Korzybski recognized clearly that his formulations were the product of his nervous system at a particular time and place. In this paper I wish to consider what were the special features of his time and place that enabled him to develop the Korzybskian system. In many ways the 1920's represented an intellectual world very different from today's, and only the oldest members of this audience remember it first hand. In my own case, I was attending a small college in Iowa, engaged in breaking away from the Baptist fundamentalism around me. Then I did graduate work, with some teaching of freshman English, and I had only an immature grasp of the currents going on at the time. After I went to the University of Chicago campus in 1932 as a research worker, I was able to see the 1920's from the perspective of looking back on the immediately preceding years. In the few minutes at my disposal, I can deal only glancingly with many intellectual currents, but I will try to reconstruct in broad strokes the milieu that Korzybski found himself in.

Most Americans did not experience the tremendous upset that World War I caused in Europe. Korzybski had experienced the debacle of the Eastern Front, with its devastation of Poland and parts of Russia. He brought this memory with him when the Russian Army sent him to Canada and the United States in December, 1915, to oversee the acceptance of orders for artillery supplies. Throughout the chaotic years near the war's end, he kept asking himself, "How could this be prevented?"

Of course, he carried with him his Polish background of studies in engineering and mathematics, but to the age of thirty-eight he was only an observer, not committing himself to any formulations. But then began a remarkable period of creativity that culminated in the publication of Manhood of Humanity in 1921. His working out of the formulations of energy-binding, space-binding, and time-binding was the result of his strong motivation to find out what makes human beings human.

He met a different atmosphere here in America that helped to free him for his burst of energy. The American background of opening the frontier and filling a new continent had led to a pragmatic outlook. In philosophy this was contained in William James's work on "pragmatism," which was very much in disrepute in Europe. The new outlook was reflected in Korzybski's work by his emphasis on extensionality. The American ethos was suited to Korzybski's development. He found that his newly learned English language was congenial to his expression. He has said that he needed English before he could construct his formulations.

One movement of the 1920's that influenced Korzybski at first, but is now almost completely forgotten, is the "Technocracy movement." This is reflected in the subtitle of Manhood of Humanity, which was: The Science and Art of Human Engineering. He was proud of his engineering training and approach, and he met regularly with a group of kindred spirits led by Walter Polakov. They organized a "Time-binding Club" for discussion and criticism. Korzybski defined "human engineering"
by saying: "By Human Engineering I mean the science and art of directing the energies and capacities of human beings to the advancement of human weal." That term, however, as it was bandied about, became much devaluated and smacked of manipulation. He was not interested in imposing on people "what's good for them," and human engineering fell into well-warranted disrepute, and he never used the term after the middle 1920's. It became much too shallow in the light of the new insights that were opening up to him. Korzybski was maturing considerably.

He came more and more to know the great ferment that was taking place in philosophy and scientific theory. The challenge was well expressed in 1923 by George Santayana in the preface of his book Scepticism and Animal Faith. Santayana wrote:

There is now a great ferment in natural and mathematical philosophy and the times seem ripe for a new system of nature, at once ingenious and comprehensive, such as has not appeared since the earlier days of Greece. We may soon be all believing in an honest cosmology, comparable with that of Heraclitus, Pythagoras, or Democritus. ... But what exists to-day is so tentative, obscure, and confused by bad philosophy, that there is no knowing what parts may be sound and what parts merely personal and scatter-brained. [George Santayana, Scepticism and Animal Faith: Introduction to a System of Philosophy (N. Y., 1923), p. ix.]

Korzybski recognized the necessity of welding these developments into a unified whole, into a coherent system. Many, many fields were contributing.

The full import of Einstein's theories had not yet been worked out. Notions of the structure of 'matter' (always put in quotation marks by Korzybski) were under revision, and even Einstein was being challenged by newer quantum theories. Just as Science and Sanity was going to press, he added a new footnote about an exciting paper by Max Born.

The physiologists were being equally revolutionary. The experiments of Pavlov in Russia, along with Dr. W. Horsley Gantt, established a new framework for judging human action, taking into account the conditional reflex. The neurologists and biologists especially, such as C. Judson Herrick and Jacques Loeb, were digging up new findings. Korzybski felt that colloid chemistry was very important. I remember my puzzlement at my first seminar in 1941 at the emphasis on colloidal behavior, for I had come expecting to be told about language problems. But Korzybski was probing into the nature of 'life', and the investigations of Jerome Alexander and others into colloids offered the basis for the beginnings of an explanation. How Korzybski would have enjoyed the recent findings on DNA!

Other revolutions were going on in formal mathematical philosophy. He assimilated the basic work of Russell and Whitehead in their Principia Mathematica and was further influenced by Wittgenstein. The notion of the "unsayable," brought out in the Tractatus, was constantly
with him. His good friend Cassius J. Keyser, Professor of Mathematics at Columbia, was in some ways almost a collaborator in Korzybski's earlier work. Korzybski kept in touch with the Polish formalist school and even traveled back to Warsaw in 1929 to attend the Congress of Mathematicians of the Slavic Countries. His correspondence with Arthur F. Bentley, whose Linguistic Analysis of Mathematics was being written at the same time as Science and Sanity, shows the two men struggling with profound issues.

Korzybski was attempting to integrate mathematical theories into an extensional system, and consequently found himself at odds with most mathematicians, who preferred to think of mathematics as occupying an autonomous domain of its own. Only a few thinkers, such as Eric Temple Bell, Cassius Keyser, and Leonard Bloomfield, were on his side.

Korzybski found inspiration in Oswald Spengler's Decline of the West, which first appeared in Germany in July, 1918, and was available in English after 1926. Its working out of "the method of comparative morphology in world-history," with emphasis on analogical structural relations, was a considerable challenge to Korzybski, and he called it a "unique and astonishing work," with "unusual scholarship and breadth of vision."

Another formative influence that helped to shape Korzybski's formulations was the great advance made in psychotherapy and psychiatry. He was critical of Freud's own outlook, for he wrote as follows: "In 1933 the work of Freud is generally accepted as important and very suggestive, although further experiments by many research workers and practitioners have shown that the Freudian formulations have not the exclusiveness formerly assumed for them." The main influence from psychiatry came during the two years, 1925 and 1926, when he did research at St. Elizabeth's Hospital in Washington, D.C., under the guidance of Dr. William Alanson White. He studied the patients, attended staff meetings, and had long discussions with doctors such as Harry Stack Sullivan. Lectures that he gave before two psychiatric societies in Washington were accorded a special printing.

Most problematical of all the influences of the 1920's that bore upon Korzybski was the possible influence of the behaviorist movement. The behaviorists were so negative and reductionist, especially in the extreme pronouncements of John B. Watson, that Korzybski held himself firmly aloof from them. However, they did great service for the thinking of that decade. They cleared the way for the acceptance of a unified field, a monism, a denial of the dualism of body/mind. Korzybski's name for this was non-elementalism, one of his most important formulations.

This represents what has come to be known in recent years as a "change of paradigm." The notion of paradigms was presented in 1962 by Thomas S. Kuhn in his book The Structure of Scientific Revolutions and revised in a second edition of 1970 and aroused a great deal of attention in philosophical circles. He put forward the view that scientific method moves forward not only by the usual cumulative process, but more importantly by leaps, when a fundamental premise is changed. His best example is the Copernican revolution.
I find it remarkable that Korzybski presented this very view twenty years before Kuhn, but philosophers then ignored it. In 1942, in the Foreword to Monograph III, this process was put forward as the necessity of a change of premises. The diagram has been used on the covers of the General Semantics Bulletin for many years. Korzybski pointed out that Postulate 1 leads to Theorem 1 and that Postulate 2 leads to Theorem 2, but many people try to cross over and get directly from Postulate 1 to Theorem 2. This is invalid, for a change of postulates is necessary.

In the Kuhnian sense, there have been two great changes of paradigm since the time of Descartes, who died in 1650. I would prefer to use the word revolution, because Kuhn, under attack from fellow philosophers, has had to put crippling limits on his use of the word paradigm.

The first of the great post-Cartesian scientific revolutions was the rise of the empirical outlook in the middle years of the 19th century -- first in geology, then in biology, and especially in Darwin's findings. There came to be awareness that a necessary first step in science is the collecting of data. It led to the overthrow of "rationalism" in its technical sense and to the overthrow of dependence on "mind". In earlier science, one's conclusions were assumed in an a priori way.

The second great revolution, or change of paradigm, occurred in the early decades of the 20th century, under the impact of the theory of relativity and of the newer psychologies, leading to recognition of the unified field and the denial of dualism. Korzybski's "non-elementalism" reflects this revolution. Korzybski's formulations have remained sound because they were made after these scientific revolutions had taken place.

The 1920's held other figures that influenced Korzybski in varying degrees. The book by C. K. Ogden and I. A. Richards, The Meaning of Meaning, published in 1923, caused considerable stir, but it rested on such an unsound neurological basis that Korzybski found it seriously deficient. The "Humanist movement" also got under way, issuing a fine "Manifesto" in 1933, but Korzybski regarded it as much too shallow, too wishy-washy, in need of fundamental revision. Out of that group only Oliver Reiser seemed to have a deep understanding of scientific issues.

A genuinely scientific linguistics was being worked out at the very same time that Korzybski was developing his general semantics, but not in time for him to use it. I have combed the bibliography in Science and Sanity for the books on language -- about six of them -- the best there were at the time -- but none of them would have been of much help. Linguistics was not yet a science. Korzybski was justified in writing in 1933 as follows: "We speak much and vaguely about the 'structure' of language, but extremely little work has been done in this field." Korzybski felt this lack, and it has been repaired by the work of many linguists in recent decades.
The anthropological linguists had got under way shortly before Korzybski did his formulating, and it would have been well if he had known more of Franz Boas, especially his writings on language; and Korzybski unfortunately did not know Edward Sapir's book Language of 1921.

It was in 1925 that the scientific study of language was sufficiently developed so that the Linguistic Society of America was founded. The chief developer of the new outlook was Leonard Bloomfield, and his fundamental work, Language, appeared in the same year as Science and Sanity, 1933. His espousal of physicalism brought him in line with Korzybski's non-elementalism, and his linguistics still supports Korzybski's outlook firmly. In England the great linguist J. R. Firth developed theories in full harmony with the Korzybskian orientation.

The very stimulating work of the great French linguist Saussure, through the strange quirk of its history, was not available to Korzybski. When Saussure died in 1913, he had given several series of lectures, unpublished, and they were then prepared for publication from the notes taken down by his students, and their importance was not generally realized until much later.

Another linguist of great influence did not begin until the mid-1930's -- Benjamin Lee Whorf. He has received great acclaim for developing the notion that one's language determines one's perception of the world. And yet both implicitly and explicitly through Science and Sanity this outlook is to be found. In the section "On Structure" Korzybski said (p. 60): "... we read unconsciously into the world the structure of the language we use." Even stronger is a later passage (p. 90) when he said: "We do not realize what tremendous power the structure of an habitual language has. It is not an exaggeration to say that it enslaves us through the mechanism of semantic reactions and that the structure which a language exhibits, and impresses upon us unconsciously, is automatically projected upon the world around us." This is good linguistic doctrine which Korzybski developed for himself, without benefit of Sapir or Whorf.

As we look at the many intellectual currents that were battling for attention after 1915, during Korzybski's great creative period, especially in the latter part of the 1920's, we can see how an inquiring mind like Korzybski's would be stimulated to attempt a synthesis into a coherent system. I have touched only glancingly at the variety of contributions that he was obliged to work with.

But our theme at this meeting is "Inheritances and Innovations," and I wish to point out what I find in Korzybski that I do not find before him -- where he supplied remarkable innovations. Most outstanding is his bold, outright denial of what is often called Aristotle's "first law of thought," that "A is A." The principle of "non-identity," as Korzybski called it, is so revolutionary that most thinkers have not yet caught up with it. It makes a Heraclitean outlook possible -- that change and flow are always with us.
The second great innovation that I find in Korzybski is this: he incorporated within a scientific system the awareness that intellectual understanding is not enough. It must be supplemented, or implemented, by further changes in the nervous system that will affect one's behavior and habit patterns. This is not anti-intellectualism, but an awareness that a rigorous, keenly-honed intellectualism is not enough. Korzybski's early recognition of this was his inclusion of what he called "semantic relaxation" in his teaching, and the Institute's seminars emphasized further the need for restructuring the personality.

The inclusion of this aspect of the teaching of general semantics (making it a "discipline" in the full sense) has turned some people against it, for there is a great bias in the academic world against "doing" anything. It is "not respectable." But however much it may be frowned upon, enlightened people will want to commit themselves to the revision of their behavior, of their habit patterns, in line with the findings of general semantics.

Korzybski did not regard his system as a finished product. He in fact believed that other non-Aristotelian systems would come along and supplant it. That is always possible with an open-ended system. So far it has not happened. The great advances made in the many fields of science -- physics, cosmology, genetics, neurology, linguistics, semiotics, and so many others -- have cumulatively supported the formulations worked out by Korzybski in the late 1920's and set forth in 1933.

Testing whether this is so is an ongoing enterprise in which we all can be engaged. Those who do not work at the theoretical aspects of general semantics can make the applications to daily life. Such applications matter most in the long run.
Allen Walker Read has long functioned as 'linguist in residence' for the general semantics community. Though general semantics is not a linguistic discipline in the restricted sense, we do draw on scientific language studies. Professor Read not only updates us through his participation in our major seminars, symposia, conferences and lecture programs, but monitors our use of the information provided. His monitoring takes the form of gentle critique, sharp analysis (sometimes in writing and quite extensive) and, as with the General Semantics Bulletin, consultation. To the extent that general semantics has become and remained a discipline, the credit must go in large part to Allen Walker Read.

Currently Professor Emeritus of English, Columbia University, Professor Read can look back at a long and distinguished academic career. Born in Minnesota, raised in Iowa, he graduated from the University of Northern Iowa (then called Iowa State Teachers College) in 1925. He took his M.A. at the University of Iowa in 1926, and from 1928 to 1931 was a Rhodes Scholar at Oxford, taking there the B.Litt. degree in 1933. This was followed by graduate studies at the University of Chicago (1932-34) and philosophical studies at the New School for Social Research in 1947-48.

His teaching and research have taken him from the University of Missouri (1926-28; 1931-32) to the University of Chicago (as Research Assistant, 1932-34, and as Research Associate, 1934-38), the Illinois Institute of Technology (1941-42), and, finally, Columbia University in 1945, rising there to the rank of Full Professor in 1962 and, since July 1, 1974, holding his emeritus status.

His teaching career was interrupted by service in the U.S. Army (1942-45) during World War II.

As important as his teaching activities have been (he numbers several leading linguistic scholars among his former pupils), it is perhaps mostly as writer-researcher that he has made his mark -- nothing less than an internationally known and respected lexicographer and scholar in the field of modern English, including the history of Americanisms, differences between American and British English, and current English usage. Behind those bland sounding terms lurks a treasure of fascinating and often amusing material. The world's authority on the history of O.K., Allen Read is also one of the first serious scholars to study graffiti as a form of folk literature. Norton Mockridge's book, The Scrawl of the Wild, devotes its first two chapters to a discussion of Allen's graffiti researches. H. L. Mencken wrote in the New Yorker of September 25, 1948, "Allen Walker Read...probably knows more about early Americanisms than anyone else on earth." His paper, "An Account of the Word 'Semantics'," published in Word in August, 1948, remains the classic discussion of
that term which has so confused even would-be general semanticists to this day.

Professor Read's editorial and consultant positions (Dictionary of American English, American Speech, American College Dictionary, Funk and Wagnall's Standard Dictionary, Random House Dictionary of the English Language, Encyclopaedia Britannica) and publications (more than 150 scholarly papers) make even a representative listing here impossible. He has also led many scholarly organizations; most recently he was President of the Semiotic Society of America.

In his "retirement" he keeps to a schedule that, as the saying goes, would exhaust a younger man. In 1980 alone he delivered major papers in places as far apart as Texas and Canada. He has accepted invitations to deliver (so far) another ten in 1981.

We are not only honored but methodologically and technically fortunate to have him as Consulting Editor for the General Semantics Bulletin.

Allen Walker Read
DOUGLAS GORDON CAMPBELL, MD:
An Interview Held with Helen Hafner, Mary Morain and David Waggoner, MD

GERARD NIERENBERG: (INTRODUCTION) Good afternoon.

My name is Gerard Nierenberg. I've been called upon to chair this afternoon and I'm going to try to make up some of the time and we're going to try to shorten some of the segments and go through without a break to our Cheese, Wine and Crackers that we get at the end as a surprise.

[LAUGHTER]

I note with keen interest that the theme of the conference is "Processes of Time-Binding," not in the singular, and this morning we seemed to be devoted to past-present time-binding with things that occurred before.

I would like to remind us that time-binding extends during the present over the entire earth through various segments of society, and concerns how we use the information that's being formulated at present. This too is time-binding, and I got the insight to it when Bill Exton made a very significant statement.

He says that there are segments of our society interested in the extensional, and that gave me the key to some of the things that I think that we're going to see this afternoon. We're going to see how people have made use of the present time-binding with the people who are in existence now, who are in different fields of endeavor. I'm a latecomer to general semantics. It was my son who was attending junior high school who got me interested in general semantics, and I made rapid progress because right after he got me interested and I reread Hayakawa's book, I found myself as President of the Board of Trustees of the Institute.

Now that's moving pretty quickly. I felt that I was a good student with time-binding and I studied rather rapidly, and what I'm doing today in my work is sharing a lot of the information from general semantics. I always use the same labels whenever I refer to any principles of general semantics in anything that I write. I always refer to it as general semantics. I try not to put it under a different name or a different designation.

You know, I think it was the Bible that said that if you give acknowledgement to the source, you are remembered by God, but that's not the--

[LAUGHTER]

--that's not the only reason because I'm interested that other people continue and follow the theme that I try to open up. At this