regards ESTHETICS, we have already shown that it has run its course as form experience. It is as impossible to posit a general objective standard of beauty as it is to assume an invariable esthetic need and feeling for QUALITY, expressed in endlessly various but nevertheless essentially equivalent styles.

This QUALITY is said to reside in a timeless will of all artists to create inner static balance. But there evidently was no such will in magical production. The prehistoric image, which gave the maximum of satisfaction when mutilated, cannot possibly have been experienced as *Gestalt*, nor can we today experience it as such. The concept of QUALITY really applies only to the three-dimensional, i.e. statically anchored, production and not to anything either before or after. The wish to conserve throughout the whole historical evolution, including our own changing epoch, one always identical esthetic faculty becomes more and more absurd. (It actually extends the belief in an Adam.) The magical experience which aimed at practical sensory change, the esthetic experience of beauty which meant conserving an ideal basic condition, and modern experience which drives toward a practical function of growth, i.e. toward an ever-open transformation, are all different in their ultimate essence. If the eternal esthetic faculty is not to evaporate into meaningless mist, then it, too, must be energized. In esthetics, too, the continuation of the three-dimensional drive toward the distinctness of an identical basic idea leads to absurdity since it is stripping that idea of its last vestige of distinctness.

Dewey has described the esthetic experience as an open process of "doing and undergoing," as a struggle between the energies of the ego and those of the milieu, which are represented by tradition, different "egos," etc. This step indicates a considerable advance and invites still

another step, i.e. an inquiry into the question whether this "give and take" process remains the same for all individuals and in regard to all objects. We doubt that it does. Dewey's analysis may be compared with an Abstract composition that shows autonomous change *per se*. But Abstract art already contains the driving force to spread out into actual historical processes, and thus to tear down the relics of the walls of self-sufficient form. Describing a timeless dynamic principle of esthetic experience cannot reveal the real intensity of life forces. They only show up in actual evolution. The esthetic experience is self-changing in a sense much wider than the purely formal sense. A modern mind which experiences life as an open process is differently impressed by Herbert Bayer's "Mountains" and by a Renaissance painting or an Egyptian relief. Yet that relatively goes farther yet, for a mind still close to the Baroque may again experience these three productions in wholly different ways. There is no static or semistatic platform where all spectators and all historical works of art may meet. It is inevitable that the modern mind finds in a modern composition a greater — and essentially different — satisfaction than the satisfaction he might derive from historical paintings which represent earlier evolutionary stages of reality, i.e. stages which this mind has outgrown. There can be no doubt that we include, whether consciously or unconsciously, the fact of man's mental growth in our judgment of esthetic value. As soon as we learn, for instance, that a Vermeer which we had greatly admired has turned out to be a recent product, or that a certain "Gothic" structure was really built during the Historic Revival, our esthetic pleasure and admiration come to a sudden end. Even esthetically there seems to be no "art without epoch." To experience an historical art work without taking into account the irreversibility of Time and the energetic transformative processes that represent it becomes more and more a life-resisting act. The experience of past art has no real meaning unless it is a struggle between our own energies and those of the historical art work. There is no art *per se*, and no aesthetics *per se*, only mutual transformations of works of art and observers.

We are now outgrowing the experience of timeless form, i.e. esthetics proper. Less and less do we experience an always identical basic world condition. Like pre-esthetic magical man we begin to respond to transforming energies in life and visual production. Usefulness, efficiency, active energy to transform life — all these are returning today in a deeper and more intensive form,\* and their return spells the death of the esthetic

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\* The imitative act of magical man intervened much more superficially in the life process than do modern design, the theoretical and practical sciences, etc.

experience, which was, by definition, opposed to usefulness. It is plainly impossible to reconcile a belief in the basic changeability of the world with esthetics.\* Yet by changing into a historical science endowed with a new self-changing dynamism, traditional esthetics may gain enormous power. Should it succeed in making people see, not only in modern design but also in historical visual productions, the never-identical collaboration of creative energies, then it would also impress on everybody the fact that it is the very act of transformation which brings about unity. This is the only sound basis upon which to build the future of mankind esthetically.

Like Esthetics so ART HISTORY will emerge with new powers from this abandonment of all timeless notions. When art history became a history of styles it began to explain historical changes in terms of a semi-absolute philosophy, founded on the supposedly timeless faculties of the human subject. These subjective faculties were substituted for the old invariably true, objective form-idea,† and were said to create always new — and yet eternally valid — style forms through their contact with diverse sensory experiences. We may also say of the history of styles that it lived in a four-dimensional reality, i.e. in a world that was mobile but still too narrow — a world paralyzed by its split character. What paralyzed it was the continued insistence on eternal basic elements in an eternal human esthetic consciousness, whether these basic elements were called the concept of space or of the picture plane, the eternal essence of Impressionism, *Gestalt*, eternal types, etc. All these concepts were, so to speak, still maintained as spatial forms which now started to curve under the impact of transforming energies. They were, so to speak, ultimate quanta of radiating matter, which served to construct the floating interpenetrating continuum of the art-historic universe. They constituted the unifying and conserving element in that universe. But as in the natural sciences here, too, such a concept of life proved too narrow. Those last semi-static units called "types" explode under the pressure of the transforming energies of history. Types come and go in the growing process of evolution; they are never conserved.

Let us take as an example that general "type," SPACE. How could we possibly conserve that concept throughout the course of history? We are already stretching it considerably by saying that the three-dimensional-

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\* It becomes more and more impossible to judge modern designs by "grace," "proportions" and similar standards of a form-anchored world. Here, too, we must see more sharply.

† In its pre-style stage, art history still tried to separate spatial qualities from temporal ones, and made the first the ruler; style-history admitted time as co-ruler.

ity of antiquity and medievalism — though it was not yet space in the Renaissance sense — was a forerunner of our space notion. But that stretching becomes wholly absurd when we attribute to the Egyptians and the prehistoric peoples an eternal concept of the picture plane and proceed to detect in that concept the germ of our own space notion. And how can we possibly reconcile an eternal category of space with the evolution of the last two hundred years, not to speak of the millions of years yet to come?

It is the same with any other supposedly eternal category of the human mind. It becomes clear again and again that none of them can keep its identity under the pressure of the transforming powers. They all explode into the greater depth of an energy which loses its own identity through interaction with other energies produced by experience. What is happening in art history is an evolution quite similar to the evolutions in physics, biology, psychology and pragmatist philosophy.\* The ultimate units, i.e. the identical or semi-identical points which had built the space world and the time-space world are dissolving into purely energetic processes of autonomous change. Here, too, we are brought face to face with a world comparable to that of Dirac's substratum.

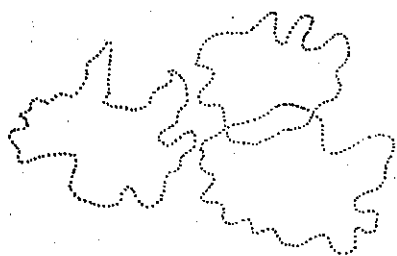
The history of styles developed because the historical powers of transformation had proved too strong to be any longer accommodated in the rigid three-dimensional cage of an ideal space form. Now these powers have proved too strong even for the semirigid four-dimensional cage of the history of styles. So we must dare to thrust forward into a more flexible, purely dynamic unity. To traditional minds this unity may no longer appear continuous yet it is the only way out of the prison of a statically anchored reality. The new continuity is more flexible, spiritual and energetic, and by the same token it is more reassuring and closer to observable change than the old rigid continuity which had been based upon the supremacy of a static Being over Becoming, i.e. upon antagonism. The notion that there is a stronger underlying changeability which causes all surface change results in a much sounder unity. This unity must be the energy of autonomous growth. Categorical faculties open into spiritual bundles of energies which change through their contacts with the energies of the milieu. The history of art becomes a process of open growth. What happens when the history of styles† deals with the present evolu-

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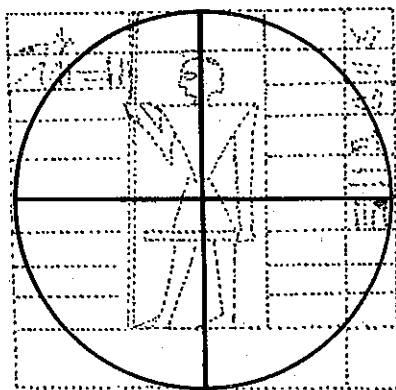
\* So the gap between the humanities and the sciences can be bridged at last.

† It depends wholly upon us how many styles we introduce into art history. The more the better, for by so doing we may get closer to the underlying self-changeability. The latter change cannot be defined by any stylistic concepts, for these concepts are too rigid and superficial. They are, after all, but temporary working hypotheses.

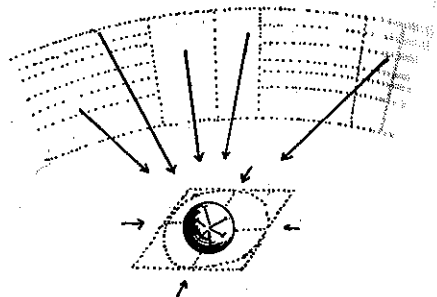
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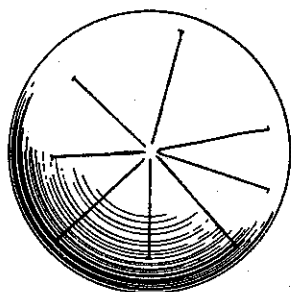
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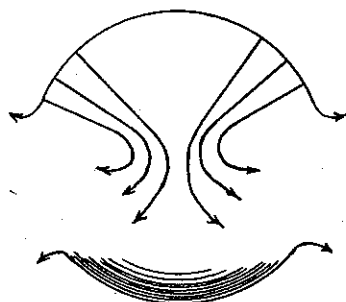
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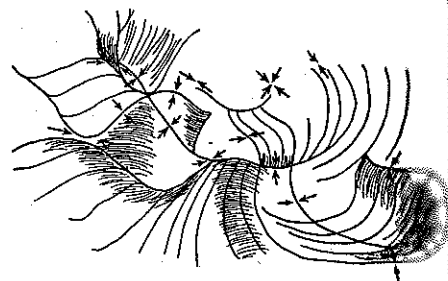
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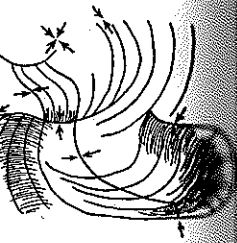
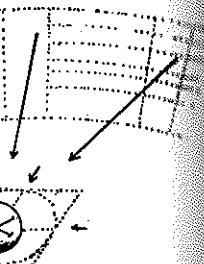


6.



*This summarizing diagram indicates how the Western picture of a three-dimensional reality (4) and its absolute ground originated and how it is now dissolving. It is only a temporary way of a temporary species of mind to deal with the energies of life. The energies working in man's experience create a constant transformation of his mental powers. This transformation is reflected in the constant growth of man's reality.*

*Man's past, present and future then are not supported and united by eternal ideas or timeless laws or Adamic mental categories. Such a certainty is not only obsolete but dangerous and deceptive. It chains us to immutable principles and makes us reactionary blocks in a life that is nothing but one tremendous act of ceaseless self-transformation. Life is not united statically but energetically, namely by the continuous process of interpenetrative transformation of all its energies resulting in an open growth never closed by any tombstone of immutability. Life never repeats itself. It has an overwhelming directing force revealed by evolutionary history. The urge of growth is the real force in our present life. Our new rationality is no longer one of Being but of Becoming.*



tion? Being concerned with the preservation of the "fundamental unity in variety" it can only point out what is "still here" instead of stressing what is now here for the first time. So it is bound to hinder modern life instead of aiding it and to widen the gap — which becomes more and more evident — between the reality of modern planning, design and science on the one hand and the reality of stylistic investigation on the other.\* Only by being regarded as open growth can art history be saved from that precarious situation.

The attempt of this book to perform such a service has doubtless been imperfect and much too sketchy to exhaust all the possibilities. But it may help to free the concept of historical evolution from the clogs of narrowness and rigidity which have been forced upon it by the tradition of three-dimensional thinking.

One thing seems certain: in art history, too, we may derive new strength from a thrust into a purely energetic substratum; and that strength may be used for the building of a new world which will no longer seek to stay the energy of spontaneous change but which will look upon it as a new hope.

The energies latent in modernized esthetics and art history may be used for the development of a new type of ART MUSEUM. Such a museum could interweave those energies much more closely with the energies of life than esthetics and art history have ever been able to do; and in consequence such a museum could transform life itself much more intensively. What would the new museum be like?

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\* How dangerous that gap is, and how misleading an analysis of modern and historical art movements can be when it contains the dilemma of a semi-static philosophy, is clear in Giedion's *Time, Space and Architecture* (Cambridge, 1941). Giedion sticks to timeless Adam faculties, as for instance "Space." So modern architecture and painting still represent the eternal human desire to express "movement in space." And there are THE eternal "basic elements" of architecture which in modern architecture are only "more rationally arranged" (obviously according to an equally timeless reason). The consequence of this semi-absolutistic philosophy is a bleeding of the real creative force behind all modern movements. Fundamentally Borromini and Tatlin, Turner and Paxton, the Surrealistic Picasso and the stroboscopic photographer, Leibniz, Newton and Einstein, Plato and Dewey all work with the same timeless human concepts. What else can modern art and architecture become under these circumstances but a new arrangement of basic elements, i.e. a "new style" — or as Giedion calls it, "a new tradition." With good instinct Giedion is fighting the split-personality of today, yet he does not realize that his own philosophy is still a typical split-philosophy that tries to preserve timeless elements in a world of change. According to Giedion's analysis, modern architecture lives still in the Newtonian world. Small wonder that the conclusion has been drawn from this book that modern architecture and art are far behind the natural and economic sciences and of very little help in solving our vital problems. We would not make an exception to the policy of our study and go into this criticism of an otherwise very useful book by one of the few pioneers in the history of modern architecture, were it not for showing how dangerous to future progress any semi-static philosophy of art and history must be.

First of all, it would no longer propagate "art" in the old sense. It would cease to be a temple of humanistic relics. It would show "art" for what it is, i.e. the product of a relatively short evolutionary phase and part of a finite and strictly limited reality. It would also begin to demonstrate the growth of reality and to show the visual production implicit in that growth. Historical realities would be brought alive in all their relativity, mutual tension and internal drive toward autonomous change. Then the museum would become infinitely more colorful — even in looks — than it is today.

As a whole the museum would have to show the forces active behind the various historical realities, using all possible sensory and intellectual resources of representation. It would have to show that the Egyptian relief, the Greek statue, the medieval altar and the Renaissance painting were transforming powers in their respective epochs, ever-new attempts which under the test of time changed into ever-new visions and are still continuing to change. It would have to teach through the individual example and through the whole art-historic process that there never was such a thing as the peace of an ultimate truth and beauty; that such a peace is inconceivable and that men are never the same, since their needs change continually as they themselves change together with their world concepts. In this manner the museum would spur us to learn from that process and to continue it more worthily. It would then point toward goals ahead.

In order to gain this new strength the museum would have to be flexible, both as to building and as to inner arrangement; flexible not for the sake of being always "different," offering constant novelties, but for the sake of transforming its own identity under the pressure of life's continuous and autonomous change. A deeper and more vital understanding of life's growing forces is bound to necessitate a new organization in everything, including modern design. The strength of the new museum would lie in the concentration and force of its life-improving and life-unifying energies. Its director would have to be more than an augments, conservator and tasteful arranger of his treasures. He would have to have the requisite imagination for making this new reality act upon the senses. He would have to collaborate with the pioneers of modern design. And there is one thing, especially, which the modern museum director would no longer be able to afford; namely, to wait until "the situation of modern art has become clarified." By so doing he would virtually decapitate the museum; and nobody expects a headless trunk to act and grow. The only meaning of the museum lies in its being a pioneer, in a double sense. First, the museum must finally bridge the gulf between

art and our industrial life. This it can only do by participating in all the struggles of the present. It must show that the most recent evolution is determined to bring about a new integration, and that modern design is no longer self-sufficient art — produced by dreamers withdrawn from life — but an active component of the new economy and society which it will help to unify. Second, it must show that the modern movement is inseparable from the whole evolution of historical art and that that evolution has been driving with tremendous momentum from the remote past into the immediate present. The art museum, then, must represent the same unifying philosophy of dynamic open growth that is gaining ascendancy in all other fields of inquiry. The only warrant of the art museum and of the esthetics and art history behind it is the present moment with its particular exigencies. But the “present moment” of yore is no longer that of our own epoch. Past exigencies craved the confirmation of an immutable truth, and the museum in its present form is still a valuable caterer to such needs. Yet our own needs are not served but rather frustrated by it. In order to serve us it must learn to distil a new progressive energy from the objects of art history. What we desire is not an immutable-form ideal or a loose arrangement of diverse styles but an irreversible evolving growth. We wish to thrust forward to the very energies that create that constant transformation of styles. Only the transforming power which leads from the old to the new can give meaning to both the old and the new.

The one and only thing that matters to us is ourselves and our vital problems. To recognize ourselves and our tasks we must discover the energies that, surging up from the past, have invaded our own lives. We exist solely as improvers of our heritage. An art museum that tries to separate the past from the present is indeed like a head without a body or a body without a head.

The new type of art museum must not only be not an “art” museum in the traditional static sense but, strictly speaking, not a “museum” at all. A museum conserves supposedly eternal values and truths. But the new type would be a kind of powerhouse, a producer of new energies. So long as the museum remains content to preserve old truths and to collect relics that house the timeless spirit of QUALITY it acts as an escape from life. Despite its air of restless activity it poses as a temple of tranquillity and peace — something that does not exist and should not be allowed to pretend to exist. It is like a dead hand reaching forward into our lives and stopping them.

It is quite natural that the present-day museum should affect us that way. Like our contemporary art life in general, the contemporary art

museum usually consists of two obsolete evolutionary stages and a new one. The last seems to move in the direction we have intimated and here and there we may already glimpse a new dawn. But the art museum, too, still contains a Baroque component, represented by the picture and sculpture gallery; beside these we have a component from the Enlightenment and Romanticism, represented by the period room. These two old components dominate the museum of today, and they are responsible for its static character. (The third component is still too weak to change that character.) Because of its idealistic basis the art museum not only stands outside the materialistic-practical life of the day but it also has none of the energy displayed by the modern movements. The new type of museum would begin to partake of that energy. It would not only be more alive and stimulating but also much more easy to establish, for it would depend much less than the current type on quantitative accumulation, i.e. wealth. It would not require any gorgeous palaces of absolutistic ideal art but would be constructed functionally and flexibly of light modern materials. It would rely primarily upon the imagination and leadership of its staff, upon their sensibility and their organizing ability. It would really begin to "function." But above all it would recover that moral strength which the traditional museum has had for earlier and more static stages of reality. Like all new movements this new type of museum would then be an important factor in the urgently needed integration of life and in the unification of mankind on a dynamic basis.

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\*Terms which appear throughout the book are not listed in the index. Such terms are: Absolute, Art, Basic elements, Becoming, Being, Energies, Experience, Form, Force of change, Identity, Interpenetration, Rationality, Self-transformation, Semi-static, Static, Stasis and others.

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