from:

Laszlo Moholy-Nagy, "Vision in Motion" Paul Theobald, Chicago, 1947.

### introduction

To state the case is almost too simple:

The industrial revolution opened up a new dimension—the dimension of a new science and a new technology which could be used for the realization of all-embracing relationships. Contemporary man threw himself into the experience of these new relationships. But saturated with old ideologies, he approached the new dimension with obsolete practices and failed to translate his newly gained experience into emotional language and cultural reality. The result has been and still is misery and conflict, brutality and anguish, unemployment and war.

Emotionally most people live within the old dimensions of anachronistic fixations, tribal prejudices. They are immune against any suggestion for a better use of their resurces because in our verbalistic society all such arguments can be answered by counterarguments for the preservation of the status quo. What is needed is a rediscovery of the elements of existence, work, recreation, and a fearless demonstration of their fundamentals relative to our time without paralogy. We have to free the elements of existence from historic accretions, from the turgid symbolism of past association, so that their function and effectiveness will be unimpaired.

Theoretically, man is the sum total of his psychophysical, intellectual, and emotional potentialities. His reasoning power parallels the emotional forces. What he knows, he could also feel if he would train himself in both spheres. In fact, this is his historic struggle, to arrive at an integrated life in which he would function to the fullest of his capacities through a synthesis of the intellectual and the emotional,

through the coordination of penetrative thinking and profound feeling. To reach this goal—to feel what we know and know what we feel—is one of the tasks of our generation.

To achieve this integrated state there is need for a well-balanced social organization and an appropriate education; an education for personal growth and not a mere training in skills for the purpose of profit; a social organization in which everyone is utilized to his highest capacity.

In the training of the human intellect there is an official standard, comprising logical thought categories, the set mechanism of syllogism and rhetoric. But there is also a need for correlated perceptive and emotional education. This is not even yet acknowledged. At present the nonintellectual development of the individual is entirely his private affair, confined to a hit-or-miss approach. The consequence is emotional illiteracy, which means to be without compass, without assurance of feeling, in a complex, immensely extended world.

Generally, the mechanism of feeling is set in motion by a network of sensations both from within and without. The mechanics of inner stimuli is as yet unexplored, although psychoanalysis attempted revolutionary explanations about the subconscious, its traumas, repressions, regressions, and wish-fulfilments. If not sublimated or released, such psychic maelstroms become the foci of conflicts.

More is known about emotional activation from without, starting with simple sensory experiences, which serve as basic material for the externalization—that is the expression—of emotional life. Expression on a high level produces art which is the most effective agent for emotional articulation. It is a sociopsychologically dangerous mistake to allow art to be classified as remote—a luxury—a nonessential.

One of the functions of the artist in society is to put layer upon layer, stone upon stone, in the organization of emotions; to record feelings with his particular means, to give structure and refinement as well as direction to the inner life of his contemporaries. It is the artist's duty today to penetrate yet-unseen ranges of the biological functions, to search the new dimensions of the industrial society and to translate the new findings into emotional orientation. The artist unconsciously disentangles the most essential strands of existence from the contorted and chaotic complexities of actuality, and weaves them into an emotional fabric of compelling validity, characteristic of himself as well as of his epoch. This ability of selection is an outstanding gift based upon intuitive power and insight, upon judgment and knowledge, and upon inner responsibility to fundamental biological and social laws which provoke a reinterpretation in every civilization. This intuitive power is present in other creative workers, too, in philosophers, poets, scientists, technologists. They pursue the same hopes, seek the same meanings, and-although the content of their work appears to be different—the trends of their approach and the background of their activity are identical. They all must draw from the same source, which is life in a certain society, in a certain civilization. This basic identity is the common denominator, the desire today to find and investigate the fundamentals in every field so that they can become constructive parts of a new civilization.

The problem of our generation is to bring the intellectual and emotional, the social and technological components into balanced play; to learn to see and feel them in relationship.

Without this interrelatedness there remains only the disjunctive technical skill of handling human affairs, a rigidity stifling biological and social impulses; a memorized, not a lived life.

#### vision in motion

vision in motion

is simultaneous grasp. Simultaneous grasp is creative performance—seeing, feeling and thinking in relationship and not as a series of isolated phenomena. It instantaneously integrates and transmutes single elements into a coherent whole. This is valid for physical vision as well as for the abstract.

vision in motion

is a synonym for simultaneity and space-time; a means to comprehend the new dimension.

vision in motion

is seeing while moving.

vision in motion

is seeing moving objects either in reality or in forms of visual representation as in cubism and futurism. In the latter case the spectator, stimulated by the specific means of rendering, recreates mentally and emotionally the original motion.

vision in motion

also signifies planning, the projective dynamics of our visionary faculties.

<sup>• &</sup>quot;The head is not more native to the heart." (Hamlet)

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#### the function of art

Art is the most complex, vitalizing, and civilizing of human actions. Thus it is of biological necessity. Art sensitizes man to the best that is immanent in him through an intensified expression involving many layers of experience. Out of them art forms a unified manifestation, like dreams which are composed of the most diverse source material subconsciously crystallized. It tries to produce a balance of the social, intellectual and emotional existence; a synthesis of attitudes and opinions, fears and hopes.

Art has two faces, the biological and the social, the one toward the individual and the other toward the group. By expressing fundamental validities and common problems, art can produce a feeling of coherence. This is its social function which leads to a cultural synthesis as well as to a continuation of human civilization.

Today, lacking the patterning and refinement of emotional impulses through the arts, uncontrolled, inarticulate and brutally destructive ways of release have become commonplace. Unused energies, subconscious frustrations, create the psychopathic borderline cases of neurosis. Art as expression of the individual can be a remedy by sublimation of aggressive impulses. Art educates the receptive faculties and it revitalizes the creative abilities. In this way art is rehabilitation therapy through which confidence in one's creative power can be restored.

# the "professional" artist

The best representatives of the arts whether in music, poetry, sculpture, or painting, even in their single works, always express the spiritual state of the age. Today a painting or a sonata is a tightly woven fabric of which the historic warp may often disappear under the richly textured modern yarns of the weft. Nevertheless, the soundness of the weave is dependent on both. The contemporary artist organizes his work within this given historical and cultural framework, but he derives his subject matter from his social and spiritual interests. These are expressed in different periods with different means and themes, such as a still-life, a portrait, a landscape, or an

<sup>• &</sup>quot;Culture" and "civilization" are used in this book as synonyms, though in German, for instance, a differentiation is made between the two: "civilization" is the term for the technological and "culture" for the humanistic sphere.

abstraction, all possessing a sensory directness as well as freedom, order, and harmony which are among the organic qualities of art. On the other hand the intensity of the artist's work is dependent upon the uniqueness of his purpose and his ability of transference. Thus the professional artist's solutions are dependent upon the existing body of knowledge in addition to the sociobiological components. But if he wishes to stir his audience and appeal to their senses, he has to create powerful new relationships. He can do so either by developing tendencies or by opposing them. The gradual elimination of the still existing feudal residues, that is, obsolete economic theories, obsolete patterns of individual behavior, obsolete sexual and family relationships is not an automatic matter.

It is unimaginable that, along with the economists, philosophers and politicians who advance suggestions for social changes, the most intuitive and responsive people in a society, namely, the artists, have no say. Tyranny and dictatorship, manifestos and decrees will not recast the mentality of the people. The unconscious but direct influence of art represents a better means of persuasion for conditioning people to a new society either by its projective or satiric-destructive means.

The true artist is the grindstone of the senses; he sharpens eyes, mind, and feeling; he interprets ideas and concepts through his own media. In the midst of vast social controversies he cannot escape that task. He has to take sides and proclaim his stand; indeed the artist has a formative ideological function, otherwise his work would be only an exercise of skill in composition. Hitler was aware of this. He propagandized trash, he tried to destroy modern art, science, and philosophy as the greatest sources of opposition to his vicious system of oppression. He banned the contemporary, the "degenerate" art, as he called it, from the galleries and museums, burned books, and forbade the teaching of Einstein's theories.

He sensed that the content of art is basically not different from the content of our other utterances. The only difference is that art is produced mainly by subconscious organization of the means implicit in the cultural and social setting of the period. To be sure, there are numerous opportunities for expression and research in all fields but among them only a few which are positively related and favored by the dynamic forces of the age. In intuitively choosing certain esthetic or technical problems, the most sensitive and advanced artist is a tool for the recording of the time-expressive contents. That is, form and structure denote definite spiritual trends. The work of the artist corresponds to the creative problems in other fields, complementing them in the structure of civilization of that particular period.

Art may press for the sociobiological solution of problems just as energetically as the social revolutionaries do through political action. The so-called "unpolitical" approach of art is a fallacy. Politics, freed from graft, party connotations, or more transitory tactics, is mankind's method of realizing ideas for the welfare of the community. Such a "weltanschauung" is transformed by the arts into emotional form, and becomes retroactive in the realm of the conscious existence. This suggests that not only the conscious but also the subconscious mind absorbs social ideas which are

then expressed in the specific media of the arts. Otherwise any problem could be successfully solved only through intellectual or verbal discourse. The difficulty lies in mass participation. The masses are filled with a petit bourgeois ideology, the masculine superman ideal promoted by papers and radios, books and films—by the unofficial education which the people have been taught to enjoy in spite of lip service to casual revolutionary political ideas. Once their sensitivity is killed, they are unable to receive the message of art whether contemporary or old.

The success theory of the profit economy pays a high premium to the anti-artist. Artists are considered effeminates who do not have the stamina to participate in competition. This is not only untrue, as are most clichés, but tragic since at present art is perhaps the only field where convention does not completely suppress sentiment and where the omnipotence of thought and the independence of emotion are kept relatively intact. To follow the divining rod of intuition and expressive desire may often act as a psychological lifesaver especially in periods of hidden and open suppression of independent thought. The phrase that "the artist represents the consciousness and memory of his time" is a good characterization of his function. No society can exist without expressing its ideas, and no culture and no ethics can survive without participation of the artist who cannot be bribed.

Art represents the uncensored statement of its author; this is one of its most positive characteristics. No one but the painter, the author, the composer is the sole master of his performance. The simpler his medium and the less investment it involves, the easier it is to avoid possible censorship and to preserve the ways of genuinely free expression.

Through his sensitivity the artist becomes the seismograph of events and movements pertaining to the future. He interprets the yet hazy path of coming developments by grasping the dynamics of the present and by freeing himself from momentary motivations and transitory influences but without evaluating their trends. He is interested only in the recording and communicating of his vision. This is what materializes in his art. He cannot misuse such a situation. To be a "fulltime" worker, a "professional," involves a moral responsibility. This is why the secured existence of the uncompromising and incorruptible artist is so important to society. If he does not have adequate tools and materials, he cannot produce his best. His records cannot be fluid

balanced, interpenetrated performance no satisfactory life exists.

<sup>•</sup> Alfred Korzybski, the leader of the general semanticists, states that if a "translation is made into the language of lower centers—namely into 'intuition,' 'feeling,' 'visualizations'—the higher abstractions gain the character of experience. By re-translating our higher order, verbal abstractions of relations and order into simplified but direct manifestations which can be visualized and felt, modern art affords immediate subcortical experience of essential structure." (Quoted by Oliver Bloodstein in "General Semantics and Modern Art," in "etc." Vol. 1, No. 1, 1943)
This suggests the intertwined nature of human experiences and their expression. I question only the biological justification of discriminating between "higher" and "lower" orders of experiences. Biologically seen, they are of equal order and without their

and direct if he cannot consecrate his life to constant work in his craft, if he has to fight for minimum subsistence.

The silly myth that the genius has to "suffer" is the sly excuse of a society which does not care for its productive members unless their work promises immediate technological or economic applications with calculable profit.

"We must have now sciences at the places where formerly intuition directed us." (Frank Lloyd Wright)

Among the artists in the 19th century there are Philip Otto Runge in Germany, Delacroix in France, who had the reputation of being competent color research workers. They applied science to their art. But there is a reciprocity, too. Seurat, for example, with his pointillist art, intuitively anticipated the science of color photography.

Sometimes a whole chain of successive influences can be traced from science—to technology—to art—and back again to science. Examples can be found in the research of photographic speed exposures such as that of Muybridge, Thomas Eakins, and the industrial motion studies of Taylor and Gilbreth which were transferred into art by the futurists around 1912. This in turn influenced scientific studies resulting in the stroboscopic photodiagrams of Harold Edgerton, MIT.

Rodin, the sculptor, was fascinated by light problems in the time of Helmholz' investigation of optics. As a result, Rodin introduced a new type of chiselcut to achieve transparent shadows, in contrast to the heavy shadows of the renaissance sculptures.

At present it would be a great help for the painter to know more about scientific optics so that he would be able to make controlled light paintings without the use of pigment, with only polarized stresses of material; or by gratings (almost invisible lines engraved into a transparent surface) and lit from behind so that prismatic light effects could be produced at will for colored light compositions.

The new artist working with plastics inevitably has to take up scientific studies or else wait decades until the knowledge about plastics becomes a commonplace.

## art and science

The task of the professional artist is not only to vitalize people but also to continue and synthetize spiritual traits. For this, besides the unconscious elements, he must have conscious source material, sound scientific outlook though not necessarily a method. But most people educated in the liberal arts, and frightened by badly-taught mathematics and physics, have an awed respect for science in any of its possible interpretations. Because of this fear, they are suspicious of an art which uses elements reminiscent of geometrical shapes, synthetic materials, and optical instruments.

In popular short-cut theories there is the problem of "chaotic nature" versus "organized machine;" sober science versus mystical religion; social planning against free enterprise. This is oversimplification. The eyes of the artist record cows and dynamos, trees and skyscrapers equally well. They represent visual raw material for him. And this is the real issue. The actual aim is sociobiological synthesis. This cannot be achieved without "laboratory experimentation," though this is another objection to contemporary art, voiced often by the layman. But without experimentation there can be no discoveries and without discoveries no regeneration. Although the "research work" of the artist is rarely as "systematic" as that of the scientist they both may deal with the whole of life, in terms of relationships, not of details. In fact, the artist today does so more consistently than the scientist, because with each of his works he faces the problem of the interrelated whole while only a few theoretical scientists are allowed this "luxury" of a total vision. The main difference between the problems of artist and those of scientist is the difference in the form of their materialization and grasp. Plastic art is expressed with means largely comprehensible by sensory experiences on a non-verbal level. Even if, as in old paintings, the creative impetus is screened by the logical presentation of a describable theme, it is not the landscape or still-life that results in art, but the creative act by which the subject matter is transmuted into visual form. On the other hand, a scientific discourse is stated in rational intellectual terms even if the impulse to it comes from subconscious regions of the intuition. On the basis of sentimental education, many still believe that the emotional depth of the artist will be endangered by the attempt to organize his elements consciously. But the artist ought not to be afraid of conscious traits in his work, as the conscious approach will be translated by him into terms affecting the senses. The conscious problems of research are on a rather modest scale anyhow, overshadowed by the intuitive forces and the subconscious mechanism of expression. In every art work there remains a great number of components which cannot be verbalized, only approached intuitively. Even product designs executed with a largely

conscious approach generally answer more questions than their producers originally expected they could. The reason is that so far product designs have shown the most obvious integration of intuition and science, form and function. Their analysis can sometimes be helpful in giving more effective information; it may stimulate new techniques in the subconscious transubstantiation of such information. Analysis can eliminate also the repetition of overused elements and create an inner security for new solutions.