



This issue was written in 1960

PROFESSOR OLIVER L. REISER, HIS WORLD

SENSORIUM AND SEMANTOGRAPHY

Dr. Oliver L. Reiser was in 1947, and still is today in 1960 professor of philosophy at the University of Pittsburgh. He has written a number of penetrating books on the idea of a Scientific Humanism, on the idea of the emergence of a new world "creature", a "world sensorium" as he called it, on the idea of a cyclic creative cosmology and on the idea of a new and modern Pantheism, a new philosophy which can give mankind a new direction in this troubled world, and a new meaning to the existence of the human race. Herebelow is an incomplete list of his books:

BOOKS BY PROFESSOR O.L. REISER

HUMANISTIC LOGIC (T.Y. Crowell & Co)
 THE ALCHEMY OF LIGHT AND COLOUR (W.W. Norton)
 PHILOSOPHY AND THE CONCEPT OF MODERN SCIENCE (MacMillan & Co.)
 THE PROMISE OF SCIENTIFIC HUMANISM (Creative Age Press)
 A NEW EARTH AND A NEW HUMANITY (Creative Age Press)
 THE WORLD SENSORIUM (Creative Age Press)
 PLANETARY DEMOCRACY with Blowden Davies, co-author (Creative Age Press)
 WORLD PHILOSOPHY, A SEARCH FOR SYNTHESIS (University of Pittsburgh Press)
 WHERE KARL MARX WENT WRONG with B.G.H. Vanderjagt, co-author
 NATURE, MAN AND GOD (University of Pittsburgh Press)
 A PHILOSOPHY FOR WORLD UNIFICATION (Haldeman-Julius)
 THE INTEGRATION OF HUMAN KNOWLEDGE (Porter Sargent)

And numerous papers in scientific journals and scientific congress reports. One special publication I wish to mention apart from the ones above, because it concerns my work Semantography, and I have published it. The title corresponds with the title given by Prof. Reiser to a paper which he read to the Annual Meeting of the American Association for the Advancement of Science, Philadelphia 1951

UNIFIED SYMBOLISM FOR WORLD UNDERSTANDING IN SCIENCE (Semantography Publ. Co)

These pages contain the story of the paper mentioned above, and a short recapitulation of the relationship of Professor Reiser to my work and myself.

In 1947, when I began to write my books in earnest, I came by a chance acquaintance into the Australian Psychology Centre where they read Korzybski's "Science and Sanity", a book on General Semantics. I got acquainted with the secretary Mrs. Betty Stoltenhoff, who agreed to read my first manuscripts. She in turn got interested in my Semantography, and when she came upon a passage in a book by Prof. Reiser, she informed me about it. This passage from Reiser's book THE WORLD SENSORIUM reads:

"The central difficulty with Humanism has been that it has tried to put an immensely simple message into WORDS, whereas such a message can only be written into a form of a universal picture language. The job is to find a layout, a picture basis so simple and so huge that it is usable by anyone who has mastered the movies or can punch a radio panel."

I was fascinated by these words, and felt that Prof. Reiser would be greatly interested in my work. However, I wanted to have my manuscripts finished first. It took me another 3 years. Meanwhile I designed my first leaflet, the title page of my books, which leaflet I numbered issue no. 1 of the new Semantography Series. After having obtained a number of testimonials from Bertrand Russell and others, I designed S.S. 6 and included Reiser's passage in it on p. 6. Then I approached Reiser himself. My elaborate letter to him in which I showed him how my symbols can demonstrate his Scientific Humanism and his Universal Ethics, forms S.S. 27. Since then I have mentioned Prof. Reiser and all his good words he found for my work in most of my writings. I mention here only the following issues of the Semantography Series No. 6, 27, 31, 35, 36, 37, 38, 40, 41, 43, 44, 51, 52, 54, 55, 58, 59, 61, 62, 63, 72, 73, 74, 77, 78, 79, 80, 81, 82, 84, 85, 90, 99, 110, 122, 129, 130, 132, 134, 135, 145, 149, 150, 156, 157, 160, 161, 162, 167, 169, 171, 173, 177, 188, 189, 190, 193, 194, and a number of other writings. In fact, I have hardly written anything down on Semantography without mentioning the good words which Prof. Reiser had for my work. His friendship meant much to me. Indeed it meant for me mental survival.

When I approached him in 1951 I was already very much perturbed. I had approached scholars in Shanghai from 1942 to 1946 and have found that they expressed great interest in my work. So did students, businessmen and private intelligent people. They all knew that I am on to something good, simply because they saw that a symbol writing can work, even when it is archaic and cumbersome, the Chinese script. It was therefore with great hopes that I arrived in Australia in 1946. Here however the picture changed disastrously. I found that Western people, scholars and laymen considered Chinese script something utterly backward. Hence, they considered me an hopeless crank. And as the years rolled by, from 1946 to 1950 I found that no one is interested and that no one is going to help me. I had put all my hopes, all my resources and all my savings on the acceptance of my work by the educators of the Western world. I was facing bankruptcy, mentally and financially. Since 1949 when my resources gave out, I took on a labourers job in a factory close to my home. I wanted to keep my mind free for my work.

In this desperate situation I approached Reiser as my only great hope. My pleading words can be read in my long letter to him which forms S.S. 27. His letters all full of great interest revived my hopes, and my old vigour came back when he informed me that he is going to read a paper on symbolism to the American Association for the Advancement of Science, and he is going to include an account of my work in this paper. This was the opportunity I have been waiting for. I conceived a special leaflet (S.S.52) for his lecture and used page 4 of this leaflet for a plea for my work and myself. What a fool I have been not to know that scholars turn deaf ears to outsiders with outsider ideas.

The only scholar who gave me help was Reiser himself. I found out later that he is the blessed exception among the professional scholars. He takes kindly to outsiders with outsider ideas. And throughout the years he has written to me many a letter which bear witness for his great friendship and for his kindness. He could not help me materially. He could not help me in securing a fellowship or a grant - simply because he himself could not get any fellowship and any grant. I found out when studying his books that he himself is an outsider among his own profession, that he himself is the "black sheep" among professors, that he himself suffers the same frustration of all his hopes which I have suffered.

From my dealings with publishers who assumed a most humiliating attitude towards me, I came to believe that only the fact that I, the author, have no special standing in the academic world, works against me and the acceptance of my work by a publisher and by the academic world in general. I conceived therefore the idea to bring out a special brochure, the author of which should not be me, but Professor Reiser himself. He wanted since 1951 that his paper to the AAAS should be printed. Unfortunately, I could not undertake the printing then, but in 1956 I approached him with the idea of a publication on two papers of Reiser, his paper to the AAAS, and his paper to the International Society for Significs read in Amsterdam. He agreed to my proposal that an enlarged version of my work should be included, and he was instrumental in using all the material and all my writing which I sent to him. So, the brochure

UNIFIED SYMBOLISM FOR WORLD UNDERSTANDING IN SCIENCE

including

Bliss Symbols (Semantography)
and

Logic, Cybernetics, and Semantics
by Oliver L. Reiser

was born. I could only mimeograph it, but I tried to make the best possible job. I sent out over 1300 promotion circulars to American universities and colleges. This circular forms S.S. 149 and has a picture of Reiser. The brochure forms S.S.No. 150. It sold, all in all, about 150 copies with Prof. Reiser distributing another 50 copies to friends and reviewers of scientific journals. A few reviews were printed and they are collected in S.S. 169. Not all were friendly. And I have realized that even the name of a professor as author makes little difference. Outsider ideas are out with the orthodox professionals.

It is my firm decision to bring out Reiser's brochure in typeset print. This is the least I can do, in return for his wonderful help he has given me throughout the years. The researcher who will go through my papers will find my letters to Reiser and his letters to me in my files. He will be able to see that Reiser was for me more than a father, more than a friend. He was for me survival - and he still is. In this year he will be 65, and I hope we shall stay alive for years to come. The following pages contain a chapter from my latest manuscript, and a summary of his great ideas, followed by reviews of his latest book THE INTEGRATION OF HUMAN KNOWLEDGE. This chapter is a tribute to Reiser's great ideas.

REPRINTS OF SOME OF THE REVIEWS
OF THE MONUMENTAL WORK OF
PROFESSOR OLIVER L. REISER
"THE INTEGRATION OF HUMAN KNOWLEDGE"

published 1958 by Porter Sargent, Boston

"It has a breadth and a sweep that are impressive but he never fails to keep the human, the creative and the poetic touch in his writing. I think Dr. Reiser is in the forefront of the speculative thinkers of our times and I believe he had lifted the sumtotal of advanced and creative thinking of our generation into a still higher level where it can catch the transforming light of another dimension of recognition. He 'levels the lift' of the best achievement of our day and aids us in the continuing pioneering by which 'we pass and continue beyond,'"

Blowden Davies, The Clearing, R.R. I, Markham, Ontario
 (see also the review from the Beacon in the next pages)

"In crisply narrative style Reiser roams such disparate realms as relativity, logic, mathematics, semantics, and ESP. Among these he imputes daring relationships and draws conclusions bearing on the development of human society. Whether his urbane observations intrigue, astonish, or enrage, they cannot be simply ignored,"

John R. Kirk, Michigan State University East Lansing, Michigan

"I will probably be using this textbook in one of my seminars. It is high time that someone give attention to the multiplying obsolescence which has overtaken the college curriculum."

Elwood Murray, School of Speech, University of Denver, Denver, Col.

"I would like to congratulate you and Dr. Reiser. This is indeed a monumental work and will definitely make a contribution to integration, which is our present key need."

Julius Stulman, Larchmont, N.Y.

FROM THE JOURNAL OF PARAPSYCHOLOGY March 1959 by Henry Margenau, Yale University

"Oliver L. Reiser's INTEGRATION OF HUMAN KNOWLEDGE is a courageous book. It outlines a theme of immense appeal and calls attention to a universal task of utmost importance. As such it is a valuable contribution and deserves to be read with sympathy and with care.

The literature is full of precepts for integrating knowledge. Most of them are based on practical exigencies of our time. They deplore our moral shortcomings, the inadequacies of our educational systems, the failures of our efforts at international communication. Some writers want us to return to one or the other of our established religions, others advise a shallow brand of scientific humanism. Reiser's approach is in this sense different from all of these and probably unique; he raises the issue of modern man's predicament to a problem of metaphysical proportions and suggests a solution as audacious and sweeping as the winds of March that break the ice on dams and rivers. The question is whether the metaphysical system proposed is sufficiently appealing and correct in its factual foundation to break man's hide-bound preconceptions.

For in its very uniqueness lies a difficulty; Reiser promises salvation to those who accept his philosophical doctrine; hence conversion is a preliminary to this book's success. I do not feel secure nor informed enough to appraise the soundness of the modernistic edifice of Reiser's metaphysics in its entirety. It has features which impress me greatly; its reliance on science comforts me; its vast extrapolations beyond verifiable knowledge are hanging arches which give me dizzy spells. But there is a small cornice, interesting to the readers of this journal, that invites my inspection and emboldens me to comment. It is Reiser's treatment of parapsychology; an attractive treatment because it endeavours to incorporate this emerging unorthodoxy within a general scheme of things.

FROM THE JOURNAL "EDUCATION" Boston, Mass. April 24, 1959

"Science may be the golden star of this mid-twentieth century, yet one recalls the earlier speculation which made its theories, postulates, and the application of its laws possible. Can we ever learn to reconcile our human differences as well as we have mastered our physical surroundings?

Dr. Oliver L. Reiser in *THE INTEGRATION OF HUMAN KNOWLEDGE* thinks we can. The author who is Professor and Chairman of the Department of Philosophy at the University of Pittsburgh points out that man's human problems are basically philosophical. "The failure of our world is the failure of philosophy," he writes in his erudite analysis of man's achievements and problems.

The task which Dr. Reiser attempts is large; how can man integrate what he knows about himself and about science into an all-embracing ethic? The author believes that this can be done through the philosophy of Scientific Humanism. The results of this integration can enable man to live harmoniously with himself and with the universe.

This book is not simple, though it is well written. A background of knowledge in philosophy and science is presupposed. Frontier thinkers will be stimulated by its forward looking vision of man's next thousand years. The strength of this scholarly work even for those with limited background lies in its mental stimulation about where man could be, and perhaps may be heading, in his human relationships; new possibilities, for example, are explored in communication. Is it possible to improve upon words and language? Dr. Reiser says yes; explores the new advances in symbolism, semantics and cybernetics; and points out what science is making possible in telepathic communication and extrasensory perception.

This book will stimulate those readers who, like Dr. Reiser, ponder on how man and his knowledge for good can be synthesized and lead to a new Golden Age.

Franklin Parker, Assistant Professor Dept. of History and Philosophy of
Education, University of Texas

FROM ETC: A REVIEW OF GENERAL SEMANTICS Vol XVI, No.3

"Oliver L. Reiser has an unusually free mind that disports itself with ruthness (to use a positive sadly long lost) among people and ideas. Such endearingly unprofessional qualities so imbue Reiser's latest work (you may recall earlier ones - *THE PROMISE OF SCIENTIFIC HUMANISM*, *WORLD PHILOSOPHY*) that it is a delight to read.

Although Reiser has always been sensitive to the paramount importance of symbols and the ambivalent role that they play in human affairs - after all, he was an unstinting supporter of Korzybski in the 1930's when general semantics had not yet attained academic respectability - he contrives philosophy as a much broader business than the analysis of symbol systems. Decades before other educators were alerted to the dangers of curricular overspecialization, he was insisting on the values of a learning, a philosophy, which shatters the compartments of special fields. Reiser abhors what overspecialization engenders.

The book is at its best when it acquaints the interested reader with certain modern developments in philosophy and the sciences. It is weaker when it criticises some points of view among those of rival candidates. It is still weaker when in the latest three chapters Reiser begins to construct what he calls "Operation Wisdom. The World Brain in Action". The concepts, ever more eloquently named, get fuzzier. We glimpse "the World Psychosomatic Organism", "the Embryology of a World Brain." We need Reiser to make small scale maps of widening territories we shall be able to explore directly, if only piecemeal. Such maps are valuable even when they suffer from inaccuracies of detail. And Oliver L. Reiser is a 20th century map-maker. There are so many, these days, who are not.

John R. Kirk Michigan State University

FROM THE REVIEW OF METAPHYSICS

"Any hopes roused by an informed philosopher's undertaking a task of such importance as this title indicates are quickly reduced to perplexity. Professor Reiser's "Scientific Humanism" turns out to be a sort of "philosophy fiction" picture of the universe, woven out of concepts from an astounding variety of fields - semantics, logic, philosophy of mathematics, topology, cybernetics, relativity theory, social engineering, quantum mechanics, para-psychology, etc. L.K.B.

FROM THE AMERICAN SOCIOLOGICAL REVIEW

"For some decades Oliver Reiser has had mankind as a whole in the center of his vision and the furtherance of a "planetary democracy" as his longtime goal. His books THE PROMISE OF SCIENTIFIC HUMANISM and A NEW EARTH AND A NEW HUMANITY elaborated this vision and his goal.

Reiser believes that "the failure of our world is the failure of philosophy." The analytical and positivistic temper of much contemporary philosophy is regarded by him as an evasion of the major function of philosophy: "to seek wisdom and provide guidance" by "putting into a unified world view the findings of the natural sciences" (p.5). So he has taken as his sustained task the synthesis of a "world philosophy" - the title of one of his books - in the hope of providing wisdom and guidance.

The INTEGRATION OF HUMAN KNOWLEDGE brings together on a grand scale Reiser's major interests and convictions. It draws into its net such diverse topics as semantics, symbolic logic, mathematics, epistemology, cybernetics, gestalt psychology, the mind-body problem, induction, quantum mechanics, emergent evolution, and the future of mankind. It attempts to integrate such material into a cosmological synthesis as the ground for Reiser's version of scientific humanism, which he thinks may be "the forerunner of a world religion" (p. 460)

While Reiser's language is in the crisp jargon of the day, and references to contemporary science (especially physics) are numerous, the general cosmology which results is historically a familiar one. Reiser notes that his pantheism is very close to Giordano Bruno's outlook, and he sees similarities in it to some features of Hinduism and to the "logos" doctrine of Hellenistic and Christian thought. His "cyclic-creative" cosmology is explicitly presented as involving a "Pythagorean-Platonic metaphysics of archtypal forms" (p. 373)

Summarily stated, the cosmos is regarded as an infinite and eternal continuum of unmanifest energy which under the guidance of the Cosmic Imagination (or Cosmic Lens) takes on manifest forms, at successive levels of emergent evolution, the products of which ultimately return to the continuum of unmanifest energy. The level predicted to next emerge is that of a world sensorium which will be the instrument of planetary man, and to which individual minds will stand in somewhat the same relation as individual cells of the brain stand to the individual brain. Thus a cosmic pantheism is offered as a support for a "pantheistic humanism."

A short review is no place to assess Reiser's argument that his cosmology is supported by contemporary physical science. It is, however, of interest to the readers of this Review to note that Reiser makes almost no use of contemporary social science in his argument; "social physics" occurs in the Index, but not "anthropology" or "sociology." "Economics, politics and psychology are missing out," we are told "because they deal with partial systems rather than wholes" (p.446). The point is not that Reiser should have done otherwise than he did (for many approaches should be explored, and he is welcome) but rather to underline the fact that other forms of scientific humanism are possible (and to some extent exist) in which support for global ideals is sought in the sciences which deal with man."

Charles Morris, University of Florida

OTHER COMMENTS ON THIS WORK

"An outstanding contribution to the operation of reducing by further thinking the intellectual confusion that has resulted from recent thinking. Presents significant insights concerning the new levels of understanding that bid fair to emancipate mankind from ancient and obsolete ways of thought."

Kirtley F. Mather, Professor of Geology, Emeritus, Harvard

"Reiser's goal is worthy, and he evidently knows what he is talking about. This will be an interesting contribution."

Gerard Holton, Department of Physics, Harvard

"This is the courageous big book of a good man, tirelessly curious, studious, and speculative, unselfish, ardent, hospitable, and ingenious. Gathering up again the main themes of his decade of thinking, it tops them off and rounds them out in a way which takes account of late results in local and natural sciences...There are...few proposals like his, pinnaled on the philosophic mountain of a theory of man in nature, with all its convergent bastions of scientific cosmology..."

Donald C. Williams, Department of Philosophy, Harvard

FROM MANAS, Volume XIII, No.23, June 8, 1960, Los Angeles

THE INTEGRATION OF HUMAN KNOWLEDGE by Oliver L. Reiser is a work which attempts to indicate the direction of human evolution by suggesting the implications of the various sciences. Mr. Reiser admittedly goes beyond the region of the demonstrable in science. Hard-headed critics might call some of his speculations fanciful, while others will praise his intellectual daring in seeking a philosophical synthesis for the world of to-morrow. If labelling is at all appropriate for such a work, Mr. Reiser's philosophy may be termed Pantheistic Humanism. The author's affinities for a kind of platonic or theosophic wisdomism are fairly apparent, even though his vocabulary seems preponderantly drawn from the conceptual resources of modern physics.

Some idea of Mr. Reiser's intentions and method may be gained from his second chapter "The Unification of Human Knowledge". He sets the stage for this discussion with a quotation from an early work of Robert M. Hutchins THE HIGHER LEARNING IN AMERICA, who wrote:

"The modern university may be compared with an encyclopedia. The encyclopedia contains many truths. It may consist of nothing else. But its unity can be found only in its alphabetical arrangement. The university is in much the same case. It has departments running from art to zoology; but neither the students nor the professors know what the relation of one departmental truth to those in the domain of another department may be."

It is Mr. Reiser's hope to remedy this situation. In nearly fivehundred pages over the entire terrain of modern scientific investigation he shows a familiarity with many specialities. His most interesting enterprise, perhaps, is the attempt to relate parapsychological phenomena to the scientific world-view. Not many contemporary thinkers have hazarded so far-reaching a project. While J.B. Rhine of Duke University, has repeatedly pointed out the revolutionary implications of extra-sensory perception for morals, philosophy and the social sciences, Mr. Reiser goes considerably further, offering what amounts to a metaphysical topography of the universe. It is a valiant attempt to close the abyss between mind and matter opened by Descartes so many years ago.

This abyss marks the real frontier of scientific knowledge. This is the real brink from which the pioneers of modern thought peer into the unknown. What are the causal relationships between mind and matter? We do not know. Is there any sort of connection, however obscure, between ethics and physics? We do not know. How are the meaning of the world and the meaning of man's life united? We do not know.

It is obvious that the moral compulsion in the human sense of responsibility depends in large measure upon the answers to these questions. The problem is to get answers without getting, also, so overwhelming a system of interpretation of universal processes that our sense of freedom and self-reliance is destroyed.

The hierarchical systems of antiquity all had answers to these questions. The empirical systems of the present have none. The answers of the hierarchical systems are rejected, because, for the most part, they seem to deny to the individual the right to discover his own answers. The trouble with Divine Relations is that it does our work for us, and this is a supreme insult to human kind. Can we get back a sense of meaning and order - both universal and individual meaning and order - without sacrificing our private sense of Promethean mission? This is the sort of question Mr. Reiser's book compels us to ask.

REVIEW FROM THE BEACON November 1959

THE INTEGRATION OF HUMAN KNOWLEDGE. By Oliver L. Reiser, Professor of Philosophy University of Pittsburgh. Extending Horizon Books, Porter Sargent, Boston

'Our planetary life', says Djwhal Khul 'is one immense synthesis of ordered activity'.

Synthesis has become a familiar word in recent years, used in many ways. The idea of synthesis is what lies back of a very important new book, THE INTEGRATION OF HUMAN KNOWLEDGE, by Dr. O.L. Reiser, who has made frequent contributions to the BEACON. The time, reflection, energy, skill and knowledge put into this book constitute an activity so vast that it is little short of a miracle that any man in this day of pressure, tension and confusion could succeed in producing such an orderly array of evidence from so many disparate sources of material and variety of disciplines.

In spite of the charm of Dr. Reiser's writing, even about the most involved of subjects, this is not a book for easy reading, but it is a book that is essential to those who, each in his own way, seek the basis of synthesis in the life of our world today. It is a big book in every way and a most valuable reference book, as well as a spur to creative thinking.

As an instance, in chapter III Dr. Reiser takes up the problem of symbolism. He writes that scientists are generally agreed that the use of symbols plays a key role in the formation of human nature. 'The ability to think in terms of abstract ideas and make use of symbolic substitutes for his inner thoughts and emotions, as well as for other things and events, is a basic trait...which lifts him above the level of his subhuman ancestors...Studies in the universality of symbolism teach us many things.' These include the migration of symbols, and the integrative and disintegrative power of symbols. Man's symbolic function plays a part in transmitting basic truths about the nature of man, the planet, or the universe, all of which constitutes part of the universal knowledge underlying the ancient wisdom.

The author believes that symbols constitute a system of values of their own. 'May it not be the case that the symbols of the soul - the myths expressed by the arts - are authentic and abiding carriers of enduring insights? Is it not true that in studying archaic cultures, it is not so much their systems of barter and trade and marriage and legal customs and the like, as the artistic manifestations of their lives that appeal to the mind's eye?'

In older cultures the symbolism that expresses the quality of the culture was usually applied to the expression of religious life. Religious life was also, of course, an expression of the group philosophy of life. It remained for us to put all the arts to work, glorifying competitive capitalism in advertising and public relations work in all the media of communication. The future will say, of course, that competitive capitalism was the basic philosophy of western life. As our philosophy changes and grows to encompass the real meanings of human existence, our symbolism will change and culture will change.

Semantic Suicide ?

With the growth of complicated social systems and the fragmentation of the race into nations with rigid boundaries, the basic human symbols become practically lost in ornamentation and false applications. Language is bent and twisted to unnatural uses. Dr. Reiser quotes the definition of the U.K. and the U.S.A. as 'two peoples separated by a common language'. Recent years have seen the multiplication of so many new systems of terminology to fit every new area of research or communication or political association that we will soon find ourselves forced

back to an understanding of basic symbolism in order to make human understanding intelligibly possible. Understanding and communication are our only remaining hopes for survival if we are to avoid what the author calls 'semantic suicide'. 'Since understanding extends no further than communication, communication is a precondition for understanding. Communication is not a solution for our human confusion, but it is essential.

Dr. Reiser points out barriers peculiar to our own times, the political barriers to the exchange of information, special scientific knowledge and the increasing unintelligibility of one science to another, and between scientists and laymen, due to the subdivision of special areas of knowledge. Even where there is no secrecy, technical jargon builds up iron curtains of ignorance. The Tower of Babel was itself a symbol which we still use to express our ultimate confusion of tongues. Yet actually ideas behind all the complications of language can be reduced to basic classifications and we still use the symbols of Plato and Euclid and Moses and Confucius and other wise men as ingredients of our communications. As the author says, the sheer accumulation of books - 'mountains of knowledge' - has become a librarians nightmare and tends to create an inferiority complex in the mind of a scholar.

How does democratic government by reasonable and informed citizens survive under these conditions? How can we use the ballot to make intelligible human impact on politics, science, economics and militarism? Certainly not by taking each of these areas piecemeal. The weapon we lack, which would be the effective one, is a philosophical weapon, a world picture based on an integration of human knowledge allied to human hopes. Anatole France once said that truth is the sum total of what we know today. But vision and hope provide the motives of direction towards new objectives.

Our problem is that we have not totalled the sum of our knowledge and so have not extracted the wisdom on which to base our world picture of man in relation to the material universe, to his fellow men and to the interior, intangible world wherein the potent subjective experience of man is centred.

This new picture of human objectives waits upon an integration of the great sprawling stockpile of the raw materials of the new civilization and the new culture. If a synthesis is achieved we can hope that the future civilization and culture will be two sides of a common golden coin used by all humanity.

Dr. Reiser has been criticized for his symbol of the world sensorium, which many interpret as a machine, a mechanical brain to rule mankind. What his critics do not perceive is that this symbolism refers not to a machine but to a group whose members are the awakened cells in a racial brain that is the responsive vehicle to the accumulated wisdom of all time. And all time is needed in our search for solutions to the problems we have created for ourselves in this age of scientific materialism. Giorgio de Santillana, in a preface to *THE INTEGRATION OF HUMAN KNOWLEDGE*, says that 'Reiser's prophecies...are simply conclusions that others dare not draw...The reason for comfort...is that he himself... has never moved from tested classical motifs throughout. In fact, here is a mind remarkably akin, across the centuries, to the learned and pious Proclus.'

There is something awe-inspiring in the results of a lifetime of thought in a book that rides above the storm in orbit round the globe to report a soul's view of our world.

BLOWDEN DAVIES

REVIEWS OF PROF. OLIVER L. REISER'S BOOK
THE INTEGRATION OF HUMAN KNOWLEDGE.
(Published by Porter Sargent, Boston, 1958.)

FROM MAIN CURRENTS IN MODERN THOUGHT, May 1959.

The Paramount Issue Surveyed.

The title of this work by Oliver L. Reiser is to be taken in a special sense: The Integration of Knowledge (Porter Sargent, Boston, 1958, 465pp., index, \$8.) The author is Professor of Philosophy, and Chairman of the Department, University of Pittsburgh. He has therefore, monitored for many years the principal topics debated among professional philosophers; he has watched the recent transformation of natural philosophy; and he has not feared to seek counsel from among people not qualified as academic or scientific philosophers. His aim is to review all of this aggregate, and to arbitrate the issues presented.

Such a procedure has an obvious advantage. The reader may be confident of being alerted to a great range of issues, some of which he, if an innocent bystander, might have overlooked. In this respect the book has very high value, indeed, and the large audience Professor Reiser commands will not be disappointed. But there is also an obvious risk of almost certain failure implicit in the procedure chosen: mere considerations of space alone ensure such a short exposition of critically important points as to make it almost certain that some of the innumerable issues must be slighted.

The author is aware of this danger, and his solution seems to be to make cross-references so as to compensate for deficiencies of exposition from over-compression in one place by leading the reader to the same topic in different context on another page. This is possible chiefly through the index. The solution is not altogether successful the reader having the uneasy feeling that the author is setting out single-handed to arbitrate issues and assemble data which by sheer number and age-old refractoriness have compelled others to retire in defeat. A clearly defined methodology adequate to the purpose, stated (say in at least the second chapter, "The Unification of Knowledge") would have cleared the ground. On page 45 he explicitly mentions, only to put aside, Northrop's penetration to the starting point in The Logic of the Sciences and the Humanities.

This volume is a remarkable virtuoso performance, and it serves to notice and to review within two covers the chief issues, the principal personages, and the stubborn problems that have been before us, for decades. Except for the present high value we must put upon Indian thought, the volume is comprehensive and it aims at fundamentals. It applies logic to logic, humanism to humanities, science to sciences, and social thought to society. But since the integrator in the last analysis is the author and no one man can bring off integration - the book can not and does not convince the reviewer that it is all that needs to be done. In this, I feel certain, Dr. Reiser will agree. Meantime thousands of readers will be stimulated, be helped and be grateful, and Professor Reiser will have the personal satisfaction that comes from keeping the greatest of all issues alive, before a multitude of readers.

F. L. Kunz.

NOTE by C.K.Bliss Professor Reiser's monumental work was the first book by a prominent professor and philosopher in which my Semantography was presented to the scholarly world at large. I searched all the reviews for a mention of it. I was bitterly disappointed. There was none - until I came upon the above review by Kunz. And herebelow is an extract from one of my letters to Prof. Reiser which deals with it.

Dear Professor Reiser,

There is one sentence in Kunz' review which explains in a nutshell all my difficulties which I have in finding recognition in academic circles. Kunz wrote:

"He (Prof. Reiser) has not feared to seek counsel from among people not qualified as academic or scientific philosophers." (underlinings mine)

The monstrous word is "feared". It appears that professional philosophers are afraid to examine ideas from people not qualified... Dr. Rice, Vanderjagt, and I, we all have an academic degree, but apparently we are not qualified and hence professional philosophers shun us. What a sorry state of affairs!

Yours C.K.B.

FROM THE HUMANIST, 1959, No. 4.Serious Attempt at a Synthesis:

The Integration of Human Knowledge: A Study of the Formal Foundations and the Social Implications of Unified Science. By Oliver L. Reiser. Boston, Extending Horizon Books, Porter Sargent Publisher. 478pp., index, \$8.

Reviewed by Charles B. Hagan.

The author Professor of Philosophy at the University of Pittsburgh, has for several years been writing books that transgress the boundaries of traditional fields of knowledge. His present book undertakes the task of uniting into a single embracing descriptive system the multiple areas of human inquiry. Dr. Reiser seeks common unifying principles that pervade the humanities, the social sciences, the physical sciences, the biological sciences, aesthetics, and religions. Moreover, he thinks that he has detected the inner principles of such a unity, so the human affairs are tied into a single embracing universe with all experience. The individual or person is structured into a World Sensorium and becomes an integral participant therein.

In the attainment of that end Professor Reiser has found it necessary to provide three levels of intellectual activity. In Level I are found logic and scientific methods, semantics and epistemology. Level II comprises the special sciences, more particularly the broad fields in which most contemporary scholarly efforts proceed. Explicitly they are the physical sciences, the biological sciences, psychology, sociology, economics and politics, aesthetics, and science of religions. Level III transcends the two preceding Levels and is entitled Wisdom and Social Guidance, the level of world philosophy. (Mathematics is in Level I).

Professor Reiser's discussions of developments in Levels I and II are succinct accurate, and clear. He has surveyed a vast amount of the contemporary literature in the various fields listed, and he presents in brief compass the findings that are pertinent to his goal. The general reader will find in these parts useful introductions to the complexities of contemporary thought systems.

In Level III an effort is made to combine the findings in the specialized and partial discussions into a dominant trend that permeates both lower Levels and leads to Level III. Explicitly Professor Reiser is trying to formulate the principles of philosophy for a world humanism. The purpose requires a philosophy of science, for it must integrate the many findings in the specialized sciences of Level II that have been attained via the techniques of Level I.

The world is treated as a psychosomatic organism in a universe of physical forces that tie into extrasensory phenomena. He observes that heredity, memory, information and communication, and other aspects of recent speculation can be fitted into a unity. His attempt is awesome in its magnitude. Few contemporary writers in any of these specialized fields have ventured so far. Professor Reiser's effort requires him to develop a terminology to describe the unified universe that would be easy to ridicule - but ridicule would not dispose of his accomplishment.

How reliable is this effort? The answer is not easy. The reviewer is an operator in one of the specialized fields. He concedes the methodological possibilities, but he doubts that Professor Reiser's unities will rest on verified findings. Nonetheless, the book stretches one's imagination, and that is surely a great merit.

Charles B. Hagan is professor of political science at the University of Illinois.

REVIEW FROM CONTEMPORARY PSYCHOLOGY Sept.1959, Vol IV, No. 9, pp 296-7

INTEGRATIVE CONFUSION VS. FRAGMENTARY CERTAINTY

Oliver L. Reiser

THE INTEGRATION OF HUMAN KNOWLEDGE Boston, Porter Sargent 1958
Pp. 478 \$ 8.00

Reviewed by Joseph R. Royce

Dr. Royce is Associate Professor of Psychology at the University of Redlands in California. He is an experimental psychologist with a bias toward 'generalism', a bias that was began when, working at the University of Chicago for a PhD under the stimulus of L.L.Thurstone, he found that he needed to spend half his time studying biology and mathematics. He is now working on a book that might be called The Encapsulated Man, who ought - such is the presumption that this revue would create - to be freed. For CP he has reviewed Ahmavaara's The Transformation Analysis of Factorial Date (Feb.1956 1, 50-51)

This book by philosopher of science Oliver L. Reiser, Professor of Philosophy at the University of Pittsburgh, is offered in the spirit of synthesis of the specializations and fragmentations of modern knowledge. It is a daring and provocative book. It weaves in and around the various compartments of scientific knowledge with breathtaking verve and dynamic quality - for we do not get the usual piecemeal presentation, but rather, a full-fledged systematic position, a scientific world-view.

The major features of Reiser's conceptual scheme are these. His universe is infinite, both temporally and spatially. It is cyclic and creative, having available a pool of energy from which various manifest forms emerge via evolution. It is pantheistic, but God is depersonalized under the concept of Cosmic Imagination. The world and its components are organismic. Isomorphisms exist between the various gestalts of emergent evolution. Field theory is a unifying concept at all levels from atom to man. This scientific Weltanschauung, along with its logical and epistemological foundation, serves as a synthetic base from which Reiser develops a social ethic. Social integration in his 'good society' calls for a unified symbolism (Jungian archetypes), a planetary semantics (Bliss' semantography), a world philosophy (scientific humanism), and a planetary democracy (world government).

The reviewer is impressed, overwhelmed, and discouraged by this book. He is impressed by the magnitude, the grand sweep of the effort, for the author attempts to correlate such diverse and difficult matters as fact and value, electronic computers and human brains, information, entropy, and cosmology, quantum mechanics, mutations, and memory, and symbolic logic, cybernetics, and semantics, all between the covers of one book. He is overwhelmed by the breadth and depth of scholarship required for such a work; no one man is adequate to the task of writing or reviewing such an effort. The dilemma is well delineated by the physicist Erwin Schroedinger, when he says: "The isolated knowledge obtained by a group of specialists in a narrow field has in itself no value whatsoever, but only in the synthesis with all the rest of knowledge and only inasmuch as it really contributes in this synthesis something toward the demand 'who are we?'"

Unfortunately the results of such integrative efforts have not been too helpful in terms of Schroedinger's challenge, and here is where discouragement enters the picture, for it seems doubtful that Reiser has been more successful than the others. In the process of simplifying for the sake of unification, there arises distortion which suggests that the desired synthesis is not possible. The logical positivists, for example, tried to gain unification via physicalism, but their reductive error cut much away of the legitimate content of the complex fields of the biological and social sciences. Reiser gains his unification via the analogy of the organism but in the process adds too much. This 'something-more' error is most obvious when he attributes lifelike qualities to atoms and when he elaborates his social ethic. He insists on such concepts as a world brain and an electromagnetic society. At this point we see most clearly the familiar overextension of a system, when the firmer foundation laid in his panoramic view of the formal aspects of science begins to sag under the weight of verbal adornment. Surely Reiser's effort would have carried greater impact had he been willing to stop on page 356. His last three chapters, which deal with the good society, are essentially polemical; they do not compare favourably with the more expository treatment of the first ten.

The shortcomings of the last fourth of the book point to what is perhaps the crux of the issue of generalist versus specialist. While we cannot expect generalist efforts to provide the same depth of scholarship which is possible when the author restricts his book to any one aspect of his total effort, we do have a right to expect him to be reasonable in selecting the components which he is trying to integrate. For instance, Reiser might have changed his title to An Integration of Scientific Knowledge or, better yet, have confined himself to integrating those aspects of science which are well established, not stopping to fill in the lacunae of our ignorance with questionable theorizing. (For one thing he spent too much time speculating on the implications of the non-firm findings of parapsychology). Some speculation is necessary in an effort of this type; the integrator must go beyond what is demonstrable; and, further, it is customary to allow the philosopher some speculative license. Nevertheless, using both hard and soft data as a basis from which to make one's theoretical leaps renders the integrator's total performance dubious. That is unfortunate. Reiser's book is too exciting to be cast aside because of its wild moments.

Perhaps the book's greatest value is heuristic. The author pulls together very unlikely components in novel and intellectually exciting ways. He has a rich and fertile mind and many high moments. His treatment of symbols and semantics, for example, is one of the outstanding chapters of his book (Chap.III) and will be of special interest to psychologists. Mathematically oriented psychologists can cogitate over his suggestion that multivalued formal systems have been untapped in human thought and all psychologists will find Chapter VIII, Scientific Method in Physics and Psychology, of interest.

Certainly the generalist should be encouraged, whatever shortcomings are inevitable in his enterprise, for civilization derives its vitality quite as much from the broad insights of the generalist as from the depth probings of the specialist.

P R O F E S S O R R E I S E R ' S W O R L D C R E A T U R E

A chapter from the manuscript

"GOD AND YOU AND LOGIC"

by C. K. Bliss.

Will chaotic evolution end in the self-destruction of its highest creature, or is there hope that ethical evolution will bring the emergence of a higher organism than man?

Professor Oliver L. Reiser of the University of Pittsburgh is an eminent philosopher and has given much thought to this question in a number of his important books. He propagates the new idea of Scientific Humanism, a new World Philosophy and Ideology for the integration of all human endeavours towards a better future. In order to appreciate the thoughts of this great thinker and his revolutionary ideas, I shall quote first his opinion about the bankrupt means and methods of our mental and moral leaders. He wrote in "A Philosophy for World Unification" (Haldeman, 1946):

"The purpose of philosophy is still what it was for Socrates and Plato: vision and guidance. Our bodies of knowledge consist of multitudes of facts. Wisdom is the insight in the relatedness of these facts to each other and to the central principles underlying man's conception of himself and his place in the universe."

"We have separated continent from continent, nation from nation, race from race, class from class; we have created many languages; and when we have evolved disciplines of science, we have divided up the resulting knowledge into departments called "fields", dividing chemistry from physics, medicine from psychiatry, geography from politics, education from life, morals from endocrinology, and so on. Until at last, today, our universe is broken up - it is a dismembered world studied by piecemeal analysis, a universe of uncounted fragments in a chaotic confusion which no one can put together."

"Synthesis - seeing things together, in their interrelations and as wholes - is the goal of understanding."

"We need to re-establish in men the faith that human beings are freely participating in a great adventure, the creation of something new here on this planet."

"For one thing, we need to develop a universal ethics which shall transcend races, nations, religions, and local cultures."

Twelve years later, in his recently published book "The Integration of Human Knowledge" (Porter Sargent, 1958), he finds harsher words to condemn our leaders in science, religion and philosophy:

"The world we hold so dear - man's birthplace, his present habitat, and ultimate cemetery - faces the ghastly prospect of an imminent and universal doom."

"Mankind has reason to be impatient with the failures of its thinkers, prophets, seers and teachers. They have not provided the purposes and plans for the conscious control of human evolution. Observe the tragic impasse, as this is revealed in the shortcomings of science, religion, and philosophy."

"Consider first the plight of society under the impact of science. Surely one of the fundamental difficulties of our world is that while the scientists are racing towards their specialization, they are failing to do their part in the recreation of social institutions to protect mankind from the harmful uses of scientific knowledge. Most tragic of all, scientists have not done what is possible toward integrating the bodies of knowledge created by science into a unified interpretation of man, his place in nature, and his potentialities for creating the good society. Instead they are entombing us in dark and meaningless catacombs of learning."

"And what does modern religion contribute towards this program of salvaging the great human adventure?"

"A religion is born when the philosophy of an ethical genius - Jesus for example - is converted by the disciples and followers of the master into an 'orthodoxy' which is then perpetuated by those who come later and organize it as a creed or religion. When this happens, the philosophy invariably loses something of its original insights, and ultimately it may become another fossil."

"Adherents of the Faiths repeat the ritual: if our science cannot save us from destruction, our spiritual superiority over communism will win the victory. Here we see the mental tranquilizer effects of the revealed religions, which look to a miracle for man's salvation."

"The churches are spiritually bankrupt."

"Such are the social malfunctions of science and theology. Now what is the situation in philosophy?"

"The troubles of the world are intellectual, no less than spiritual, and can be alleviated by perfecting a world philosophy. This common search should provide a higher plateau of co-operation enabling us to transcend the otherwise hopeless conflict of godless Communism versus Judeo-Christian supernaturalism. In a word, the real problems are philosophical not primarily political, economic, religious, military, or technological. The failure of our world is the failure of philosophy."

Professor Reiser expresses here the belief of many. For centuries philosophers have argued with words about the meanings of these words. The scientists however, have turned to the experiment in order to get an answer from nature directly. Unfortunately this led them to cultivating small specialized fields of knowledge. They are usually ignorant of what is going on in the other fields and they do not dare to intrude into the domains of their colleagues. Hence, they are unable to see the great unifying principles and laws which govern all phenomena of our universe.

Professor Reiser thinks that now - more than ever - the true philosopher is needed. He must co-ordinate the various knowledge in the various fields and must give us a unified interpretation of human knowledge about the great laws of nature which govern us and our world. But in order to be able to do this, he must be more than a philosopher. He must have specialized knowledge in the various fields of mathematics, physics, chemistry, biology, psychology, etc. etc.

Fortunately, Prof. Reiser is just such an all-round scientist. He knows more about these special sciences than many a specialized teacher. Consequently he deplors the present stand of philosophy which seems to have reached an all-time low. Many modern philosophers do not even talk about the ultimate questions of mankind. They talk only about the words they use.

"Not all philosophy has abdicated its historic role of providing the synoptic view which is unified knowledge. But much of current philosophy is seeking ways of escape from the laborious job of achieving the dynamic synthesis which is wisdom, by taking refuge in Logical Positivism, Existentialism, and the newest diversion, Language Analysis, especially as this is purveyed by Oxford University scholars."

"Among the British advocates of the notion that the task of philosophy is to analyze the meanings (uses) of words in language are Professors Gilbert Ryle, John Wisdom, R. M. Hare, J. L. Austin, and F. W. Strawson. In his survey of 'doing' philosophy, Mr. Warnock indicates that much of this approach stems from the work of Professor G. E. Moore, who inspired the belief that 'the business of philosophy is clarification and not discovery; that its concern is with meanings, not with truth; that its subject matter is our thoughts or language, rather than facts.'"

"In his book 'Language, Truth, and Logic' Professor Ayers argues that the philosopher is not directly concerned with the physical properties of things, but is concerned only with the way we speak about them, - 'the propositions of philosophy are not factual, but linguistic...they express definitions or the formal consequences of definitions,' as Ayers puts it."

"Such is the dreary state of affairs in philosophy in some parts of the world."

These words are added explanation of the waywardness of many modern logicians who usually are professional philosophers too. In previous chapters we have seen that many a logician is not at all perturbed when a statement is factually false, provided only it is logically true, that is true with regards to the words used in the propositions - no matter how false they are themselves.

However, Professor Reiser is hopeful.

"It is my hope that philosophers will soon return to their major function: putting into a unified world-view the findings of the natural sciences."

And here are some of the scientific and philosophical problems, as listed by Professor Reiser:

"What is man? Is he a 'machine'? Or is he a creature with an immortal soul? Or are there other alternatives?"

"What kind of universe is it that man inhabits? Is it governed by rigid causal connections? Or by 'chance'? Is there meaning and purpose within the cosmic processes?"

"What is man's place in nature? Is he here by accident or by design? Are there other intelligent beings on other planetary systems in the cosmos?"

"In the light of one's theory of the nature of the universe, biological evolution, and the nature of man, what is the best kind of social system for man to inhabit? Is man free to recreate society? What is the place of human values in the cosmic scheme?"

These questions are dealt with in 'cosmologies', speculations about the beginning, the development and the end of our cosmos and its phenomena. As most of our modern philosophers are too busy analysing words, we have to turn to the scientists for an answer to these questions. Alas, they are still engrossed in their belief of chaotic chance creation. At present two of their theories are accepted, the steady-state cosmology, and the big bang cosmology (see "The Evolution of Cosmologies" by O.L. Reiser in Philosophy of Science, Vol.19, No. 2, April 1952).

The steady state theory accepts the universe as it is, infinite in space and time. The galaxies are rushing away over the edge of space, and new matter is created in space. The adherents of their theory do not bother about the question how something can be created out of nothing. The adherents of the big bang theory believe that all matter was once concentrated in one super-duper atom. It exploded about 5 billion years ago, and the galaxies started to rush away. And they are still rushing away in ever increasing speed. These adherents don't bother to think of what happened during the time before the big bang. One of the founders of this cosmology was a priest, Abbe Georges Lemaitre, and perhaps because of him, Pope Pius XII declared in 1951 that God created the universe 5 billion years ago. The real significance of this declaration went unnoticed: that the pope himself refuted the Bible.

In these two theories there is no explanation nor mention of the manifestation of life, and the manifestation of intelligence, logic, love, care, conscience, ethics and mercy, as shown by the higher animals. For most scientists the question is not worth bothering about. It was very simple. When the temperature on our earth came down to the right degrees - life began. But how? Quite naturally, by some chaotic chance combinations and mutations of molecules and cells into all kind of fancy freaks (as seen in our zoos and aquariums). There is no aim, sense, reason or purpose in evolution, they cry.

It's chaos all right.

Any intelligent boy and girl who contemplates the logical engineering wonders of the organs of a flower, the organs of a bird, or the organs of a baby, must come to the conclusion that something more than senseless chance is needed to compose these marvels. A power of creative imagination must be at work in the creation of every living creature. And this indeed is what Professor Reiser proclaims untiringly. Against the cosmology of chaotic chance evolution he brings forth the cosmology of cyclic creative evolution in which the creative power of a Supreme Imagination is at work. Herebelow is in simple language an exposition of his fascinating theory.

From the Einstein equation we know that visible matter can be created out of invisible energy, and can dissolve back into energy. Hence apart from our visible universe of matter with our earth and all the galaxies, there must be an invisible "ocean of energy" out of which matter is constantly created and into which matter dissolves. The first particles of matter which are thus created are the electrons, protons, neutrons, mesons, etc. out of which a hydrogen atom is created, itself a complex solar system. Professor Reiser does not assume that these elementary bits of matter are formless. To form these amazing atoms the force of Supreme Imagination is needed. In order to make us "understand" what happens he refers to the image of a "Cosmic Lens" which like a lens concentrates the waves of energy and focus them into particles of matter. Later, this Cosmic Imagination forms molecules, crystals, one-cell creature, many-cell creatures, up to man himself.

Should this planet of ours be destroyed, its matter may dissolve back into the invisible universe of energy and be re-created elsewhere. Hence the name of the cyclic-creative cosmology. But if mankind will not destroy our planet and itself, is there the hope that still higher organisms of life will be created? Yes, answers Professor Reiser in his theory of "emergent evolution". In fact, we ourselves are witnessing and suffering under the birth pangs of a new organism, a world creature.

In order to understand better these fascinating ideas we must hear them from Professor Reiser himself. First his theory of cyclic-creative cosmology, then his theory of the emergent evolution of a higher creature than man. As a true scholar, he points out that others before him have evolved a similar cosmology "which meets the requirements of science and man's deepest yearnings."

"This is the cosmology of Pantheism, a world-view introduced into Western culture by Stoicism and exfoliated by Giordano Bruno, Spinoza, poets like Shelley and Emerson, and contemporary scientists like Einstein."

And here is how he describes his cosmology of Pantheistic Humanism in his book "The Integration of Human Knowledge.":

"1. Behind our perceived universe of material things in space and time there is a Cosmic Field of Energy, infinite, eternal, uncreated, and indestructible. Within this universal and undifferentiated ocean of energy there is a Supreme Imagination which, by way of the Cosmic Lens, acts as a focusing and guiding field of influence in controlling the creation and evolution of matter. Thus, high above the local gods

of our earth's regional religions, there is a Divinity, an immanent guiding field, maintaining the balance between the visible or manifest world and the invisible or unmanifest world (as required by Einstein's equation for the equivalence of matter and Energy, $E = mc^2$). This guiding influence organizes matter into the forms of evolution, from the inorganic to the organic world, from atoms to human beings."

"2. Since God is not a personality distinct from nature, 'miracles' and 'special providences' as violations of nature's laws cannot occur. Therefore, there are no revealed religions, and the doctrine of the verbal inspiration of scripture has no foundation in fact. The Supreme Imagination appears as an invisible field of influence permeating the visible physical universe, but since this impersonal and divine influence can never in man's thoughts be any greater than man's capacity to envisage, man will become more like Divinity as he reverences and increasingly understands the infinite and everlasting cosmos in which all things live and move and have their being (to use a Stoic phrase which Christianity borrowed)."

"3. There is no 'sacred' literature; there is no special religious experience; there are no chosen people; and sin as a violation of the laws of God as revealed to some prophet is sheer superstition. The clergy have no private contacts with supernatural powers, and they have no unique status as the interpreter's of god's will."

"4. Human consciousness in its awareness, and in its time-spanning properties, is man's most immediate experience of the cosmic guiding field in its organic expression. The invisible Supreme Imagination which guides the course of evolution in the visible physical world is a non-moral force, it is neither good nor bad, until it reaches up into human consciousness to appear as integrated personality, at which point the Cosmic Energy acquires moral attributes. If there are other universes - planetary systems with living and conscious creatures inhabiting them - there, too, problems of moral choice will arise. But here on this earth man alone is the bearer of that god-like quality of creative imagination which is the precondition for moral behaviour."

"5. Since a Pantheist does not pray to^a personal god for special favours, he must seek for human 'salvation' through the 'therapy of knowledge'. The Pantheist cannot go to war because some god demands it, and if some day man brings peace to the world, it will come as a result of the fact that man is endowed with the divine quality of creative imagination and has forged a social lens for constructive social synthesis. But if a Pantheist cannot be lured into virtue by promises of everlasting life in paradise, neither can he be tormented by fears of eternal punishment in hell. In a word, the sources and sanctions of the good life are natural from beginning to end. Man must fashion for himself a social lens for collective vision; but the potentialities of human nature are much richer than the materialists, ancient and modern, are willing to admit."

And now to the other fascinating aspect of Professor Reiser's thoughts, his theory of emergent evolution, the emergence of a higher creature than man. Let us try to understand his thoughts in simple language.

In previous chapters we have learned of the most momentous moment in the history of our earth: the decision of a number of living molecules to form a co-operativa, the one cell amoeba. Later, more cells formed higher and higher co-operativas until in the higher animals, we find that cells assumed various functions in order to make their complex co-operativa a going concern. Some cells built and operated the central pumping station, the heart. Others formed the eyes, the ears, the lungs, the intestines, etc. etc. of their community. The most important task fell to those cells who formed themselves into the central switchboard, the brain, in order to direct by electromagnetic impulses - going out over miles of electric nerves - the activities of the whole community which forms a living creature.

The next step in social evolution was the decision of a number of living creatures to form in themselves a higher community, as exemplified in the bees and the ants. Each bee and each ant is in itself a community of cells. But each bee and each ant itself is only a "cell" in their higher community of a beehive and ant hill. There each individual performs its special task "unselfishly acting for the interests of the entire community" as Alexis Carrel told us in previous chapters.

These bees and ants are free to go wherever they like in order to perform their tasks. They may cross the frontiers of their environment, and they may never return. There is no coercion in their state, as it is in the states of human beings under dictatorial control.

Let us realize that our own body is a state of cells, almost a planet in itself. Indeed, there are many more millions of cells in our own body as there are humans on our earth. And what we do not realize is that millions of cells in our body enjoy the freedom to go wherever they want to go. They travel freely with the blood stream and the lymph stream. These leucocytes and lymphocytes are true amoebas, one cell creatures in themselves, for whom our own body is the "earth" they inhabit. But they are not vagabonds and vagrants. In going through all parts of our body they perform their social tasks as rescue squads, ambulancemen, repairer and rebuilders of damaged parts. There are other species too, plant-like and animal-like creatures, viruses and bacilli, some of them of utmost importance for the health of the whole community, others, however, are intruders and a direct threat to the community. There are sometimes even large animals in our own body, long worms, more gigantic in comparative size than the fabled sea serpent. In short, our own body is in itself a whole "earth", giving life and nourishment to many more millions of creatures than are indeed on our planet in existence as individual higher animals. Most important of all creatures in our body are the cells which form the brain, the neuroblasts, the electromagnetic switchboard operators, which direct all cells and all rescue and ambulance squads to every point of emergency.

Now let us imagine for a moment that our planet is in itself the place of a giant creature, a planetary creature, a world creature. Then every single man and woman, every single boy and girl is a "cell" in this world creature. So are all other animals and all plants. But what exactly is the place of the human race in this world creature? Three hundred years ago we wouldn't know. But in the meantime we have invented the telegraph, the telephone, the radio transmitter, the television system. We have spanned the whole earth with million upon millions of electric nerve wires, with cables and telephone lines and regional and national central switchboards. What does all this mean?

IT MEANS THAT WE HUMAN BEINGS ARE THE CELLS WHO ARE BUILDING THE CENTRAL SWITCHBOARD, THE WORLD BRAIN, OF THE NEW WORLD CREATURE TO BE BORN. Already we try to use the same cosmic imagination which works in our own brain and in our own body. When a finger gets hurt, its cells send a frantic telegram for help to the central switchboard in our brain. Immediately our brain sends out electric messages to various parts of our body, order the leucocytes to the scene, orders the manufacture of medicines, orders rescue squads and ambulances and repair squads to come to the help of their stricken brothers.

We, the human race, the world brain of the new word creature, act already in much the same way. Whenever an accident occurs on our earth, involving the health and well-being of creatures, be they humans or animals or plant crops endangered in a flood, an epidemic, a volcanic eruption, a famine, the world organisations, which we have built up already, receive frantic electromagnetic messages for help. And by cables and telephones and radio we order rescue squads to the scene, ambulances, medicines, food, repair materials and repair men in order to help the stricken people, the stricken cattle, the stricken crops, all "cells" of the world creature.

When we have hurt the little toe of our foot, we feel the pain, we feel the discomfort, we cannot walk, we cannot work, we cannot think. Our brain sends messages to all parts of our body, ordering everyone to help our brothers of the little toe. Similarly, we have come to realize that our well-being in America or Australia can only be assured if we do everything we can to help our brother cells in stricken area like India or Africa. All our strivings for a United Nations Organisation, a World Health Organisation, etc. etc. are the visible influence of the Cosmic Guiding Field, the Cosmic Imagination which is already at work in the central nervous system of every creature on earth. Observe a little cat who has eaten some slightly poisonous food. She feels ill. Her brain directs her to go out into the garden and nibble at certain herbs which contains the medicine she needs. She does it unconsciously under the cosmic influence - which has made us conscious to search for causes and effects, to find medicines and aid the cosmic imagination working in our body and in the body of stricken animals and plants.

THIS IS THE GREATEST POWER IN THE UNIVERSE: CREATIVE CO-OPERATION OF ELECTRONS, ATOMS, MOLECULES, CELLS AND CREATURES OF HIGHER HARMONY IN CO-OPERATION. We can call this Power Logos, the Ultimate Reality, or Cosmic Imagination or whatever other name in whatever other language we may give it. Any child could see its working in the flowering of a rose, in the flight of a bee or bird, in the intelligence, logic, love, care, conscience, ethics, and mercy which the higher animals display towards their children and members of their own species. What we human beings have to do is to understand this Cosmic Power of Co-operation and act on it. What we have to do is to realize the fallacy of our scientists, prophets, seers and teachers who see only chaotic competition and who preach only competition by various churches, various states, various competing ideologies.

This is the Vision, this is the Message, but this is also the Warning of Professor Reiser -

"We can be sure that we are facing the greatest reactionary movement in history, for this is the last ditch of the 'rule or ruin' people in politics, business and the authoritarian churches, who have their counterparts in every country of the earth."

Pantheism, the idea that God (theos in Greek) is in all (pan in Greek) creatures, all cells, all molecules, all atoms, has been evolved by other thinkers throughout the centuries, as Professor Reiser pointed out before. In his latest book he dwells especially on the cosmology and pantheism of Giordano Bruno. The difference between Bruno and Reiser is that Bruno lived in a country where the authoritarian church had the power to persecute, prosecute and put to death thinkers who thought differently and deviated from the doctrines of the party in power. He was burned in 1600 in Rome for defending the Copernican cosmology. Reiser's books would have been burned in Berlin and his body in Bergen-Belsen had he been in the hands of the Nazis. Had he been a Russian scientist, he would have found peace long ago in an eternal rest camp somewhere in the Siberian wastes. The authoritarian church, of which Karl Marx is God and Lenin his prophet, does not tolerate deviation from its sacred doctrines.

Fortunately, Professor Reiser lives in the United States. He can write freely and without fear. I am a citizen of Australia and so I too can write freely and without fear about Reiser's writings. Though we both have no hope that our ideas will be put into practice by the professional during our lifetime. The authorities in the temples of learning do not take to unorthodox ideas of unorthodox thinkers. It takes centuries. The new thinkers and their opponents must die first, as Max Planck pointed out.

On the cover of Reiser's book "World Philosophy" (The University of Pittsburgh press) there are a few words about himself.

"When asked to name his professional hobby, Dr. Reiser answered, "Anything new in the field of ideas."

And this puts him apart from the majority of his colleagues. Reiser knows that new ideas are influenced by the cosmic guiding field in minds who are not burdened by old and accepted ideas. They are the non-professionals, the outsiders. Professor Reiser takes kindly to them. He regards them as the "cells" in which the cosmic imagination brings forth new and inventive ideas - just as some cells of creatures have invented new ideas to cope with the difficulties of life - television for day animals, and radar for night bats for instance, as explained in previous chapters.

Among his non-professional friends, Professor Reiser refers in his books to the late Dr. C. Hilton Rice who has influenced him in the idea of a world creature. He gives credit to his friend B.G.H. Vanderjagt who has helped him in working out his cyclic-creative cosmology. He refers to me and my work many times in his books. Not that I have influenced him in his thoughts. The opposite is true. Much what I have said in this book is due to the influence of Professor Reiser. He took kindly to me at a time when most professionals considered me a crank. He sees me as one of the inventive "cells" in the emerging world brain. Let me explain the role of my work as Professor Reiser sees it.

In the cell state which is our body (or the body of any higher animal) the many millions of one cell creatures which travel through our blood stream, have their own nucleus from which the activities of all their molecules are directed by electric impulses. In addition, all those individual leucocytes and lymphocytes, and other creatures which roam our body, are directed by other electric impulses coming from our brain. We may very well

assume that the electric signals from the simple amoeba nucleus are somewhat different from the electric signals coming from the complex brain. But the telegraphic code of the brain is understood by all cells, and all creatures of our body.

At present, the human race talks in many languages and sends its messages over the wires and radio and through the papers and the books. Not only is understanding often blocked, demagogues and dictators deliberately block understanding even in the same language, by using ambiguous and fallacious meanings. Here my work Semantography, as I called it (from Greek semantics significant meaning, and graphein to write) can come in useful for the emerging world brain, the new humanity.

Semantography has three aspects:

1. its Graphics, as a symbolism which bridge all languages,
2. its Semantics, which exposes vague and ambiguous meanings, and
3. its Logic, which is derived from the natural logic displayed creatures.

If the human race will build the world brain for the world creature to come, it must have a telegraphic code

1. which is understood in all languages without translation, just as mathematical symbols like 1 2 3 4 5 6 7 8 9 0 can be read in all languages without translation,
2. vague and ambiguous meanings in this telegraphic code could be exposed and recognized, just as the mathematical symbols x, y, z mark ambiguous meanings, demanding that they be resolved in exact meanings,
3. the logic of this telegraphic code must be the logic of nature, just as $2 + 2 = 4$ is a natural logical statement, understood and accepted in all languages.

These three conditions are dealt with in Semantography, which will be demonstrated in the second book. "Bliss realized the ambition of the great mathematician Leibnitz" said Reiser in his paper on "Unified Symbolism for World Understanding in Science" read at the Annual Meeting of the American Association for the Advancement of Science, Philadelphia 1951. And herebelow are a few quotations on Semantography from Reiser's latest book "The Integration of Human Knowledge" (Porter Sargent, Boston 1958) in which book he expounds the idea of the human race being the nerve cells (neuroblasts) of the new world brain (world sensorium) as told in foregoing paragraphs:

"The intercommunication systems, already partially functioning, which will unify the earth organism into a well-integrated whole, will come into being when the neuroblasts of the emerging embryo have matured into a world sensorium with an all-world semantography."

"The hypothesis is based on the fundamental idea that as social evolution progresses and becomes ever more intimately interwoven with the proliferating spiderwebs of telephony, radio, television, radar, telegraphy, and other media of communication, we are in fact constructing what may be termed the electromagnetic society. In order that the world

may be integrated into an electromagnetic society, we shall require as a physical basis for world unity, a unified and world-wide symbolism such as C.K.Bliss has given us in his Semantography."

"More effective communication among humans via electrical systems will require a planetary semantography."

"A global radio and television hook-up employing a planetary semantography is the earthly foundation for the coming psychic unity of mankind."

"The planetary symbols of Bliss's Semantography will provide the media for communicating the world philosophy of a Scientific Humanism."

In the second book I shall demonstrate that my symbols not only provide a simple logic, they also can communicate Professor Reiser's Scientific Humanism and "a universal ethics, which shall transcend races, nations, religions and local cultures" in such a simple and natural way that even children can understand it.

In closing this chapter I wish to give thanks to Professor Reiser for all the encouragement he has given me at a time when I despaired about the neglect of the professionals. He at least displayed the co-operative spirit of the cosmic imagination. And he led my mind into the most fascinating field of human research, a field which most scientists still consider as old wives tales, the field of extrasensory perception, the capacity of some human beings to "see" events happening thousands of miles away, and to "see" even into the future. Of all this we shall here in the last chapters.

End of Chapter

No doubt, sceptics will not see what Prof. Reiser "sees" so clearly: the use of my semantography as a world medium of communication, not only in writing and print, but even in a worldwide television hook-up or even in a projection of messages in semantography on the skies of the world for all the world to see and read. My own friends are sceptical indeed. And Prof. Reiser's friends? He wrote

"To some of my colleagues, this idea of a sky-writing semantography for all mankind, high above the earth and on the very dome of the heavens, seemed like utter fantasy. But hardly was my book published than the means for realizing this dream came into being. Here in brief is the story."

THE ARGUS EXPERIMENT AND A PLANETARY SEMANTOGRAPHY

by O.L.Reiser

In a previous book, THE WORLD SENSORIUM (1946, p.28), I pointed out that the central difficulty with a scientific humanism has been that it has tried to put an immensely simple message into words, whereas such a message should be written into the form of a universal picture language. Then, if we can form the great vision, there can be a tremendous uprush to the idea of humanism-individual creativity within the frame of social evolution. As there stated:

"The job is to find a layout, a picture basis, so simple and so huge that it is seeable by anyone who has mastered the movies or can punch a radio panel. If it were possible to use the full play of international techniques, an all-world drama could lift up the inner lives of people to their own transfiguration by sheer evocation of spiritual powers from within."

In my subsequent volume, THE INTEGRATION OF HUMAN KNOWLEDGE (1958) this idea of a universal picture language was connected with C.K.Bliss' contribution of a universal picture language "semantography - one writing for one world." In this approach I struggle with the problems of how engineers could project sky-images into the regions above the earth so that peoples living on adjacent parts of the earth could envisage a programmed choreography of meaningful movements of a planetary iconography. As themselves participants in the integrated sequence of a cyclo-drama, they would enact their roles through a shadowgraph performance on a giant television screen, as big as the world's horizon.

To some of my colleagues, this idea of a sky-writing semantography for all mankind, high above the earth and on the very dome of the heavens, seemed like utter fantasy. But hardly was my book published than the means for realizing this dream came into being. Here in brief, is the story.

I had previously utilized the idea of the ionosphere, raised or lowered above the earth's surface by electromagnetic influences emanating from the sun, as a basis for a "cosmecology" hypothesis in which the sun acts as a pace-maker for evolution. Later on, additional evidence for the existence of electrical blankets surrounding the earth was provided by the American earth-satellites, which revealed the presence of two charged electrical currents, held in place by the curving lines of the earth's magnetic field of force. Next the scientists laboring in the field of astronautics created artificial magnetic shells encircling the earth. This, in a remarkable way, paralleled my own speculations about a Psi-layer surrounding the earth and reflecting what I termed "planetary electro-encephalograms." Finally, and still more recently, Nicholas Christofilos showed (in the Argus experiments) how it is possible, by exploding H-bombs, to create currents which envelop the globe in the near-vacuum 300 miles above the earth's surface. This constitutes a sea of electricity thus making it possible to hang "electronic mirrors" in the sky to reflect what is transpiring in other parts of the earth.

In time, I suggest, this technique will be perfected to the point where these man-made ionospheres may serve as radar and television screens. But instead of using such screens to detect what is going on behind the "iron curtain countries" why should we not develop this new form of planetary vision and iconography into an extra-terrestrial scanning medium for transmitting global or sky-writing programs for intercultural collaboration? This would be a planetary iconography which is in fact the cinerama of man's future social evolution. A one-world picture language may yet unite the peoples of this earth by way of a cosmic symbolism of communication and understanding. Science, art, religion, may then be fused into a world-synthesis, a general ideology, and a planetary semantography. -----End-----

Dear Professor Reiser,

December 1960

I can go on and on with many more writings by you and by me about you, but Xmas is approaching and I want to send now one copy of this Semantography Series No.185 to you as a small token of gratitude for all you have done for me, and indeed for virtually lengthen my life, so embittered about the neglect of the professional world. You have concluded this year your 65th year. I am well in my 64th year of age. My greatest hope for you and me is that I be allowed to write to you "many more happy returns." Perhaps we may well see the realization of our dreams.

Yours ever gratefully

C. K. Bliss

Overdelighted I sent the copies together with letters. My correspondence with the expert of symbolism Prof. Bryson is recorded in S.S. No. 160. The result was dismal. And here is the dismal correspondence I had with Shapley. I took the opportunity to ask him just two questions which have bothered me a lot throughout the last 20 years. As they have some bearing on semantics, the way we attach meanings to words, I wrote to him a detailed letter.

Professor Harlow Shapley

60 Garden Street,
Cambridge Mass.

20th September, 1955.

Dear Professor Shapley,

Prof Oliver I. Reiser has informed me that, thanks to the good offices of Dr. Hoagland, you have expressed interest in Prof. Reiser's monograph UNIFIED SYMBOLISM FOR WORLD UNDERSTANDING IN SCIENCE. I consequently despatched a copy to you. Later I learned that Professor Reiser has done the same. Would you be kind enough on receipt of my copy sent by surface mail and due to arrive in a few weeks, tear up the bill and send the copy to Professor Reiser, or you may interest the librarian of one of your libraries to acquire it - whichever procedure is more convenient to you.

Professor Reiser's monograph contains an exposition of my semantography and I am thrilled that you, the great astronomer of whom I have read so much, will have a look into my work. My three books and 84 issues of the semantography series are available at Harvard and I hope that you will convince yourself that the impossible may seem possible now, namely that with only a few symbol elements mounted on an ordinary size typewriter, an astronomer who knows only English can write a letter to an astronomer who knows only Portuguese, or Danish, or French. Or a circular letter directed to all observatories in the world can be read in all languages spoken on this planet. I am ready to prove that any meaning in astronomy can be simply expressed in the symbols of Semantography. And for that any meaning in any other science, industry, commerce, communication etc. A letter, a paper, even a poem written, typed or printed in my symbols can be read and understood in all languages, just as in fact the symbols of mathematics have the same meaning for scientists and technicians, for goers and housewives no matter what languages they speak.

When I started 13 years ago on this work, which has been considered an impossibility for 300 years, since the great mathematician Leibnitz posed the problem, I thought that knowledge of my achievement will cause nothing less than a sensation. Exactly the opposite happened. I am considered a crank, and publishers and science editors, scholars and their learned societies shun away from me and from my work, lest they be tainted by showing the smallest interest in an obvious crackpot idea. All my approaches to scientific foundations for a small grant to have my mimeographed books and brochures typeset, have failed. The scholarly outsider is an out-law. The amateur Latin, the lover of wisdom, suffers under the modern semantic twist which gives the meaning of 'amateur' a taint which is strictly observed by orthodox science. I have walked through the abyss of despair throughout these 13 years, and were it not for Professor Reiser, I might have given up the struggle. His belief in my work, his good words, his active help has given me enough courage to keep going. My undying gratitude goes to him for all his endeavours to bring my work to the knowledge of the scholarly world. Still, is it right, that the pioneer of a new idea is shunned today, as the pioneers have been shunned yesterday? Should I not be put to work on the primers for semantography for astronomy, biology, physics and for any other science? Should I not be given the means to work out the unbelievable, an international science abstract, which all scientists can read in their own languages (see Prof. Reiser's monograph p. 15)?

Now enough of the wailing. This letter to you, the great and acknowledged scholar is like an injection of hope, at least for the next few weeks. There is another motive however, which prompts me to take the opportunity - no, to grab it, to write to you. It deals with the semantics of certain astronomical observations. Semantics in the science of the meaning of symbols and signs, phonetic symbols - words which like other signs stands for the phenomena

of this our universe. I ask you to kindly give me the answer to two questions. You may answer with a short yes or no, and I shall be grateful to you. Now

here is the basis of two phenomena, the semantics of which troubles me.

Since 1905, when I made my first trip to the moon - with Jules Verne that is, I was always intensely interested in the findings of the astronomers.

Now they have found that the Doppler effect observed with oscillating air molecules, holds also true with oscillating something which we call light. And greater and greater telescopes and spectroscopes have revealed that the island universes are hurtling away from us in all directions with ever increasing speed.

This is the semantics, the meaning of the red shift. But is this semantic interpretation correct? What seems to me untenable is the assumption that we and our tiny planet from which the universe is hurtling away in all directions,

should be the exact centre of the primeval explosion of 'ylem' (a word is quickly coined for any mystery, as the naturalist Goethe observed). I think that the semantics of the red shift is wrong. To illustrate my assumption. Let us assume that we hear a shrill whistle which slowly changes to a deeper tone. Not knowing that the whistle is blown by a boy whose lungs give out, we may rightly interpret the frequency change in a departure of the whistle away from us. Could it not be true that ^{that} something, light, gets a little tired on its long way through millions of years, or that its passing through hydrogen. (or primogen, when we should find that there is something more primary than hydrogen) just slows down the frequency and causes the red shift? Do you really believe in the interpretation which proclaims that the galaxies are hurtling away from us with ever increasing speed? A few words from you, a yes or a no will be greatly appreciated. Now to the second question.

If larger and larger telescopes discovers greater and greater red shifts, than the masses of the different galaxies will soon surpass the speed of light and thus invalidate a tenet of the relativity theory. For more than 30 years did I explain this theory to large and small audiences and to myself and throughout the last generation I have waited for the proof of Einstein's main contention, namely that space contracts and time slows down on moving bodies. Today I do not believe any more in this contention. The bending of a light ray near the sun may have been rightly interpreted by the Lorentz formula which were evolved for light phenomena, but this does not prove in the least that time slows down and space contracts. To this the Einsteinians say that we can never observe the contraction of space because our rulers will contract too, and our clocks will slow down too. Against this the other refer to Andersen's emperor's clothes, only the clever ones can see them. Again to illustrate what I am driving at, let us assume a primitive mediceman who explains the suppression of fever by the administration of quinine bark, the good little goblins in quinine drive out the bad little goblins which cause fever. And indeed, actual observation proves his theory correct. Until we come along and call goblins molecules - semantics again. In short - do you believe that space contracts and time slows down. Do not refer me to the slowing down of atomic clocks in highly concentrated stars (as the companion of Sirius, if I am right). This again refers to that something which we call light. It does not refer to space and time. What is your answer to the second question? I know that there is a proverb (and they are usually wrong as proved by semantics) that a fool can ask more questions than ten wise men can answer. I know too that I am called a fool by thinking of a unified symbolism for mankind. But I could not let this opportunity pass to write to you, and I thank you for every thought you will give my work and this letter. Maybe, you will rouse the scholarly world to new possibilities contained in Professor Reiser's ideas. Thank you for everything you will do.

Yours sincerely,

C. K. Bliss.

What happened? Why the usual thing. Shapley did not answer, just like Bryson. So I wrote both a short and sincere Xmas letter wishing them all good wishes for a Merry Xmas and a Happy New Year and begging them to brighten my Xmas by answering my detailed letter. As to Einstein's contention, I asked Shapley for only a yes or a no. But Shapley would not commit himself. He knew very well, that there is no proof whatever about Einstein's contention. But he has taught it all the time. Why not say a few words about it? Why not agree that after all, every scientific theory is bound to be overthrown sooner or later?

Dear Sir,

December 20th, 1955

I retired from the directorship of Harvard Observatory two years ago and since then I have been devoting all the time and strength I can spare to completing projects that I have undertaken. I am therefore unable to take on additional reading and studying jobs. Quite likely you are making an important contribution to the understanding of science. The material sent to me forwarded to an assistant of Dr. Norbert Wiener of the Massachusetts Institute for Technology - the original home of cybernetics. With best wishes, I am

Yours very truly,

Harlow Shapley.

Prof. Wiener, and the home of cybernetics!! This brochure contained Reiser's ideas about cybernetics, and should have interested Wiener. Moreover, he wrote a book about Leibnitz, and should be interested to know that Leibnitz's idea has been realized at last through Semantography. But Wiener and his home of cybernetics remained silent.

Arriving at the end of this page I think there is no need to continue with more pages and more scholars. I believe I have proved my point. 18 years ago I believed that all scholars will take notice when an old problem has been solved at last. Today I know better. They won't be bothered with problems which have been solved by someone else, least of all by an outsider. The End.