When Doctor Kost asked me to speak to the staff of your hospital, I was very glad for the opportunity to renew a most pleasant relationship with him and some of his co-workers that began a year ago. However, I would not be quite truthful if I did not admit some feelings of inadequacy in attempting to convey to you in the next hour a very rough view of my approaches to psychotherapy.

Dr. Kelly of Ohio State University recently wrote that 'a person’s processes are psychologically channelized by the ways in which he anticipates events.' As a corollary, he went on to state that we 'anticipate events by construing their replicas.' (1) Over the years, I have found that the word semantics, which appears in the title of my remarks, evokes expectations in some individuals in any audience that do not fit what is to follow. It is a common habit of all of us that when the unfoldings do not fit our expectations, we blame the happenings. I can only say to this that I am not responsible for anyone's expectations, save my own. The word semantics is an old, respected word that has gradually spread through the world of prints, until now the general populace vaguely understands that semantics has something to do with words. Some people view semantics as having a very close relationship with what we label as sharp practices, diplomacy (which many people nowadays do not trust), or just plain skullduggery. When such people hear someone talk about general semantics, they are likely to miss completely the word general. If they notice it at all, their reaction is often, 'Some more words about words,' or they may be prepared for a discourse about words that is more 'general'.

I shall have very little to say about semantics, or words as such. The consideration of words, word 'meanings', etc., I leave to the philologists where it properly belongs.

In making the remarks that are to follow, I shall assume therefore that the listener can differentiate between Semantics, an old, respected discipline that comes within the purview of philology, and the newer General Semantics of Korzybski. Rather than take your time to talk about what general semantics 'is', I hope to show how I use this system of evaluation in my work.

In entering a domain with which some of you may not be familiar, I am fully aware, as are many of you, of the confused state of affairs that exists among those engaged in the business of psychotherapy. In a volume entitled, Progress in Psychotherapy(2), which summarizes the papers presented at a symposium of the American Psychiatric Association in 1955, the following statements appear:

Psychiatry has a great need for a clear and rational understanding of the process of recovery. . . Hypotheses we have. . . but none has gained that degree of validation which should serve to command general acceptance in the medical profession as a well-established theory. (Whitehorn, p. 62.)

Psychotherapy has many more variants than psychoanalysis and what constitutes psychotherapy, and what does not, is even less clear than what is, or is not, psychoanalysis. . . The time has come to investigate not the difference but the similarities, and to formulate common denominators among the bewildering array of different methods and procedures. (Hoch, pp. 72-73.)

It is discontent which drives me in my approach to this problem. Only a few years ago (although it seems a long time in my life as a psychoanalyst) I harbored the comforting expectation that increasing analytic sophistication and experience would yield a higher percentage of therapeutic successes. . . My reluctant impression is that this hope has not been realized (p. 87). I am impatient with any propagandish approach to the problem from any point of view. We have no right to be for
or against anything in this field. We have a right only to the most complete humility—humility that says we still know practically nothing about many important elements either in the neurotic process or in the psychotherapeutic process. (Kubie, p. 101.)

Psychotherapy is today in a state of disarray, almost exactly as it was two hundred years ago (p. 108). At this stage we seem to be fighting each other to attain some sort of theocratic throne, and we often forget that that throne is as unsteady as a three legged chair. (Zilboorg, p. 110.)

The state of affairs in psychology offers little about which I or my fellow psychologists can feel complacent, as Professor Krech so pointedly describes it:

The 'compleat psychologist' is pretty much of a fish story—a pleasant daydream of a non-existent expert. We have learning psychologists, perception psychologists, and motivational psychologists—and as many other kinds of psychologists as there are possible ways of classifying psychological data. This is true not only of the empiricists among us, who perform are limited to rather sharply defined problems; but it is equally true of the systematisists among us, who operate on the cosmic level. For corresponding to every conceivable way of classifying the data of psychology we have erected separate and independent theories, systems, and approaches—but we have no single and unified set of principles and laws which encompass all of psychology. Were one to aspire to the role of the 'compleat psychologist' and to set about the writing of a serious theoretical treatise covering all of behavior, his output would have many of the characteristics of the confused delusions of hebephrenia—to use a term suggested by Gardner Murphy. In discussing one sample of behavior he would have recourse to 'learning principles,' another sample of behavior would necessitate his calling upon 'perceptual principles,' a third, 'motivational principles,' etc. And the truth or falsity of any one of these sets of 'principles' would not be dependent upon the truth or falsity of any other set. The tome of our would-be 'compleat psychologist' would, in essence, consist of three different kinds of organisms (none of which, I am prepared to argue, actually exists). This would be so because our mythical aspirant would discover that traditionally most psychologists have so answered the question: 'What are the categories of psychological data?' as to create three 'basic' categories: learning data, perceptual data, and motivational data—each with its own set of independent principles and laws. He would find that many of our experimenters and theorists have concerned themselves with non-perceiving, non-motivated LEARNERS; with non-learning, non-motivated PERCEIVERS; with non-learning, non-perceiving NEED STRUCTURES. He would seek in vain for a set of descriptive terms which would enable him even to guess at the nature of an all-encompassing unitary set of principles. (3)

In 1962, when half the beds in our hospitals have mental patients in them, when one in ten people we meet on the streets will predictably be committed to a mental hospital, and when anxious eyes everywhere turn to the skies in anticipation of the awful flash that may atomize all of us, serious questions are being raised about how such a state of affairs came upon us. Many voices are speaking answers albeit with much less assurance than they were spoken when I embarked on a teaching career. In that day—forty-five years ago—I was quite certain that knowledge is something that has existed for a long time and can be handed down on authority. Having completed a number of years in institutions which were the depositories of knowledge, I felt that I was in possession of the knowledge, to be sure. I was also quite sure that since I had acquired certain techniques for transmitting knowledge, that I could do so. Being young, I was firm in my convictions that once a learner came in possession of the wonderful knowledge I pipe-lined to him that all would be right in the world. Today I am not sure. As we listen to learned discussions and prescriptions, I am reminded of a story Korzybski used to tell that came from the European underground under Hitler:

In a railroad compartment an American grandmother with her young and attractive granddaughter, a Romanian officer, and a Nazi officer were the only occupants. The train was passing through a dark tunnel, and all that was heard was a loud kiss and a vigorous slap. After the train had emerged from the tunnel, nobody spoke, but the grandmother was saying to herself, 'What a fine girl I have raised. She will take care of herself.' The granddaughter was saying to herself, 'Well, grandmother is old enough not to mind a little kiss. Besides, the fellows are nice. I am surprised what a hard wallop grandmother has.' The Nazi officer was meditating, 'How clever those Romanians are! They steal a kiss and have the other fellow slapped.' The Romanian officer was chuckling to himself, 'How smart I am! I kissed my own hand and slapped the Nazi.' (4)

Here, obviously, we find some differences in the 'perception' of a happening. So great, indeed, are these differences, that we might very well ask, 'Where does what we see, hear, perceive, etc. come from?'

I had been teaching many years before the full impact of this question dawned on me. Once it did dawn on me, I have never ceased wondering at what
I and my clients and my neighbors do see as we go about our daily affairs.

It was many years after I began to ‘mess’ with my neighbors’ children before I confronted myself, for the first time in my life, with this question: ‘Exactly what am I trying to accomplish with these human beings?’ This is a weighty question and I suggest that you face it, and that you do not answer it quickly. I submit that unless I have a very clear answer to this question, I am not a safe person to whom to intrust the education of a human being.

Over the years, I have repeatedly asked this question of teachers and prospective teachers. I must confess that the answers I get are often quite frightening. A vast majority of the people whom I have asked are not very clear about what they are trying to do at all. Many will say: ‘I am trying to teach children to read, or, I am trying to teach them history, etc.’ I have even had some ask, ‘How else would I make a living?’

Without laboring the question further, let me indicate as simply as I can, my answer to it. A quarter of a century ago, I decided that the task of a teacher is to assist those who come in contact with him to continuously establish relations within themselves that will be in correspondence with the continuously changing relations in the environment in which they live.

This view is not my own. It derives from Herbert Spencer’s definition of life, first published in 1855 in his Principles of Psychology, in which he says, ‘Life is the definite combination of heterogeneous changes, both simultaneous and successive, in correspondence with external coexistences and sequences.’

Spencer’s definition applies to all living forms. If we examine an ameba under a microscope, or a living cell from a human brain, we can observe it undergoing ceaseless change. Unresting Cells. Gerard calls them. If the ameba contacts some substance in the liquid medium in which it lives, it immediately changes internally to conform with the changed environment it has encountered. It forms a ‘mouth’ around the substance and ingests it. Unless it constantly makes changes of this character, it does not survive. When it no longer makes changes, it is dead.

An organism’s operations on and transactions with the environment follow from its inner states. Life becomes a transactional matter. It does not proceed in a vacuum. Ultimately, in education, I am concerned with the operations and transactions of the learner. I am concerned, because in the final analysis, what my neighbor does in turn affects me; what he does affects all of us, including himself. If his internal states and his consequent actions are not in tune with his total environment, then he is in trouble; we may well all be in trouble.

Over the years, it gradually became increasingly evident to me that those individuals who came to me in a clinical setting gave indications of inner states that were not in harmony with the total environments in which they lived. Many of these individuals were students in our educational systems. They had already been ‘educated’ in various ways. But the education they had received was not serving them very well. Indeed, what they had learned facilitated the formation of inner states that did not comport with the environmental happenings surrounding them. Their operations on and transactions with their total environments were of such a nature as to produce hurt for themselves and for others. Gradually the beneficience of pain, which has been recognized by a few people for many years, dawned on me. I define pain as an inner state which in effect says to an organism, ‘Your actions have thrown you out of balance with the total environment in which you are living. When your actions are in harmony with the environment in which you move, you will not hurt. You will not hurt others, either, who then, in turn, will not hurt you again.’

It became increasingly clear to me that my function as a psychotherapist must be similar to my function as a teacher. Let me repeat then: My view of my task in a clinical setting is to facilitate the formation of inner states in the client that will lead to actions on his part that will be in accord with the universe in which he lives.

This view immediately suggests certain questions that will occur to many of you. Let me suggest a few:

1. Can we establish the nature—the characteristics—of the human environment? In short, what constitutes the HUMAN environment? Is HUMAN environment the same as the environment of an ameba or Fido? Unless we correctly assess the characteristics of the environment in which a HUMAN Smith lives, how can we possibly facilitate the formation of Inner, subjective states that will lead to actions on his part that will be in accord with the universe in which he lives?

This view immediately suggests certain questions with which the Sphinx daily confronts him.

2. Can we establish the nature of the HUMAN organism? Does the nature—the STRUCTURE—of the human organism justify us in assuming that fundamental changes can be
made in acquired patterns of relating to universe? Does the structure of the human organism give us any basis for assuming that a client can perform the operations necessary to maintain himself in tune with his total environment?

3. From our knowledge of the nature of the HUMAN environment and the nature of the HUMAN organism, can we establish the nature of the HUMAN operations on and transactions with the environment that will promote the client’s fullness of life? All life consists in maintaining a continually transforming correspondence between inner states and external, environing conditions. However, life at all levels of biological organization is unique. The generalization that describes predictably the necessities that will insure a fit between the inner states and external states for an ameba or Fido will not adequately describe the corresponding necessities for HUMAN organisms. Can we ascertain what these necessities are for the HUMAN class of life? I believe we can.

If we consider the long, evolutionary road from the ameba to humanity, some commonly accepted generalizations can be made that will be useful at this point. According to George Gaylord Simpson, one of the world’s leading paleontologists, the oldest fossils definitely established are at least one billion years old. Without recounting in detail the story he tells so magnificently in The Meaning of Evolution,(7) it is sufficient to say that at some time a unique species of life appeared. With the appearance of this species, a deceleration in biological change began, and an acceleration of psychological changes came into existence. Perhaps it would be more accurate to say that with the appearance of man, his very existence came to depend more on the changes he wrought by psychological means than through biological changes in his structure. For the first time, says Dobzhansky, ‘Human genes accomplished what no other genes succeeded in doing. They formed the biological basis for a superorganic culture, which proved to be the most powerful method of adaptation to the environment ever developed by a species.’(8)

What can we say about this new class of life that has assumed ascendency over all other living forms? To begin, man creates; animals do not, except in a very limited way. Long ago, man, by imitating, accidentally at first, the processes of nature, created many new forms from existing wild species. He created new varieties of fruits, grains, and new breeds of animals. He created uses for fire which no animal has ever done. He created the wheel, which did not exist on the western continent when the Indians ‘found Columbus on the beach.’ In the words of V. Gordon Childe, Man Makes Himself.(9) More than that; the operations he performs and his transactions with the environment enable generations yet unborn to live. Indeed, the newborn generation today could not possibly survive had not some preceding generations performed some operations on the environment.(10) This can be said of no other living forms. As long as man’s method of obtaining food was essentially that of an animal, men had to continue to fight like dogs over a bone. Today, any attempt to live by animal models of life would quickly end in disaster for all of us. Without the fruits of men’s creations—uses of fire, artificially produced grains, medicine, clothing, tools, the wheel, etc.—all but a very small percentage of humanity would die within a matter of days. I submit, therefore, that systems of psychotherapy that postulate hostility or aggressiveness as one of the chief mainsprings of human behavior ignore the patent fact that we belong to a class of life whose very existence depends upon cooperation—even with generations long dead. Man cannot stand alone. Not one of us is in possession of all the information that is needed to keep this building, and all the facilities housed in it, functioning. Not one here could provide through his own efforts the food he will eat for his next meal.

Let me repeat, if psychotherapy is to engage itself in the facilitation of inner states that correspond with the external conditions of life, then it cannot be based on the biological premise that hostility constitutes natural, survival functioning in the human class of life. There is no finding in modern genetics of which I am aware that points to the inheritance of hostile tendencies. All we inherit is a structure which under environmental impact may manifest hostility. The same structure, under different environmental conditions, will exhibit non-aggressive, cooperative behavior as Ruth Benedict demonstrated so beautifully in Patterns of Culture. To quote Dobzhansky again: ‘Since social organization may increase the biological fitness of the species, natural selection may be expected to promote cooperative behavior.'

Brock Chisholm, in Prescription for Survival(11), clearly demonstrates that we passed the time over 15 years ago when aggressive behavior ceased to be a survival tactic. Certainly we have reached the point in psychotherapy when we can join voices with the Hopi Indians, the Mennonites and the Quakers in recognizing that patterns of behavior that will lead to certain destruction for all of us cannot possibly be regarded as ‘normal’ conduct for the HUMAN class of life in 1962.

Others have written about man’s awareness of his aloneness and have pointed out that man, on psychological grounds, cannot face this state of being. With this point of view, I am in agreement, but I go further. The facts for HUMAN organisms
happen to be, leaving aside all psychological considerations, that men as biological organisms cannot survive if they stand alone. Evolution at long last, has brought forth a class of organisms that cannot survive except as they act in concert. The supreme form of punishment for a human being is to isolate him from his fellows. The prisoner in solitary confinement suffers, not because he lacks food, but because he is cut off from other men. Separated from other men, modern man cannot avail himself of the knowledge and mechanical means to provide himself with food with his own bare hands. Thus the wisdom of the body, experienced as pain during isolation, forewarns him that physical death is inevitable should his state of isolation continue. The forewarning gives unmistakable clues regarding the nature of the human organism, the latest development in the long evolutionary process: Man cannot stand alone.

Let me go back now and consider, what constitutes the HUMAN environment. We share with all other living forms a common universe, up to a point. This universe, as Dr. Einstein postulated it, may be described as a dynamic process. Mathematically, it can be described only in four-dimensional terminology: Space-time. When we eliminate the hyphen in space-time, we abolish the Einstein theory. This means that nothing ever remains where it was. It means that nothing in universe can be spoken about predictably without taking into account when. In universe we can establish no identity; everything is related to everything else; mathematicians have to invoke the principle of indeterminacy to even talk. In universe we find no qualities—no redness—no sweetness—no heat. Universe is basically unknown.

The environment I have described thus far, we share with all organisms: sunlight, air, soil, water, various climatic factors, and an indeterminate number of other physical factors variously described as gravitational fields, radiant energies, and so on. But the human class of life must take into account other environmental factors which are of no concern to other classes. The linguistic environment, man's unique creation, becomes a factor of supreme importance in the ordering of our daily lives. A headline announcing Khrushchev's latest move affects inner states of men all over the world. A whispered, 'I love you,' makes her tingle all over. Without language, we cannot possibly transact the affairs of men in such a manner as will insure survival.

And yet, language turns out, in the words of Sir Charles Sherrington to be a double-edged sword; 'You thought nature Intelligent, even wise. You know her devoid of reason being pure mechanism? Yet at length she made you, you with your reason. If you think a little, you with your reason can know that; you, the only reasoning thing in all your world, and therefore the only mad one.' (12)

Let me recapitulate; In addition to the dynamic systems of relationships, the electro-magnetic, physico-chemical phenomena with which animals' actions must harmonize, the operations of HUMAN organisms must comport with environmental factors that human beings have created. Here, we live in the coal country. For millions of years the coal under our feet was of little consequence to the denizens of the forest. In evolutionary time the dynamic systems we customarily call 'nature' change slowly. Living forms had ages during which they slowly developed, under environmental impact and through the operation of processes of natural selection, structures that enabled them to suit the environmental niche in which they moved. But with the coming of man, a new environmental dimension emerged—a new set of ever-changing relations to which we must continuously conform our daily actions or die. Man has taken the coal and utilized it in conjunction with new processes that he has created—processes on which his very existence depends. Man has depleted the forests of Pennsylvania (Penn's Forest), forcing us to rely on forests in Canada or in Oregon (and the HUMAN beings there) for the materials with which we can build our homes.

He has taken ores from the earth and constructed the railroads, the airplanes, the systems of communications that bind men all over the globe together. He has almost depleted the formerly 'unlimited' ore supply in the Mesabi range and now, perforce, must depend on the mountains in Venezuela and the people living there. The ores do not mine and transport themselves. With the ores he draws from the earth man continually transforms the environmental conditions to which he must constantly make appropriate adjustments. At last he has forged the missiles with which he can destroy himself—an accomplishment no animal has ever achieved.

In contrast with the older, 'natural', evolutionary, 'biological' environments, changes in the humanly created environments now proceed with breath-taking speed. The change is a geometric function. It is a change produced by HUMAN organisms. We come at long last to the point in the evolutionary process where education, psychotherapy (RE-education) included, is our most important business. Eby, one of our most discerning social scientists, formulates a definition of an educated man in terms that fit the human dimension of life. The educated man is...
We are members of the world, whether we like it or not, and the history of the world teaches that our survival depends upon keeping on friendly terms with this world in relationships that are honorable and hence mutually advantageous (13).

Man has suddenly entered an age when his self-regarding, hedonistic impulses are no longer safe guides for his continued existence. The age of man-induced change is upon us. The earth has grown smaller. The people in the heart of Africa whom we once regarded as savage dozens of far-away jungles are now on our doorstep. Those infantile individuals whom Korzybski characterized as 'want [ing] all the 'sense' enjoyment, never inquiring about the sufferings of others or of the consequences to themselves in the future' cannot possibly fit in a shrunken world where each of us is bound to every other.

As long ago as 1933, Korzybski formulated very clearly the nature of the adjustments we must all make today if we are to keep our inner states in correspondence with the HUMAN environment in which we all live. The following statement from Science and Sanity (14) is diametrically opposed in its implications to the premises underlying the hedonistic psychologies that form the basis for most psychotherapy in 1962: 'The more the child comes in touch with 'realty' the more he learns, and in a 'normal' child the 'pleasure principle' which was established as a method of adjustment on the infantile level, is slowly displaced by the 'realty principle' which thus becomes the semantic method of adjustment of the complete adult.'

Korzybski realized that the freudian 'system-function' must be revised and reformulated. To this end he specifically called for 'an active 'dynamic' 'unconscious.' The postulation of a dynamic 'unconscious' eliminates the demonological determinism implicit in the older systems of psychotherapy. In 1962, a static, demonological 'unconscious' makes no more sense than a static 'conscious' would make. Every science today postulates nothing static in universe.

On the basis of my own experience, I would go much further and say only at this point that the time is rapidly approaching when notions of a substantive 'unconscious' will be relegated to the realm of myth. I will develop the theoretical foundations at greater length in a work that I am now preparing. Suffice it to say at this point that I find it far more fruitful to examine what a client is doing with his 'conscious' than to enter into the realm of a mythical 'unconscious'. On this point, my experience supports the conclusions of Mowrer (15) and others although, as far as I know, I go further by showing how on neurological grounds and in terms of evolutionary processes, these conclusions make sense.

It is a psycho-biological principle that the kind of behavior we can expect from an organism depends on the structure of the organism. The structure of an ameba limits its behavior to relatively few movements as compared with man. Does the human structure give us any basis for assuming that a client can perform the operations necessary to maintain himself in a dynamic complex of ever-changing relationships? I believe we can say with confidence that it does. Time permits only a fleeting examination of the data pertaining to the structure and function of the human nervous system. In this connection, the reader is urged to examine the fundamental researches of George E. Coghill, C. Judson Herrick, C. M. Child, C. S. Sherrington, Russell Meyers (16) Herrick's work—The Evolution of Human Nature (17)—in which he summarizes the fruitful activity of his long lifetime mentions many others.

The elephant has a larger brain than man. His large brain is needed to integrate the functions of his massive body, functions that have to do chiefly with locomotion, reproduction, respiration, and digestion. In comparison to his weight, however, man's brain greatly surpasses that of the elephant. In man, as in the elephant, a portion of his brain integrates the animal, biological functions. But man has tissue to spare, over and beyond what is required for a vegetative, animalistic existence. Let us enumerate briefly some of the outstanding structural characteristics of man's brain, and the correlate behavior that this structure makes possible.

First of all, the human nervous system is the most intricately complex structure known. This structure performs, to use Herrick's terminology, analytic and integrative functions. The analyzers respond to a fantastic array of energy changes in the surrounding environment, thus giving humans the basis for differential activation that is unmatched in the organic world. For example, tactile receptors of the skin respond to mechanical impacts ranging from a single contact to over 1500 contacts per second. The ear differentiates vibrations with a range of about 9 octaves, or 30 to 20,000 vibrations per second. The eye is sensitive to vibrations ranging from $4 \times 10^{14}$ to $8 \times 10^{14}$ per second. The eye alone contains more than 100 million photoreceptors. This means the eye can exist in $2^{100,000}$ states. The human cortex contains in the neighborhood of 10,000 million nerve cells. The number of different circuits possible from such a collection of cells staggering the imagination. It exceeds the total number of atoms in the visible, sidereal universe. This means that we have a structure that permits us to react differentially in a dynamic environment with its endless succession of complexities. There is no rigid connection between a happening and the behavior that follows. The analytic structure means we can detect
Herrick's description of the structure of the HUMAN organism forces us to question sharply the freudian doctrine that man is clutched within the tentacles of mysterious 'instincts' residing somewhere in the caves of a mythical 'unconscious'. Anyone even slightly familiar with the research on so-called 'instincts'—see, for example, Berney and Tsevan—would pause, to say the least, before embracing a psychological system based on 'instinct' premises. It is of interest to note that Herrick does not even mention Freud's name in the crowning work of his long, illustrious career. It is also worthy of note that another giant in neurophysiology, the late Sir Charles Sherrington mentions Freud's name only once in two volumes (12, 19), one of which remains to this day the outstanding classic in neuro-physiology.

The human nervous system with its spare tissue carries further possibilities for successful adaptation to the environmental complex. When there is no spare tissue, the amount of learning that can take place is limited. Thus the difference between infant and adult behavior in animals is small. Stereotyped behavior is characteristic of such organisms. Individual experience is of little account. Such organisms start where the last generation left off and stop there.

In contrast, the human being begins life as an infant, with only a partially developed cerebrum representing capabilities which it is left for its individual experience to bring forth and modify. The career of each human being is no longer, like an animal, largely predetermined by the careers of its ancestors. The greatly lengthened period of infancy in human beings, unmatched in any animal form, makes it possible for every generation to develop, under environmental impact, in ways consistent with the surounding conditions at the time. It is not necessary for a child of the 20th century to live again the 2 million years of pre-historic, human existence. The extreme modifiability of the new human brain is unmatched by any other organism. In common with all organisms, the human brain is modified by environmental impact. For example, it has been known for many years that children born with cataracts do not always see when the cataracts are later removed. To evaluate these clinical findings, Reisen, Hebb, and others have been conducting experiments for more than 15 years that lead to the generalization that environmental impact, or its absence, are critical in determining both structure and function of the nervous system. The data derived from these experiments also support the generalization that organisms whose living adaptations to the environment are most complex require longer periods of environmental impact to develop the structures needed to make the more complicated adaptations. The published reports of a recent symposium at Harvard Medical School (20) summarize the results of many researches that are going on in this area of investigation, currently called Sensory Deprivation. These researches simply do not support current systems of psychotherapy that are based on static 'instincts'.

The human brain with its vast network of association neurons makes possible such actions as we call 'connecting', 'relating', 'integrating', 'coordinating', etc. This means that we have a structure that enables us to take into account many diverse factors in the dynamic complex we call environmental, and arrive at an integrated response. But it means something more. It means that we can become creators of language. Our responses can be in terms of the past, present, and future. We can, because man has created language, represent past actions and their consequences in the present (in what for want of a better term I call 'memory'). We can project representations of the possible consequences of our present actions into the future. Our nervous systems abstract. Not all characteristics in universe come to awareness. Because we do abstract, we can make different aspects in the environment similar, ignoring all differences. In short, we can generalize—we can create higher order abstractions. We can call different things by one name, and forget that the things are different. But because we can generalize, we can create sciences, mathematics, and systems of psychotherapy. We can record the wisdom of the ages and thus start where the last generation left off. Or we can limit ourselves to the use of the old 'wisdom' and stop where our ancestors ended their journey. Even as new abstractions and generalizations may lead us to new insights and better predictability, and perhaps spare us the fate of the dinosaur, our old generalizations may put us out of step with the new succession of events, and in extreme cases, make us subjects for psychotherapy. We can even cling to outmoded freudian postulates of 'instincts', a static 'unconscious', etc., that contradict modern genetics, anthropology, physics, neurology, etc.

All life abstracts, but man is the only organism that can know this. Fido has no libraries, no extra-neural aids, no science to tell him.

Man's structure enables him to carry the abstracting-generalizing processes to lengths unknown to any other forms. The number of higher order abstractions-generalizations he can make is unlimited—something can always be said about what has been said. The animal stops the abstracting-generalizing process somewhere. In the clinical situation I often encounter the client who is saying the last word.

Man's generalizations through science have put
the satellites in the skies. It may not be too much to hope that eventually he will take to heart the human situation that we are all in this world together. Perhaps we can never arrive at the state where we can all live by this generalization, as a blueprint that fits the facts of the human environment in 1962. Whether or not we will ever arrive at a 'Manhood of Humanity', when large numbers of us will be aware that we are all in this world together, I do not know. Powerful forces are operating to keep us at infantile levels. The headlong destruction of our natural resources in a mad scramble to 'get for self', endemic antagonisms between 'labor' and 'management' in this country, to 'get and keep for self'; the 'permissive' home; the 'progressive' school; the 'adjustment' mania; the widespread apathy regarding crime — these and many more factors are operating, with the active participation and tacit consent of human beings like you and me, to hold us at animal levels. Freudianism justifies such animal conduct. I do not say that Freudianism causes it. The freudian system provides the theoretical, linguistic framework that justifies us in viewing animalistic 'sex' and countless forms of hostility as the distinguishing characteristics of human behavior. This simply is not so. The human race has not survived up to now on the basis of unrestricted breeding and hostility. It cannot survive in the future if we in psychotherapy continue to have before the people a model of 'sex' and hostility as the 'normal' pattern of conduct that characterizes the human class of life. Surely other forms of HUMAN expression have been in existence for many years that are more aptly designated as HUMAN. Richard LaPiere(21) gives us a cogent description of hedonistic, animalistic patterns of behavior operating in our culture that in terms of the freudian premises must be regarded as 'normal' for human beings. While I do not agree with all of LaPiere's conclusions, I cannot urge too strongly that his, The Freudian Ethic be seriously studied for its deep implications for those engaged in the business of psychotherapy.

One other factor of great importance arises in connection with the process of representation. Once an individual's universe has been neatly organized — trapped, so to speak, in the structure of language forms — the structural implications carried in the language we use become a determining factor in what we perceive. The perception of an object necessarily implies the recognition of the object as like certain objects or unlike others. There is no cognition without RE-cognition. We cannot even name a chair without implying a personally created category of objects which the chair before us resembles. The essential element in the perception of this chair (here-now) is not the reception of a group of visual or tactual impressions, but the organism's evaluation of those impressions as like other antecedent impressions of similar objects.

When we RE-cognize, it means very simply that we compress a new, never-before-existing event into an old verbal category and sometimes the fit is not very good. What happens in RE-cognition must be regarded as an act of categorization quite as much as the act by means of which a naturalist ranks a newly-found horned and cloven-hoofed mammal among the ruminants. The only difference in the two performances is that in ordinary RE-cognition, the act has been performed so frequently as to have become automatic, whereas in scientific classification the act involves awareness and careful comparison of relations. In daily life, our automatic attempts to compress the oncoming events into the old language forms often amounts to complete distortion, especially if we suffer from hardening of the categories. 'Man,' says Kelly, 'looks at the world through transparent patterns or templates which he creates and then attempts to fit over the realities of which the world is composed. . .[he] creates his own ways of seeing the world in which, he lives; the world does not create them for him.'(1) This can have serious consequences as the client attempts to bring his inner states in correspondence with the goings-on outside his skin.

Time does not permit the much more thorough elucidation that these issues deserve. Let me now, in summary re-capitulate what I have tried to say. I have described very hurriedly, and in a very fragmentary manner, some of the bases for an approach to psychotherapy through Korzybski's general semantics. I have not said all about such an approach. This system of psychotherapy is based on certain premises that have already been enunciated:

A. The proposed system is based on the fundamental postulate that life essentially consists of the continuous maintenance of a dynamic equilibrium between the organism and its environment. Life is regarded as the continuous establishment of relations within an organism in correspondence with relations existing or arising in the environment.

B. It is further postulated that the HUMAN organism is a structure that makes choices that sometimes lead to internal relations consistent with external relations or at other times will lead to internal relations inconsistent with external relations. Alternatives of action are constantly evoked by the continuous stream of complex, dynamic relationships in the environment and the operations of the nervous system, and choices are constantly made whether we realize this or not. Deterministic explanations of the choices we make are rejected in this system with the exception of clearly demonstrated limitations of the organism itself. The rejection of deterministic explanations constitutes a choice. Choice alone cannot be rejected.
C. It is further postulated that there is no a priori method of determining with certainty that any given choice will increase or decrease the degree of correspondence between internal and external relations.

D. This system rejects hedonism as a survival basis for making choices. It deliberately embraces the view that the total HUMAN environment is such that we must choose to control our individual brutish impulses for self-gratification at the expense of our neighbors. It recognizes that HUMANITY constitutes a new dimension of life that cannot function in a survival manner if individuals do not sacrifice some personal gains and preferences for the welfare of the group. This system recognizes 'altruism' as possibly the most important orientation of the HUMAN class of life. One of the outstanding facts of existence at HUMAN levels is that no one can stand alone. Aside from any ethical considerations, no individual in modern society can long provide, through his individual efforts, the food and other necessities without which he cannot exist.

E. This system recognizes that individual choices create new relations in the environment that reflect back and affect in return potentially all individuals, even those yet unborn. 'The evolution of mankind,' says Sir Arthur Keith, 'is not something that happened long ago and far away. It is happening here and now under our own eyes. The evolution now going on under our eyes is not something that is happening to us. It is something that is happening by us, and insofar as we know what we as individuals are doing, sets the direction of the future course of our evolution.'(17) In terms of this postulate, no one can escape partial responsibility for the world in which he lives and in which his children will live. Individual responsibility for the choices an individual makes can not be delegated. A decision to assume a position of irresponsibility in this connection is still a choice from which consequences follow.

F. This system rejects widely held views labeled as 'neurotic guilt.' Under existing systems, it is alleged that the client reacts with feelings of guilt to actions he has performed or thinks about performing and that such feelings are neurotic. I regard the singling out of certain feelings, and labeling them as neurotic as wholly arbitrary. It so happens that we have structures that enable us to feel. Guilt feelings, feelings of shame and remorse, are simply some of the feelings we are capable of experiencing because we do not stand alone. Such feelings have very solid groundings in the facts of the history of every human being. With the greatly prolonged period of infancy that appears in the human class of life, there came the beginnings in the parents of feelings and actions not purely self-regarding. As the human family, with its definite relationships, came into being, there must necessarily have grown up between its various members reciprocal necessities of behavior. The conduct of the individual could no longer be shaped with sole reference to his own self-centered desires, but must be to a great extent subordinated to the general welfare of the family. And in judging the character of his own conduct, the individual must now begin to refer it to some factors outside himself. The moment two human beings exist, no one can have his own way all of the time.

To maintain inner states in correspondence with the complex environmental relationships that constitute the HUMAN environment necessitates voluntary choices that are made on a basis other than some hedonistic, giving-pleasure-to-the-'senses' basis. To explain the payment of taxes for mental hospitals in terms of a hedonistic ('it makes me feel good') principle must be regarded as an arbitrary, a priori act of classification. Classifications are not spontaneously generated. Let us be honest at this point: Paying taxes does not give me pleasure. I do not like taxes. Paying them gives me no gratification, directly or indirectly. I choose this particular form of discomfort to escape what I regard as even more uncomfortable consequences if the doors of all the mental hospitals and penitentiaries in the country should suddenly be opened. I deliberately elect this form of discomfort to maintain highways, schools, postal systems, water and electric supplies, and other social enterprises to escape certain death if these facilities are not maintained. I can make this choice because my biological structure makes it possible for me to create representations of the consequences that would certainly ensue if I did not make them. I can create a higher order abstraction (a creative, verbal operation) that puts ultimately every human being into the same verbal category with me. The fact that we can create such representations opens the chasm that forever separates human beings from brutes. Animals operate on 'sensory-pleasure' levels. The human class of life could not possibly survive on a pleasure basis if it should attempt to do so. Sense data in science, 1962, are outmoded.

In the course of development each of us
has internalized certain rules of conduct which take into account the fact that there are other human beings. We inherit biological structures that make it possible to internalize rules of conduct. The selective processes of evolution have preserved such structures, which have met the test of survival up to now. I know of no serious student of human affairs who would maintain that we could have a society if all of its members did not live by certain rules of action. We cannot stand alone; some rules are imperative. We just happen to inherit the kinds of structures that feel guilt, shame, fear of consequences, remorse, etc., when a rule of the culture that has reared us from childhood has been broken. These feelings I regard simply as warnings that we conform our actions to cultural conditions that kept us alive and keep us alive. This does not deny that any culture teaches its young conflicting rules of conduct, and even damaging ones, but that is another matter. Nor does this point of view deny the value of the individual. Rather what we are saying was said long ago by Alexander Pope in his Essay on Man:

So drives Self-love, thro’ just and thro’ unjust,
To one man’s pow’r, ambition, lucre, lust:
The same Self-love, in all, becomes the cause
Of what restrains him, Government and Laws.
For, what one likes if others like as well,
What serves one will, when many will rebel?
How shall he keep, what, sleeping or awake,
A weaker may surprise, a stronger take?
His safety must his liberty restrain:
All join to guard what each desires to gain.
For’cd into virtue thus by Self-defence,
Ev’n Kings learn’d justice and benevolence:
Self-love forsook the path it first pursued,
And found the private in the public good.

The elimination of guilt feelings, from a survival point of view, would make as little sense as the elimination of toothache. What MUST be eliminated if the human race is to survive is the teaching of certainties in every culture that do not fit the HUMAN environment in 1962. Once this is done, guilt feelings will become very useful; they will, in fact, have survival value. The individual who wrongs someone or aggrandizes himself at the expense of another should feel guilty, and will, when large numbers of people achieve HUMAN stature.

It has been my observation that guilt feelings about guilt feelings are far more frequent concomitants to other neurotic symptoms than the first order guilt feelings. The effects of such second order feelings can be, and often are, particularly devastating. In effect, the moment we feel guilty about feelings that are universally experienced (as far as I know) by human beings wherever we find them—feelings that have had survival value—we literally stimulate ourselves to move away from what cannot be moved away from. It so happens that first order feelings, guilt included, are internal goings-on. To move away from such feelings would in effect necessitate moving away from one’s self, a feat that would be impossible to perform.

To regard our verbalizations, ‘thoughts’, etc., about first order feelings as more important than these feelings must be regarded as a pathologically reversed order of evaluation which is certain to have harmful consequences. For example, see Douglas M. Kelley’s paper on World War II neuroses on this point.

The linguistic environments in which we live in 1962 encourage such reversed order evaluations. The freudian jargon has in effect become a religion. Television, movies, and newspaper columns daily portray miraculous psychiatric cures. Novels in profusion evoke the hoary, old Oedipus myth to account for all neurotic manifestations. These linguistic media repeatedly depict guilt feelings as neurotic. This makes as much sense (and no more) as it would make to categorize all headaches as neurotic. The ‘normal’ behavior pattern, according to the freudian mythology, is for sonny to want to ‘sex’ with daddy. How do we know this? Freud said so. How did he know? He knew because some ancient writer correctly divined the mainsprings of all neuroses in the Oedipus myth. Let it only be said in this connection that any attempt to build a modern science on premises derived from a prehistoric myth in 1962 would be quickly greeted with hoots of derision.

The monstrous demonological system Freud concocted deprecates man to animal levels. We look in vain in his system for discussions about integrity, love, responsibility, or any of the finer HUMAN characteristics we call ‘spiritual’. With his invention of the UN-conscious, he denies, in effect, the possibility of rational behavior at all. If we seriously believe such nonsense, then what shall we say if a client should question the therapist’s rationality? Shall we who are engaged in the business of psychotherapy then tell our clients that we are gods operating under a different system of rules?
If we grant the Freudian premises of UN-conscious, demonologically dominated behavior, then, indeed, it would have to follow that guilt could not possibly make sense. In this case, guilt would have to be regarded as a neurotic manifestation. Premises lead where they lead. Since no one wants to be neurotic, then it is quite understandable that we should find, in our linguistic-semantic climate, many individuals who will deny feelings of guilt, or strive to obliterate them, or feel guilty about them with serious consequences.

Once we change our premises to fit the HUMAN dimension of life, the handling of guilt feelings becomes an entirely different matter. It becomes a matter of examining the choices the client is making, the certainties in terms of which he is operating, and, in many cases, of helping him to find ways of making restitution for the harmful consequences of his acts on others.

Broadly considered, the goals of effective psychotherapy are seen as:

A. Leading the client to discover the choices he is making in his attempt to maintain relations within himself that are NOT in correspondence with relations in the environment.

B. Leading the client to discover situations where he is creating representations that are not in correspondence with the environment.

C. Leading the client to discover situations in which he is attempting to operate in accordance with contradictory sets of representations.

D. Leading the client to discover the choices that he can make to bring internal relations into correspondence with external relations.

As steps toward the attainment of the goals set forth above, the client must be re-educated in a manner that will give him the following insights:

A. The nature of the relationships in the total environment in which he lives. The relationships that are most significant for HUMAN conduct are those with other people. The transformation from brute to man has radically changed the standards of fitness for survival. As Herrick has so wisely observed: 'Not until man became a social creature could the manhood of humanity come to full fruition. This means that the individual man—not his overlord or his government or any power of impersonal 'culture' acting as a coercive entity—that the person as his own master takes the management of himself and of his group relationships into his own hands.' The individual dies; his children will survive if the individual and collective actions create environments that will not sustain all of us. The aggrandizement of an individual must NOT be at the expense of his fellows. The nature of the HUMAN environment demands that cooperation and mutual aid—not antagonism—is the price that must be paid ultimately for individual survival even though this price involves (as it must) some sacrifice of personal comfort.

B. In the course of his re-education, the client must become aware of what he is living, striving for, asserting, behaving, expressing in one way or another. He must become aware of the relationships in terms of which he is operating, as well as the relationships he is ignoring, as a consequence of premises (often not clearly formulated) that he takes for granted. He must become aware of the impact of his operations on others. He must constantly ask himself; How would I fare if all of my neighbors were operating in my terms?

C. As aids to the establishment of inner relations in correspondence with outer relations, re-education should lead him to formulate clearly what the situation in which he lives is 'demanding' of him: a) as he sees it; b) as others in 'power' over him express it; and c) as others, from a less involved point of view, see it.

D. He must face clearly this question: What lies am I telling to myself? An organism never reacts to the environment. It reacts to its own creative representations or misrepresentations of the environment. 'Men are tormented by the opinions they have of things, rather than by the things themselves' (James Harvey Robinson: The Blind in the Making, p. 3). The operation of organismal abstracting mechanisms, and, in HUMANS, of the creative capacity to make representations and MISREPRESENTATIONS based always on what we have abstracted and what we project into the world, operate in such a way as to give us representations of the TOTAL environment that are invariably false to a degree. When we operate AS IF our representations were in fact the ACTUAL relationships surrounding us, we assert, behave, express, a lie with consequent separations from life, 'pain', etc., in many areas. Those assertions of the client that contradict the basic survival behaviors for HUMANS (consideration for the other fellow as well as for himself) imposed by the fact
that man cannot stand alone produce effects in the environmental surround that reflect back on him and increase his separation.

More specifically, he must become aware of particular forms of representation that he automatically uses, such as the following:

1. Does he treat his representations of happenings as if they were the events? For example, does he treat his present projections of happenings in the future as if they were the actual events in the future. Does he treat his remembrance of happenings in the past as if they were the actual events? In short does he confuse orders of abstractions.

2. Do his representations portray himself and certain events in his environment as static—not structurally similar to the dynamics that characterize the total environment?

3. Do his representations assert that he is taking ALL factors in life situations into account?

4. Is he stopping the generation of higher orders of abstractions, i.e., deciding that nothing can be said about what he has thought or said?

5. Does he relate his higher order generalizations to lower order, non-verbal abstractions as a test of fitness?

6. Does he habitually treat inference as description?

7. Is he aware as he makes representations about himself and his surroundings that the character of the representations he makes depends on the characteristics he has noted?

8. Is he flexible enough in making his representations to deliberately seek out characteristics he has overlooked and form new representations?

9. Do his representations indicate that he is taking relationships into account?

10. Do his representations indicate that he operates in terms of a demonological system that relieves him of responsibility for the choices he is making? For example, does he blame fictions, such as his ‘mind’, his ‘unconscious’, his ‘emotions’, ‘talents’, etc., for his difficulties?

11. Do his representations suggest an artificial, arbitrary division of universe into two and only two values? For example, are his choices made on the erroneous premise that all of his decisions must lead either to totally painful or totally pleasant consequences?

12. Do his representations assert the identity of different phenomena?

13. Do his representations indicate areas in which he fails to generate higher order abstractions? The HUMAN class of life is sharply distinguished from the animal class of life by the fact that there is no limit in HUMANS to the orders of abstractions that we can generate. A human being who habitually fails to generate the higher order abstractions that include himself and every other human being operates at animal levels and is certain to find himself in difficulty.

14. Do his representations indicate an awareness that he has a hand in creating the environment with which he is interacting? It is equally important that his representations reveal an awareness that he does not create all of his difficulties.

15. Do his representations suggest that he is seeking certainties or absolutes as solutions to his difficulties?

16. Do his representations indicate that he habitually operates in terms of un-stated premises that are not similar in structure to the dynamic environment in which he lives?

17. Etc.

E. RE-education should lead the client to discover the points at which his misrepresentations are producing inner states that are not in correspondence with external states. Above every other consideration it should reinforce a clear recognition of HIS responsibility for his choices, of HIS responsibility to carry his share of the load so that his neighbors do not have to carry it for him. He must realize that before he can be true to himself, he cannot be false to them if he values himself. To be true to them is to be true to himself. This means he creates a higher order abstraction that encompasses all humanity, including himself.

F. Finally, the process of re-education should lead the client to make alternative representations and choices more consistent with the total environmental circumstances surrounding him. Above everything else, he must face the fact that the world IS NOT his oyster. The moment there are two human beings in the world, It means that NO ONE can have his own way all of the time.

The system of psychotherapy proposed here places emphasis on what the client is doing right now. It assumes that since human beings CAN and DO make choices, they have a hand in shaping the
consequences of their choices. It rejects the
demonological, push-from-behind mechanisms,
beyond HUMAN control, of mysterious forces in
the deep, dark caves of the 'unconscious'. Such
demonological theories relieve the client of all
responsibility. This system confronts him with
the inescapable fact that life offers NO possibility
for total escape from discomfort. Instead, it
postulates that in the HUMAN class of life SOME
personal comfort must be sacrificed, for the wel-
fare of ourselves and others, if we are to survive.
This is a stern requirement, no matter if we are
comfortable or not.

The system rejects the premise that the sig-
ificant aspects of HUMAN life are diabolical,
animalistic goings-on in some dark, subterranean
caves of a mythical, 'unconscious' mind, while the
observable aspects of living are regarded as
merely frosting on the cake. On the contrary, this
system regards the HUMAN class of life as one in
which increased awareness of the environment and
increased awareness of the consequences of our
choles characterizes the behavior of individuals,
and distinguishes us sharply from animals. The
rejection of false-to-the-nature of HUMAN life
animalistic, biological premises make it unneces-
sary to engage in historical or mining operations
as a technique in psychotherapy. The rejection has
a further effect of leading the client to create
representations of himself as a HUMAN being and
NOT an animal, the consequences of which often are
unbelievably 'healing'. Careful observation of what
the client is doing RIGHT NOW often makes it pos-
sible to infer the nature of what has happened to
him in the past even after this is no longer neces-
sary.

Above everything else, the system postulates
the Importance of representations that are struc-
turally-similar to the non-verbal factors that must
be taken into account as opposed to wishful, in-
fantile representations—and the importance of the
assumption of PERSONAL responsibility rather
than dependence on a psychiatric confessor. It
works toward a realization that NO ONE can ab-
solve us from the consequences of our own acts and
forward the full awareness that we are not in the
world alone. It works towards a realization of the
HUMAN condition in which we now all findourselves—the condition so admirably expressed by
Marian Martin in a recent article in Saturday Re-
view(21) entitled, 'How Big Should a Shelter Be?'

The city of Tucson, where I live is ringed by
18 Titan missile installations. Needless to
say, there is a lively interest among Tucsonians
in civil-defense fallout shelters. For myself,
I have solved the problem of how large the
shelter ought to be and how to stock it adequa-
tely.

The shelter must be large enough to ac-
 commodate approximately three billion people.
All have an equal right to existence, and
therefore all must be sheltered.

The shelter must be stocked with adequate
food, clothing, housing, medical care and
educational opportunity for the three billion.
Also essential is a great supply of under-
standing, humility, sympathy, courage and
love. This shelter will also offer sunshine
fresh, uncontaminated air, plants and ani-
mals, woods, fresh water and oceans, a star-
ry roof at night, and many other wonders for
the occupants to share.

In my heart I hope that this is the shelter
we will choose to build. I know that is the
only one that affords safety for any of us.

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13. Eby, Kermit, 'Life Is My Laboratory,'
ORA RAY BONTRAGER was born in Johnson County, Iowa, 9 October 1898. His bachelor’s, master’s and doctoral degrees were earned at the State University of Iowa where he did his undergraduate work in mathematics and engineering, and graduate work in psychology, education and language. He first became interested in general semantics through Wendell Johnson and in connection with ‘reading problems,’ on which he was then working. He studied with Korzybski in nine IGS seminars (1939-1949), participating as lecturer-consultant in the seminar-workshops from 1946 on. He has used the discipline as methodologic core in his teacher training courses since 1949; also in his private clinical work. He is a Fellow of the Institute and chief lecturer for IGS seminars (1950—).

Professor Bontrager began his teaching career in a one-room rural school, and his experience ranges from kindergarten to graduate school. He was also superintendent of schools in two towns in Iowa, principal of Illinois Soldiers and Sailors Children’s School (one of the largest welfare institutions of its kind in the US); instructor in psychology and education at Cornell College and associate professor of education at Illinois Normal University before going to California (Pennsylvania) State College where he was professor of education and psychology, 1936-62. While at CSC, he prepared the outline for a course in general semantics (1930 which, so far as we know, was the first to be adopted by a state department of public instruction. During World War II he was in command of the Navy V-12 unit at Topeka, Kansas (Lt. Comdr. USNR, 1942-46). Now Special Lecturer in Education at Arizona State University (1962—), Professor Bontrager is teaching in the department of Educational Foundations which, headed by Dr. Thomas Weiss (see GSU 24 & 25), is strongly based on general semantics. His all-too-infrequent articles which have appeared in the General Semantics Bulletin are: Numbers Four & Five, ‘On Higher Order Abstractions: A Methodologic Issue,’ pages 3-5; ‘Some Neglected Considerations of Order in Current Reading Methodologies,’ pages 25-33. Numbers Twelve & Thirteen, ‘Some Possible Origins of the Prevalence of Verbalism,’ pages 30-37.