Alfred Korzybski Memorial Lecture

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ON TIME-BINDING AND THE CONCEPT OF CULTURE*

In June 1921 an important book was published by an unknown author. The book was entitled Manhood of Humanity and its author was Alfred Korzybski. By December 1921 it had gone into its third printing, and in December 1923 there was a fourth printing. Obviously quite a number of people had found the book of interest, but who they were I cannot tell. Certain, it seems, the book did not make much rumor in the world or leave too deep an impression. I read this book for the first time in 1950 in its second posthumously published edition of June 1950. It was only then that I learned that Korzybski's theory of time-binding had been developed long before the appearance of Science and Sanity in 1933. It is to be hoped that with the re-publication of Manhood of Humanity the book will, at last, come into its own, for it is perhaps more timely for our own day than it appears to have been for the time during which it made its first appearance. For in Manhood of Humanity Korzybski attempted to lay the foundations for the science and art of what he then called by the new term Human Engineering—a term which has since been adopted by others, but not quite in the sense in which he meant it. Such a science, Korzybski pointed out, must be based on a true understanding of the nature of man, upon what is essentially characteristic of him; and he endeavored to show that what distinguishes man from all other living things is his capacity for time-binding.

II

Before proceeding to the discussion of this brilliant conception I must say a few words about the dangers of making one's appearance too early. Intellectually, Korzybski was a prematurely born child. The views set out in Manhood of Humanity were from 25 to 30 years too early. While in 1921 Korzybski was occupied with science and its relation to ethics, with science and its relation to values, his contemporaries in the sciences and in philosophy were denying that science or philosophy could provide a sound scientific foundation for leading the good life. We find Bertrand Russell, for example, writing, and Korzybski quotes this very passage, 'The hope of satisfaction to our more human desires, the hope of demonstrating that the world has this or that ethical characteristic, is not one which, so far as I can see, philosophy can do anything whatever to satisfy.' With this viewpoint Korzybski was entirely unable to agree, and I think, if we are to judge from his latest writings, Russell would today be more inclined to agree with Korzybski's 1921 judgment than he would with his own of earlier years.[1] Said Korzybski, in 1921, 'The scientists, all of them, have their duties no doubt, but they do not fully use their education if they do not try to broaden their sense of responsibility toward all mankind instead of closing themselves up in a narrow specialization where they find their pleasure. Neither engineers nor other scientific men have any right to prefer their own personal peace to the happiness of mankind; their place and their duty are in the front line of struggling humanity, not in the unperturbed ranks of those who keep themselves aloof from life. If they are indifferent, or discouraged because they feel or think that they know that the situation is hopeless, it may be proved that undue pessimism is as dangerous a "religion" as any other blind creed.'[2]

This was a view which was not popular when Korzybski wrote. Scientists were inclined to an ivory-towerism and a hand-washing indifference to the consequences of their work. Thirty years later scientists are pretty generally agreed that they must take a more responsible view of their place in the world. Korzybski's warning has come home to roost, 'If those who know why and how neglect to act,' he wrote in 1921, 'those who do not know will act, and the world will continue to flounder.'[3]

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Korzybski was among the first to point out that 'it is the great disparity between the rapid progress of the natural and technological sciences on the one hand and the slow progress of the metaphysical, so-called social "sciences" on the other hand, that sooner or later so disturbs the equilibrium of human affairs as to result periodically in those social cataclysms which we call insurrections, revolutions and wars.'[4] In the history of the development of the consciousness of this fact Korzybski's name will come to occupy an honored place. When a society places its emphases on technology it produces a nation of technicians. Korzybski saw quite clearly where the emphasis must be placed if mankind is to survive—namely, upon the understanding of man's nature and the development of human relations on the basis of that understanding. The good life was what Korzybski was passionately interested in, and so he said, 'Ethics is too fundamentally important a factor in civilization to depend upon a theological or a legal excuse; ethics must conform to the natural laws of human nature.'[5] Korzybski clearly stated the consequences of 'A system of social and economic order built exclusively on selfishness, greed, "survival of the fittest," and ruthless competition,'[6] and prescribed the remedy. The period of the childhood of humanity was one of arbitrary thought and confusion. 'The period of humanity's manhood will,' Korzybski wrote, 'I doubt not, be a scientific period—a period that will witness the gradual extension of scientific method to all the interests of mankind—a period in which man will discover the essential nature of man and establish, at length, the science and art of directing human energies and human capacities to the advancement of human weal in accordance with the laws of human nature.'[7]

Korzybski died on 1 March 1950. Happily he lived to see his best hopes for the application of scientific method to some of the interests of mankind get started, even though fitfully. The dangers of being born too early are largely personal. One suffers the pains of inappreciation for being ahead of one's time, and when one is caught up with by the rest of mankind one has to have sense of humor enough to bear with equanimity the comment that after all there was nothing new in one's ideas, or that they were known all the time. Those who knew him can testify to the fact that Korzybski had a delightful sense of humor, so that neither the barking of the dogs of St. Ernulphus nor the patronizing gestures of the world of pernicious academia too much disturbed him.

III

In the present lecture I wish to consider one of Korzybski's most significant contributions toward the better understanding of the nature of man, namely, his conception of time-binding.

Korzybski distinguished between the classes of life in the following manner: Since plants captured one kind of energy, converted it into another, and stored it up, he defined the plant class of life as the chemistry-binding class of life. Since animals were characterized by the freedom and faculty to move about in space he defined animals as the space-binding class of life.

'And now what shall we say of human beings?' asks Korzybski, 'What is to be our definition of Man? Like the animals, human beings do indeed possess the space-binding capacity but, over and above that, human beings possess a most remarkable capacity which is entirely peculiar to them—I mean the capacity to summarize, digest and appropriate the labors and experiences of the past; I mean the capacity to use the fruits of past labors and experiences as intellectual or spiritual capital for the developments in the present; I mean the capacity to employ as instruments of increasing power the accumulated achievements of the all-precious lives of the past generations spent in trial and error, trial and success; I mean the capacity of human beings to conduct their lives in the ever increasing light of inherited wisdom; I mean the capacity in virtue of which man is at once the heritor of the by-gone ages and the trustee of posterity. And because humanity is just this magnificent natural agency by which the past lives in the present and the present for the future, I define HUMANITY, in the universal tongue of mathematics and mechanics, to be the TIME-BINDING CLASS OF LIFE.'[8]

Very properly Korzybski emphasized the importance of grasping the meaning of this definition of humanity as a starting-point for discovering the natural laws of human nature—of the human class of life. Korzybski pointed out the immeasurable evils which have resulted from regarding man as a mere space-binder, an animal. In other words, Korzybski was from the first aware of the dangers of 'biologisms' or what I have elsewhere called 'the pathetic fallacy,' the belief that man is nothing but a function of his genes—a fallacy which many contemporary thinkers have even yet not succeeded in avoiding. Korzybski recognized that man was characterized by 'properties of higher dimensionality'; that everything which is really time-binding is in the human dimension.

Now, Korzybski's definition of humanity, of man, is virtually identical with the present-day anthropologist's definition of culture. Here are some definitions of culture taken from the latest anthropological works by leading anthropologists. Firth writes, 'If society is taken to be an aggregate of social relations, then culture is the content of those relations. Society emphasizes the human component, the aggregate of people and the relations between

them. Culture emphasizes the component of accumulated resources, immaterial as well as material, which the people inherit, employ, transmute, add to, and transmit. Having substance, if in part only ideational, this component acts as a regulator to action. From the behavioural aspect, culture is all learned behavior which has been socially acquired. It includes the residual effects of social action. It is necessarily also an incentive to action.'[9]

Kluckhohn writes, 'By culture anthropology means the total life way of a people, the social legacy the individual acquires from his group. Or culture can be regarded as that part of the environment that is the creation of man... The general abstract notion serves to remind us that we cannot explain acts solely in terms of the biological properties of the people concerned, past experience, and the immediate situation. The past experience of other men in the form of culture enters into almost every event.'[10]

Herskovits writes, 'Culture is the man-made part of the environment. Implicit in this is the recognition that man's life is lived in a dual setting, the natural habitat and his social "environment." The definition also implies that culture is more than a biological phenomenon. It includes all the elements in man's mature endowment that he has acquired from his group by conscious learning or, on a somewhat different level, by a conditioning process—techniques of various kinds, social and other institutions, beliefs, and patterned modes of conduct.'[11]

White writes, 'The physical category is composed of non-living phenomena or systems; the biological, of living organisms. The cultural category, or order, of phenomena is made up of events that are dependent upon a faculty peculiar to the human species, namely, the ability to use symbols. These events are the ideas, beliefs, languages, tools, utensils, customs, sentiments, and institutions that make up the civilization—or culture, to use the anthropological term—of any people, regardless of time, place, or degree of development. Culture is passed down from one generation to another, or, it may be borrowed freely by one tribe from another. Its elements interact with one another in accordance with principles of their own. Culture thus constitutes a supra-biological, or extra-somatic, class of events, a process sui generis.'[12]

Compare with these definitions Korzybski's definition of culture or civilization in the 1921 Manhood of Humanity. Korzybski writes, 'Civilization as a process is the process of binding time; progress is made by the fact that each generation adds to the material and spiritual wealth which it inherits. Past achievements—the fruit of bygone time—thus live in the present, are augmented in the present, and transmitted to the future; the process goes on; time, the essential element, is so involved that, though it increases arithmetically, its fruit, civilization, advances geometrically.'[13]

The faculty peculiar to the human species, namely, the ability to make complex use of symbols, to which White refers, and upon which the development of the time-binding or cultural capacity of man is dependent was, of course, fully grasped by Korzybski, and here, too, Korzybski was a forerunner of later thinkers in this field. Chapter IV of Science and Sanity is devoted to symbolism, and its very first words are 'The affairs of man are conducted by our own, man-made rules and according to man-made theories. Man's achievements rest upon the use of symbols. For this reason we must consider ourselves as a symbolic, semantic class of life, and those who rule the symbols, rule us.'[14]

This viewpoint had already been worked out by the distinguished philosopher Ernst Cassirer in his Philosophie der Symbolischen Formen, published in three volumes in 1923-1929,[15] and in part made available in a new English version in the author's An Essay on Man, published in 1944.[16] In the latter work Cassirer writes, 'Man has, as it were, discovered a new method of adapting himself to his environment. Between the receptor system and the effector system, which are to be found in all animal species, we find in man a third link which we may describe as the symbolic system. This new acquisition transforms the whole of human life. As compared with the other animals man lives not merely in a broader reality; he lives, so to speak, in a new dimension of reality... Reason is a very inadequate term with which to comprehend the forms of man's cultural life in all their richness and variety. But all these forms are symbolic forms. Hence, instead of defining man as an animal rationale, we should define him as an animal symbolicum. By so doing we can designate his specific difference, and we can understand the new way open to man—the way to civilization.'[17]

Writing at about the same time, and quite unbeknownst to each other, Korzybski and Cassirer had arrived at the same conclusions. Writing in 1944 Cassirer appears to have been quite unaware of Korzybski's work.

Sufficient, I hope, has been said to show that Korzybski's conception of time-binding and the anthropological conception of culture are virtually identical in character. It is rather sad to reflect that almost all anthropologists have overlooked this fact. It is to be hoped that this oversight will soon be remedied. Meanwhile, let us proceed now to discuss certain consequences which follow from the general theory of time-binding or culture for the

development of a science of human nature and the science and art of human relations.

IV

Korzybski pointed out that 'Human nature, this time-binding power, not only has the peculiar capacity for perpetual progress, but it has, over and above all animal propensities, certain qualities constituting it a distinctive dimension or type of life. Not only our whole collective life proves a love for higher ideals, but even our dead give us the rich heritage, material and spiritual, of all their toils. There is nothing mystical about it; to call SUCH a class a naturally selfish class is not only nonsensical but monstrous.'[18] In this passage Korzybski comes very close to the discoveries which are only at this moment in process of being made concerning the nature of human nature. How right Korzybski was in referring to the belief in the class of humanity as naturally selfish as nonsensical and monstrous. The belief in the inherent selfishness of man, his innate naughtiness, inborn evil, aggressiveness and hostility, has taken many forms, and in each of its forms it has done untold personal and social damage. In the first place that belief has conditioned our attitude towards our fellow men, and not only to our fellow men, but to those utterly defenseless and dependent potential time-binders of the classes of babies, infants, children, and adolescents. Our belief in the inherent naughtiness of man has caused us to make out of the process of child-rearing a discipline of restraints and frustrations, which has had the effect of seriously crippling and distorting most human beings who have been exposed to it. There is pretty good reason to believe that most of the personal and social tragedies which mankind has created and suffered from have been due to this erroneous belief and the consequences flowing from it as a result of the child-rearing processes it has conditioned. The belief in the innate naughtiness of man is very old, but in the nineteenth century it accrued unto itself a strong reinforcement in the doctrine of 'the survival of the fittest.' 'The struggle for survival,' 'nature red in tooth and claw,' 'dog eat dog,' and similar phrases were used to describe the condition of animals in a state of nature. Since man is an animal, it was argued, he has inherited the same fundamental drives as keep the rest of the animal kingdom going. Hence, man is by nature aggressive and competitive, and, it was asked, do we not see this in the evolution of human societies, and in the struggles of the classes in society? The Spencerian application of the theories of Darwin to the struggle for survival in human societies known as Social Darwinism, further lent enchantment to this particular view of the relations of men to one another.

Searching for the inherent naughtiness and aggressiveness of the infant at birth and thereafter, contemporary investigators have been unsuccessful in finding any evidences of it. The distinguished child psychiatrist of this city, Dr. Lauretta Bender, having handled thousands of children, writes from her great experience, in an important article entitled 'The Genesis of Hostility in Children,' that far from being inborn, hostility or aggression in the child 'is a symptom complex resulting from deprivations which are caused by developmental discrepancies in the total personality structure such that the constructive patterned drives for action in the child find inadequate means of satisfaction and result in amplification or disorganization of the drives into hostile or destructive aggression.' 'The child' she writes 'acts as though there were an inherent awareness of his needs and there is thus the expectation of having them met. A failure in this regard is a deprivation and leads to frustration and a reactive aggressive response.'

Indeed, the creativeness of the organism is directed toward maturation in terms of cooperation. Bender calls it 'the inherent capacity or drive for normality.' And as she says, 'The emphasis on the inborn or instinctive features of hostility, aggression, death wishes, and the negative emotional experiences represents a one-sided approach which has led our students of child psychology astray.'[19]

Maslow, in an article entitled 'Our Maligned Animal Nature,' writes, 'I find children, up to the time they are spoiled and flattened out by the culture, nicer, better, more attractive human beings than their elders, even though they are of course more "primitive" than their elders. The "taming and transforming" that they undergo seem to hurt rather than help. It was not for nothing that a famous psychologist once defined adults as "deteriorated children."' 'Could it be possible' Maslow inquires, 'that what we need is a little more primitiveness and a little less taming?'[20]

Babies are born cooperative. What they want is to be cooperated with and to cooperate. When their needs for cooperation, for love, are frustrated, they may react with aggressive behavior. Aggressive behavior is originally a means of seeking and if possible compelling love. Aggression is practically always, if not always, the effect of love frustrated, or of the expectation of love frustrated. Children are not born selfish, they are made selfish by being forced to attend to their own needs as best they can by the failure of their discipliners to attend properly to their needs for cooperation. The natural selfishness of the child is, indeed, a monstrous notion. It is an unfortunate projection of themselves upon the child of those who hold it. Man is not born evil, nor is he born neither good nor evil, but in a very positive sense he is born good. Good in the sense of

conferring survival benefits upon all with whom he comes into social relations. When one analyses the basic needs of the human organism, those needs which must be satisfied if the organism is to survive, one finds that they are oriented in the direction of cooperation, of wanting to love, as well as wanting to be cooperated with and loved. It is in this sense that the organism may be said to be born good, and it is one of the few senses in which the word good means anything.[21]

Even if man had inherited any drives toward aggressiveness and combat, by virtue of his capacity for time-binding man would be capable of so controlling the expression of such drives as to negate and completely nullify their potencies.

As for the doctrine of 'the survival of the fittest,' Korzybski pointed out that this 'in the commonly used animal sense is not a theory or principle for a "time-binding being." ... its effect upon humanity is sinister and degrading.'[22]

Thomas Henry Huxley, in a letter written 27 October 1890, wrote, 'The unlucky substitution of "survival of the fittest" for "natural selection" has done much harm in consequence of the ambiguity of the "fittest"—which many take to mean "best" or "highest"—whereas natural selection may work towards degradation vide epizoa.'[23]

What, indeed, is fitness? The Social Darwinists overlooked the fact that fitness is related to the current environment of a group, and without further scruple they converted 'fittest' into 'best.' The current environment of man, perhaps more than at any time during his whole history demands that he realize pretty rapidly what his fitness must consist in if he is to survive. As Korzybski pointed out in 1921, 'There is indeed a fine sense in which we can, if we choose, apply the expression—survival of the fittest—to the activity of the time-binding energies of man. Having the peculiar capacity to survive in our deeds, we have an inclination to use it and we survive in the deeds of our creation; and so there is brought about the "survival in time" of higher and higher ideals... It must be emphasized that the development of the higher ideals is due to the natural capacity of humanity; the impulse is simply time-binding impulse.'[24]

Fitness for man, perhaps more than for any other creature, has fundamentally always consisted in and must increasingly come to consist in the subordination of individual competition to interpersonal cooperation, and of intergroup competition to cooperative association.[25] For this purpose it will be necessary to follow the highest ideals. But what are the highest ideals? Are they the same for all mankind? To answer the second question first: The ideals of human fitness are, indeed, the same for all mankind because all mankind is human and because these ideals are determined by the nature of human nature itself. As Korzybski stated, 'human logic—...the logic natural for man—will show us that "good" and "just" and "right" are to have their significance defined and understood entirely in terms of human nature. Human nature—not animal nature—is to be the basis and guide of Human Engineering.'[26]

Korzybski's contribution to the understanding of human nature did not lie in the fine analysis of its structure, his contribution lay in his distinguishing man from all other living creatures as the time-binder, and to emphasize the fact that this capacity is a natural one. But unlike Thomas Henry Huxley he saw that man doesn't have to struggle against his inner nature, but rather that he must realize it, for human nature, innate nature, was good not evil. And Korzybski held that the discovery of the highest ideals should be based on the scientific understanding of the nature of human nature, in other words, that 'what is right is what is right for human nature.' I believe that when everything is said and done this assertion will be found to represent the fundamental formula for the life of man, that what is right is what is right for human nature. To some of us who are working in this field it is already evident that this is, indeed, so. For the findings of modern workers have shown unequivocally that insofar as men depart from the biologic demands of their innate nature they fall ill and become disoperative, and that insofar as they conform to the requirements of their nature they function harmonically and well. But in order to recognize this fact it is first necessary to understand the nature of human nature. This is an area in which the most significant work has been done in the 20th century, and in which a tremendous amount of work remains to be done before we can really speak of understanding the nature of human nature, but for some who have been interested in putting together the findings of modern science on the nature of human nature the general picture is clear, and it is in complete conformity with Korzybski's views. In the time remaining I propose to give an outline of that general picture.

V

Man is, of course, part of the world of Nature. He comes into being in fundamentally the same way as all other creatures, that is, by reproduction. The reproductive process is the fundamentally social process, and it is this reproductive process which determines the pattern of man's, as well as all other living creatures', biologic life. The process of reproduction is an interdependent dependent one, and that is the essence of the biologic relation between organisms, interdependency and dependency. This holds true whether we are concerned with unicellular

or multicellular organisms, for the amoeba or for man. Man, however, is perhaps more strikingly characterized by this interdependency-dependency trait than any other living creature. Following conception he spends nine months in that dependent-interdependent state, and after birth he continues to spend several years in dependent-interdependent relationship of the most dependent kind with other human beings. Dependency is man's basic biologic state and interdependency is man's basic social state. Man comes into the world biologically wanting to be dependent and interdependent. How do we know this for a fact? We know this for a fact because if the interdependency needs of the potentially human organism are not satisfied the organism simply does not develop as a human being, and if its dependency needs are not satisfied it can develop only in a crippled sort of way. The infant's drives are oriented in the direction of love and cooperation, it wants to love and it wants to be cooperated with, and if it is loved and cooperated with then it develops in every way more efficiently as a loving cooperative human being, and also as a healthy physical organism. How do we know these things for facts? We know these things for facts because if the potentially human organism is not adequately loved or cooperated with it fails to develop as an adequate human being, as a being who is functioning harmonically and who is adequately capable of loving and cooperating with others. The evidence for these relationships has recently been ably discussed and summarized in a World Health Organization publication entitled 'Maternal Care and Infant Health' and written by the English psychiatrist John Bowlby.[27] As for the relation between adequate love in infancy and proper physical growth and development the work of Dr. Ralph Fried at Cleveland[28] and of others elsewhere is conclusive. This should not surprise us in the least, for the organism is a whole, and one cannot deprive it of necessary stimulations in any part of it without affecting the whole organism—that is what the word 'organism' properly understood, in part, implies. Not only this, we now know that when children within the first year and during the greater part of their first six years are adequately loved they grow up to be adequately loving and cooperative healthy persons, persons who are capable of taking the stresses and strains of life very much more efficiently than those who have not been adequately loved during their first half dozen years.[29] From the studies which have been made among the non-literate peoples of the world, the so-called 'primitive peoples,' anthropologists have found that the way in which children are brought up is closely related to their personality structure, and on the whole, the conclusion is that the more adequately children have been loved during their first six years the more loving they are as adults, while the more frustrated children have been during their first six years the more frustrated they are as adult personalities and the more unloving. This may be putting the essence of the findings in an oversimplified form, but I don't know of any better way of stating the facts in a few words than in this manner.

What, in brief, has been discovered is that to live as if to live and love were one is the only way of life for human beings, because, indeed, this is the way of life which the innate nature of man demands. The highest ideals of man, therefore, spring from man's own nature, and the highest of these ideals and the one which must inform all others is love. This is not a new discovery in the world; what is new is that scientists should have made it by scientific means. What contemporary scientists working in this field have done is to give, without in most cases being aware of it or intending to, a scientific validation to the Sermon on the Mount: To love thy neighbor as thyself: To do unto others as you would have them do unto you; principles which were enunciated by many philosophers, prophets, and seers, long before the birth of Christ. Indeed, every people has at sometime or another arrived at this elementary piece of wisdom on the basis of experience, and most peoples have more or less successfully attempted to live by these principles because they have discovered them to be the most efficient to live by. This, at any rate, is their theory enshrined in their religious and civil codes, but the practice seems to lag far behind the religious theory and the civil codes so frequently derived from and based on those religious theories. What is the reason for this difference between theory and practice?

In the light of our modern studies the answer to this question would not seem to be a very difficult one, although any answer that is returned is likely to be an oversimplification. The reason why people don't live by the principle of love is that they haven't been raised by it. On the other hand, most of them have been raised by the principle of systematic frustration—which in our culture we often call 'discipline.' Most of the so-called civilized world simply hasn't loved little children adequately enough, no matter what their holy books have said about love, and if you've been pushed around as a child you are likely to grow up as a pusher-around of others when you are an adult. You can be terribly interested in love if you've been deprived of it as a child, but you will be unable adequately to receive it and unable adequately to give it. One may tell children one loves them while at the same time one is frustrating them. What they remember is the frustration, not the love. For what children believe is, that what others believe is what they do, not what they say.

How, then, is one to escape from this vicious circle: Frustrated children growing up into frustrating parents who in turn produce frustrated

children who grow up to be frustrating parents? The answer is: By educating the world of human beings in the facts, by showing all who are capable of learning what the true nature of human nature is, and why it must be respected; what it is that human nature demands and why those demands must be obeyed, for as Bacon put it, 'Nature to be commanded must be obeyed.' We must teach, all who are capable of learning—and everyone is capable of learning, what happens when you don't obey the innate demands of one's being, and what happens when one does. We must, in short, teach the art and science of human nature, the art and science of human relations. We must relieve mankind of the load of myths which has been weighing it down for so long about the nature of nature and the nature of human nature. We must disabuse mankind of the myth of the inherent naughtiness of mankind, and present the facts which will permit men to judge for themselves what the truth really is. But above all else we must teach men how to love. This can all be achieved by many different approaches and at innumerable different levels, but the one method in which I place the greatest faith is education. Education which must be conceived to be the bringing out the best that is within the person by making available to him all the encouragements and supports and stimulations which he requires, to enable him to become a loving, cooperative, non-conflictful person, who is not only aware of what is right with the world but also what is wrong with it, and who is equipped with both the knowledge and the desire necessary to improve it nearer that ideal of what it should and can be. A person who will not be a competitor, but a cooperator, a person for whom altruism will be a passion and selfishness a disorder; a person wise enough to know that

> He who would love his fellow men
> Must not expect too much of them;

a person who will want to improve the world as he finds it, and not accept things as they are, but who will have the wisdom to know what things to accept and what to change; a person who will not risk wrecking the social machinery by exceeding the speed-limit of rational inquiry; who will not abolish anything but merely make it necessary to discontinue it, dispelling fear by supplying facts and knowledge; who will recognize the strange necessity of beauty; who will have a sense of personal responsibility for decency and justice; who will never burn the smoke of incense before an empty shrine; a person, in short, who having had a loving order made within himself will make loving order in the world,

> be to other souls
> The cup of strength in some great agony,
> Enkindle generous ardour, feed pure love,
> Beget the smiles that have no cruelty—
> Be the sweet presence of a good diffused,
> And in diffusion ever more intense.
> George Eliot

May I conclude with some words from Korzybski's 1921 Manhood of Humanity: 'In humanity's manhood, patriotism—the love of country—will not perish—far from it—it will grow to embrace the world, for your country and mine will be the world. Your "state" and mine will be the Human State—a Cooperative Commonwealth of Man—a democracy in fact and not merely in name. It will be a natural organic embodiment of the civilizing energies—the wealth-producing energies—characteristic of the human class of life. Its larger affairs will be guided by the science and art of Human Engineering—not by ignorant and grafting 'politicians'—but by scientific men, by honest men who know.

'Is it a dream? It is a dream and science will make it a living reality.'[130]

REFERENCES

1. See Bertrand Russell, The Impact of Science on Society (New York: Columbia University Press, 1951).
2. Alfred Korzybski, Manhood of Humanity, 2nd edition (Lakeville, Connecticut: Institute of General Semantics, 1950), p. 10.
3. Ibid., p. 11.
4. Ibid., p. 22.
5. Ibid., pp. 34-35.
6. Ibid., pp. 40-41.
7. Ibid., pp. 44-45.
8. Ibid., pp. 59-60.
9. Raymond Firth, Elements of Social Organization (London: Watts & Co., 1951), p. 27.
10. Clyde Kluckhohn, Mirror for Man (New York: Whittlesey House, 1949), pp. 18-19.
11. Melville J. Herskovits, Man and His Works (New York: Alfred A. Knopf, 1948), pp. 17-18.
12. Leslie A. White, The Science of Culture (New York: Farrar, Straus & Co., 1949), pp. 15-16.
13. Korzybski, Manhood of Humanity, p. 106.
14. Korzybski, Science and Sanity (Lancaster, Pa.: Science Press, 1st ed., 1933), p. 76.
15. Berlin: Bruno Cassirer.
16. New Haven: Yale University Press.
17. Ernst Cassirer, An Essay on Man (New Haven: Yale University Press, 1944), pp. 24-26.

18. Korzybski, Manhood of Humanity, p. 143.
19. Lauretta Bender, 'Genesis of Hostility in Children,' American Journal of Psychiatry, Vol. 105 (1948), 241-245.
20. A. H. Maslow, 'Our Maligned Animal Nature,' Journal of Psychology, Vol. 28 (1949), 273-278.
21. See Ashley Montagu, On Being Human (New York: Henry Schuman, 1950).
22. Korzybski, Manhood of Humanity, p. 142.
23. Life and Letters of Thomas Henry Huxley, edited by Leonard Huxley (New York: D. Appleton & Co., 1901), Vol. II, p. 284.
24. Korzybski, Manhood of Humanity, pp. 144-145.
25. This is a precis of the words written by Patrick Geddes and Arthur Thomson in 1889 in their book The Evolution of Sex (London: Scott, 1889), p. 311: 'Each of the greater steps in progress is in fact associated with an increased measure of subordination of individual competition to reproductive or social ends, and of interspecific competition to cooperative association.'
26. Korzybski, Manhood of Humanity, p. 149.
27. Issued in the United States by Columbia University Press, New York, 1951.
28. Ralph Fried, and M. F. Mayer, 'Socio-Emotional Factors Accounting for Growth Failure of Children Living in an Institution,' Journal of Pediatrics, Vol. XXX (1948), pp. 444-456. See also Harold G. Wolff et al (editors), Life Stress and Bodily Disease (Baltimore: Williams & Wilkins, 1950).
29. See James L. Halliday, Psychosocial Medicine (New York: W. W. Norton, 1948).
30. Korzybski, Manhood of Humanity, pp. 199-200.