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ARTHUR E. MORGAN'S BOOK

"SEARCH FOR PURPOSE"

(Antioch Press 1955, Yellow Springs, Ohio)

A Review by C.K. Bliss

being also a comparison with the reviewer's own "Search for Purpose" which has arisen out of his work on a new Symbolism for Mankind (Semantography).

For the last 14 years I have tried to interest the men who count in the world in my work. I have met with disappointment after disappointment. I cherish therefore the few instances when important men wrote to me. I cherish the letter which I received from Dr. Arthur E. Morgan

The Letter

Yellow Springs, Ohio, June 27, 1955

Dear Mr. Bliss,

You may be interested in my book "Search for Purpose," just published. An announcement is enclosed. If you would like to read it, I will send you a copy without charge.

I should like to learn your impressions of the book, and to have any corrections or suggestions for improvement. (This is the first printing.) Also, if you think it is worthwhile, I should appreciate your reviewing it for a suitable publication, or otherwise helping to give it wider distribution.

The world over, among persons who are not bound by traditional doctrines, there seem to be emerging the beginnings of a common view of life. This emergence is a gradual process, and can be furthered by exchange of ideas and attitudes across national and cultural boundaries. I have endeavoured to secure from several countries the names of a few pioneers in this search for purpose, and I am writing them letters similar to this.

Sincerely

Arthur E. Morgan and I

Arthur E. Morgan

I must confess I did not know of Dr. Morgan. I have never been to the United States and my little knowledge of this great country stems from readings of LIFE, TIME and some books and newspaper reports. I have read about the Tennessee Valley Authority and have admired this colossal work. Now I learned that it is the first Chairman of the TVA who wrote to me the letter. It gave me a tremendous thrill. It gave me some consolation for some bitter wounds which I had received some years ago at the hands of the top men of the hierarchy of the American Humanist Association. Everytime I think what they have done to me, the old wounds burn again. But apparently at least one of them must have felt remorse, or at least must have felt that I am a pioneer in the search for purpose. The headquarter of the A.H.A. is Yellow Springs, Ohio, and I assume that Dr. Morgan, enquiring about pioneers in other countries, got there my name and address. At least, my futile approaches to the A.H.A. have produced this one good result. I am in touch with a great American and a great human.

Moreover I feel great satisfaction in the fact that Dr. Morgan is a practical engineer like I am, and, when reading his book, I have derived fortitude for my own search seeing that he approaches the problem like I do, namely as a practical engineer. And believing that I have something important to tell, I am writing this review for my own Semantography Series which is bought by some important world libraries. May be, nobody will take the time and trouble to read it, except Dr. Morgan and his wife and my wife. It will be sufficient reward for me when Dr. Morgan will read it and be fortified in his own search. I say this, because for me the search is over. I have found the Purpose of Man in the World. Moreover I have made an important discovery which supports Dr. Morgan's work.

The Shortcomings of this Review.

I am not a salaried scholar who is given time for research and writing reviews. I must make a living in trivial fields in order to pay the grocer and the stationer for this paper. I have little time for my scientific work. And I have found a terrible discrepancy in what I want to say and how I said it. I have torn up draft after draft, manuscript after manuscript. I realized then that I cannot make any progress in this way. I adopted an improvisation like a good engineer who has to make the best of the available time and material. I type my books, brochures, articles directly on to the wax stencils as the thoughts come into my mind. I hope that the understanding reader will excuse the shortcomings of my writings which are grammatical in nature. Not the form should count, only the content. In this spirit I beg that these pages shall be received as a sincere contribution to Dr. Morgan's work, to his endeavours and to his ideals which are mine too.

Another Man reviews "Search for Purpose."

In the HUMANIST No. 4, 1955, the organ of the American Humanist Association I found the following review written by the editor of the HUMANIST Mr. Edwin H. Wilson:

SEARCH FOR PURPOSE. By Arthur E. Morgan. Yellow Springs, The Antioch Press 197 pp. \$ 3.00

Those who have read Arthur Morgan's MY WORLD (1927) will especially welcome the appearance of a volume which summarizes in his clear, terse, and honest style the conclusions of a lifetime in which reflection and action have been combined to an unusual degree. Integrity of process has been maintained, while growth has never ceased. Dr. Morgan is active in Quaker circles and is an intransigent nonsuperaturalist and realist. His chapter headings and subheadings include topics vital to the development of a mature humanism, such as "Man is Part of Nature," "No Revelation," "Science is concerned with Values," "Vows undermine Freedom," "Is there a Time Limit to the Human Venture?" "Do the Processes of Nature Disclose Conscious Purpose?" "Means for Nature are Ends for Man", and "Strategy for Survival."

One must mine such a book as this for the many germinal ideas presented. Some will be entirely new to the reader, drawn as they are from Morgan's struggle with immediate human problems. Others give a new turn to everlasting perplexities faced freshly by a man who observes and reflects in direct touch with the stuff of life.

There is freshness and candor throughout the book. The author writes, for instance: "Relatively few people make the most of their lives..." "Inanimate nature has no end or aim of policy..." "Many people feel that they have their beliefs confirmed by assurances from without themselves...I do not feel that I have such assurances...Convictions are the result of human experience, insight, and judgement." Or this: "When scientists agree to leave values to men of religion they are, it seems to me, surrendering their right to a share in the kingdom, and are settling for the administration of a province."

Perhaps we are biased by a long and admiring acquaintance with Arthur Morgan, but we believe that he has in his person and in his thought the elements of greatness. Here is firm judgement that will stand for years because it comes not alone from books but from life. Indeed, life is Morgan's theme, and to be faithful to the life that is his is this educator-engineer-philosopher's central loyalty.

As he puts it, "It seems to me that there is one supreme virtue a man may have. It is loyalty to the adventure of life. If there is one supreme disloyalty, one greatest course of treason, possible to men, it is that in this great adventure, this struggle, this searching for a good way of life, we do not do the best we can. To be a diletante, playing with life, is treason."

Edwin H. Wilson

Can Morgan be satisfied with such a Review?

I cannot think that you are satisfied with Wilson's review. I can think that you might have ground your teeth in anger. I have done so. Because a review like

this one is not a review of the problems the author faced and not a review of the answer the author gives. It is, apart from the few quotations, nothing but a string of flattering words. It is one of those reviews which may have been written without reading the book, but browsing through it only. Take away the quotations and the words may fit any other book on the problems of life.

To prove my point let us imagine a book under the title "Search for Treasure!" The reader who wants to find in a review a sort of condensation would like to know what the Treasure is all about and then whether or not the Treasure has been found. Wilson gives no indication what Purpose Morgan is searching for, and does not tell us whether he found it or not. Instead of a summary we get a flattery, nothing more.

The Purpose of my Review

You, Dr. Morgan, asked from me my "impressions of the book and any corrections or suggestions for improvement." This I want to do. Moreover, as I said I believe to have found the answer to your search I hope that you will convey my findings to some of your friends and other readers of your book. This is one reason why I mimeograph these pages. The other reason is to draw attention to my own Search for Purpose which I have conducted and laid down in my books and brochures on my new Symbolism. If you are convinced that I have gone a step further, the natural thing to do would be to incorporate my findings in your second edition. Not that I am craving for publicity. I am approaching my sixties year of life. I wish I could find the rest which I desire. But the force which throbs in the living Universe compels you and me and many other human minds to think of a betterment, of a progress in life. The matter is deadly serious. Every minute millions of human beings are asking themselves what the heck they are doing on this planet, what the heck they are striving for, buying and selling, maiming and killing, living and dying - what for? What purpose? Whither mankind? There is no problem in the world which is more important than just this, the Search for Purpose.

You must allow me therefore that in examining your thoughts I must bring forth my own thoughts. I want to convince you. And I beg to excuse when these pages will be filled with thoughts which could have been expressed in less words. As said before, I have no time to make drafts and abridge them.

My Search for Purpose.

Though we are (or were) both engineers, you a civil engineer, I a chemical engineer, our lives have run differently. You have become a great American and a successful man in every respect. I have been an obscurity all my life, and have carried the terrible burden of an oppressing inferiority complex. I simply felt that I have not the mental capabilities to think, least of all to write, about the great problems which thinking mankind face. I was content of doing my factory job well, and in between, of trying my hand on music, art and other satisfying creative activities. Deep in my heart there was the great sorrow that my boydream did not come true. This dream was to do something for humanity by which humanity would greatly benefit. Not the writing of a book, or a symphony, or a painting which may give pleasure to mankind. No, I always wanted to do something very practical, something of immense usefulness to every human being. But alas, the years run on and my life run out. It was not before my 45th birthday that I found my personal Purpose in Life.

I was an engineer in Vienna, Austria when the Nazis overrun this country. As I have always spoken my mind freely, I was among the first whom the Gestapo arrested and imprisoned. I went through the terrors of Dachau and Buchenwald. I survived. Through my own untiring efforts and those of my wife I was released. I had to leave immediately for England. Before she could follow, the war broke out. We were again separated. I decided to go to Shanghai via Canada, and then managed to get my wife to Shanghai via Siberia. Then the Japanese took over and segregated all European refugees in a special area. But I was already oblivious to the new dangers. Working for a living, my mind was immersed in a great adventure and I used every free minute for it.

In my scientific library researches I was painfully aware of the tremendous disadvantage faced by mankind who is separated by thousands of different languages. I believed then that an international language like Esperanto was the

solution. Only in Shanghai did I realize that mankind will not take to an international language. Twentytwo different nationalities lived and worked in the International Settlement of Shanghai. They stuck tenaciously to their mother-tongue just as in the United States settlers, whose forefathers came over centuries ago, still stick to their French, German, Italian and other languages.

I found a similar state of affairs in China where different languages are spoken to the effect that a man from Canton cannot converse with a man from Shanghai, and he in turn is not understood by a man from Peking. But then a miracle unfolded itself before my eyes - the Chinese ideographic writing. It is a curious and complicated and cumbersome mixture of pictographs, ideographs and phonographs, but it has one tremendous advantage. The signs do not stand for the sounds but for the meanings. Consequently they can be read and understood in all languages, just as mathematical signs like $1 + 2 = 3$ have the same meaning in all languages. And I found tremendous encouragement in the words of a great sinologist Prof. Basil Hall Chamberlain who prophesied: "Ideographic writing will surely win the final victory over phonetic writing." Here was my great chance. Here was the fulfilment of my boyhood ambition: a simple and scientific symbol writing for mankind. A book, a paper, even a poem printed, typed, or written in my "World Writing", (later on "Semantography") can be read and understood in all languages. I went to work.

Since I graduated from the University of Technology in Vienna I have worked in factories making electric lamps and radio valves. Consequently my special hero was Thomas Alva Edison. His method was my constant inspiration and he said: "Success is composed of 2% inspiration and 98% perspiration." I knew there will be hard work ahead, and I started it determinedly. In the beginning it was easy. Picturable meanings which stand for real things in our world could easily be outlined and pictured in a schematic pictorial symbol. But then - the abstract words came along, the general terms, the highest meanings of mankind which defy pictorialisation. How to picture Life, Freedom, Good and Evil, Nature, Creation, etc.etc. The Search for Meaning began. What do we mean by Life, Purpose of Mankind on Earth, etc.etc.etc??? I wished I had never started.

The Price of Freedom is eternal Vigilance.

Since that fateful day in 1942 in Shanghai many people have come across my Semantography. They took one look and immediately they knew what's all about it. "Ah, a picture language!" they say and ("how childish, how futile" they think.) There is no use to convince them that the words of all languages which cause misunderstanding and misery are the ones which cannot be pictured. How can we picture these words: The, price, of, freedom, is, eternal, vigilance? They cannot be pictured. And consequently different minds will conjure different pictures for whatever they understand means price, and freedom, and vigilance. And consequently Americans can say "The price of our Freedom is eternal Vigilance", and Hitler could say "Der Preis unserer Freiheit ist ewige Wachsamkeit" and the Communists can say the very same words in any of their languages, and they would fit their particular Freedom and what they understand under Vigilance. In the United States out of a hysterical Vigilance a general has been chosen to lead the Nation. Thank Heavens he is a kind man, but it could be another Huey Long or MacCarthy or Superman. The aspect is terrifying. When I maintain that my Semantography can be used to demask such slogans, that it can spell doom for demagogues and dictators, I am pitied for my idealism. When Prof. O.L. Reiser of the University of Pittsburgh said to the American Association for the Advancement of Science "Bliss's heroic work...he realized the ambition of the great mathematician Leibnitz (the discovery of simple symbols for a new and simple "Algebra of Thought)" no one in the scholarly world took notice, except some enlightened librarians who have started to collect my writing in order to preserve it for future generations to benefit.

In his Search for Purpose the Engineer must turn Biologist and Anthropologist.

Your book is from beginning to end a biological treatise. You could not help it. There was and is no other way. In order to speculate about the purpose of man on earth we must examine man as part of the living world around us and must try to find purpose in the manifestations of life on earth. My search was more modest. In order to find a scientific symbol for Life I had to search books on biology. In order to find symbols for man's purpose on earth I had to study anthropology, and other sciences. I did not want to speculate like you did. I only wanted to know what the scientists know about those meanings. And to my consternation

I found that they don't know. They are ignorant. But instead of following the advice of Socrates and confessing their ignorance, they cover it up by a flood of words, technical terms and long-winded sentences, that the layman can only gape in wonder at their erudition.

What is Life? I searched books and books on biology and did not find an honest answer. At last I opened the book on "Early Life" by Harvard paleontologist Raymond and there was one small sentence: "What Life is, no one knows!" When I saw that modern science could not give an honest answer to those problematic meanings, I had to do my own searching. And in the course of my search, I made a discovery of the most far-reaching importance.

The meaning of "discovery" is a wide one. Usually scholars claim a "discovery" when they have built-up an idea, a hypothesis, a theory, in short a word construction. "Discovery" in the narrow sense means the uncovering of something real which was hidden in the ground and was found by excavation, be it an ancient site, graves, caves or the like. Well, I did not do the actual digging, but I searched the caves of prehistoric man alright - and here I made my great discovery. When I had everything written down, my system of Semantography and my discovery in paleolithic caves, all in 3 volumes, I approached the appropriate people, the linguists about my symbolism and the anthropologists about my cave discovery, and the biologists to verify it all, then I made my second discovery, this time a terrifying one. The linguists were not interested, the anthropologists didn't want to hear about it, the biologists didn't bother to listen.

It may seem that my approaches were incorrect, boisterous, unpolite, and repelling. The opposite is true. My inborn inferiority complex made arrogance impossible. Some of my letters to great men are already in important libraries. They and others will testify that I approached the men of science in utmost courtesy. But it was of no use. When I now speak and write in personal tones, about my work, about my discovery, about my experience, it is only out of sheer desperation. I maintain that my first discovery holds breath-taking hopes for humanity. In desperation, in order to attract attention, I boast that it is the greatest discovery of the twentieth century. I want to know which other discovery is of greater importance. At the same time, my second discovery shows the most tragic aspect of humanity, the real reason why progress is hindered.

I regret that I have to be so personal in such a review, but as I maintain that I have the answer to Morgan's search, all the foregoing statements are necessary for the understanding of what I have to say.

The Book's Beginning, the Core and its Ending.

The Begin.

Three passages in Morgan's book contain for me great significance. In the Preface on page V Morgan wrote about the difficulties which he as a layman faced when starting his search:

"But here one finds himself in difficulty, for he enters the domains of the specialists. Within a month, while I was talking with a famous anthropologist, he said: "Laymen should keep out of anthropology. It is a highly specialized field, and for one who has not subjected himself to its rigorous discipline to presume to write or speak concerning its subject matter or its conclusions can only lead to confusion."

To this I can only cite what Prof. O.L.Reiser said in his introduction to my work (Unified Symbolism for World Understanding in Science by O.L.Reiser, p.10)

"One of the consequences of the resulting over-specialization in education is the ethics of professionalism: the doctrine that only the expert has the right to speak on matters within the area of his specialism. Recalling the statement that "an expert is one who studies more and more about less and less until he knows everything about nothing", it becomes clear that on this principle the size of the area in which a person is allowed to speak is day by day becoming smaller. In this case there is not an infringement upon freedom by way of totalitarianism; we have achieved a muteness by common consent."

I have seized on Morgan's quotation from a "famous anthropologist", because anthropologists should be concerned about my discovery. The anthropologists of Sydney University refused an interview, ignored my letter and treated me, like an outsider is usually treated, with contempt - all the time having not the faintest idea what I want to tell them. Then an American anthropologist came to Sydney,

Margaret Mead of the Museum of Natural History, New York. She refused me an interview although I informed her that a famous American anthropologist Prof. Ashley Montagu agrees with my findings. She did not know what I have to say. It was enough for her that I am not a certified anthropologist. She refused to see me. I had more luck with another anthropologist Prof. Clyde Kluckhohn of Harvard. We met in Sydney and he was impressed with my findings. He commissioned me to write an article (Semantography Series No. 85). He promised to place it in a scientific journal. He promised to help me to a publication grant from the Carnegie Corporation. He failed in all and in a short time forgot all. No wonder that I have no good feelings for the anthropologists. They are the ones whose duty is to take an interest in any new finding in their field.

What actually is the "rigorous discipline" of the anthropologists? They are concerned with anthropos - man. Do they know something of the physics of the atoms which constitute man? Do they know of the chemistry of the molecules which constitute man? Do they study the cells which constitute man? Nothing at all. They are blasted ignorants in all these fields. What then do they study of man? Ah, they are scientists alright. They measure, they compute, they draw up graphs, just like real scientists do. But what do they measure? They measure the length and width of human skulls, among other trivialities. And they have divided mankind into longskulls and broadskulls - until a man came along and proved conclusively that in some parts of Germany infants are placed in cradles with a hard head-cushion which broadens the pliable baby skull. In other parts of Germany a soft head-cushion is used by which no broadening of the skull results. Then the "race" of the longskulls develops and they are the true Germanic and Nordic types.

Thus the damage was done. The anthropologists, be they German or of other nationalities, have divided mankind in different races according to slight differences in trivialities, the shape of the nose, the buttocks, etc. and mankind's most dangerous myth was born, the myth of superior and inferior "races!" Hitler was a good pupil of the anthropologists. He lost no time in exterminating inferior races.

The Core of the Book

Your book contains chapters which deal with your experiences and with your findings of the purpose of man. Other chapters try to find verification for your findings in nature, whether or not nature displays conscious purpose. This is indeed the crucial point. And I quote your passage on p. 128:

"Except as it is evident in man, and to a very limited degree in other animals, I conclude that I do not see evidence of conscious purpose in the course of animate or of inanimate nature. Some able scientists believe that they do see evidence of such purpose. I cannot conclude definitely that there is no such purpose. Such a conclusion would, I think, be justified by a wisdom that is far greater than that possessed by man. I have refrained from accepting the classification of "Humanist" partly because of the tendency of some of those who use that designation to be "cocksure" that there is no purpose they do not see."

In short, your search has failed to some extent. You cannot find conscious purpose in Nature, though you admit that some animals display it "to a very limited degree". But they do display it, and they are part of Nature. Even if we assume that conscious purpose is slowly appearing in the higher animals and man, is this not a manifestation of conscious purpose in Nature of which the animals and we are a part?

Your words about the conclusion which would be "justified only by a wisdom that is far greater than that possessed by man." are not clear to me. Could only a greater wisdom see no purpose in Nature? I shall endeavour to prove to you that the cells of a plant, or an amoeba display "a wisdom that is far greater than that possessed by man." I shall demonstrate that the atoms and cells of all living things display such wisdom and display conscious purpose. In doing so I shall give tremendous support to your deliberations. In writing your book you want to convince the reader that man displays conscious purpose and that this is good. The greatest support to your theory would be the proof that in Nature all living things display such conscious purpose too. But you could not find it. I maintain that I have found the proof. If I dwell too long and too often on the fact that no one of the competent persons listens to me because I am an outsider, I hope that you will forgive me and understand my bitter feelings.

The End of the Book.

It is customary to end a book with some trenchant and pregnant passage which "in a nutshell" sums up all the conclusions the author had arrived at. And this is what Morgan had to say in his end paragraph:

"As we examine one by one what seem to be the chief barriers in the way of substantial and continuing human progress, none of them seems to be impassable. The chief obstacles seem to be in limitations of human culture as embedded in the minds of men. The rigidity of cultural patterns is growing less, and the comparing of varied life patterns is increasing. These are favorable signs."

Well, Dr. Morgan, I am sorry, but I have to contradict you. 14 years ago I would never have said what I am going to say now. But 14 years have convinced me, and now I am prepared to bring thousandfold proof of my statement which is in contradiction to your statement as to what the chief barriers and obstacles in the way of human progress are:

THE CHIEF OBSTACLES TO THE PROGRESS OF MANKIND ARE THE CHIEFS OF MANKIND.

By "chiefs" I do not mean the kings and conquerors, the demagogues and dictators, which have usurped power by hook and by crook. In desperation men have found no other way to get rid of them than by attentates and murder. Those chieftains were and still are great obstacles to the progress of mankind. But there are other chiefs, to whom we submit meekly. They are our mental and spiritual chiefs, our educators, our mentors, our spiritual leaders. I am not thinking of the religious leaders. They have been the instigators of some of the greatest massacres of mankind. I am thinking only of those who are paid to work for the progress of mankind, the teachers, the educators, the professors, the scientists.

Think of the history of every new idea be it in science, in engineering, in the arts, in every field of human endeavour. Every new idea was somehow in contrast to the old and established ideas promoted and professed by the professors in the academies. They would not unlearn. They would not admit that their previous teaching was all wrong. On the contrary. They would ridicule the pioneer be he an outsider or even a professor, they would attack him, they would contradict him, they would bring him to an untimely end in bitterness and desperation. Into the grave first, pioneer! Only then will later generations of educators exhume you, extol you and exploit you by making a living by your teaching. But not before! It takes hundreds of years until a new idea is accepted in the universities. Hypnotism has been taught 180 years ago by Dr. Mesmer as being of great help to medical men. But it is still not taught in the universities. Only variety performers on country fairs practise it. It was the same with chemistry, practised by earnest men and charlatans outside the universities for centuries. It was and still is the same with every new idea.

Take atomic energy. More than one hundred years ago a man became convinced that the atomos (meaning indivisible) are divisible. It was heresy and contrary to university teaching. He was so afraid of ridicule that he published his thesis under a false name. He was not a professor, not even a qualified chemist. He was an amateur chemist, an amator, a lover, as the Romans called those who did some work not for money's sake and not for making a living. That pioneer was William Prout of London. He is not forgotten, but not forgiven. A recent proposal to change the term proton into prouton was rejected by the salaried scholars in the field of atomic energy.

Take the idea of Evolution. You quoted Thomas Huxley a number of times in your book. He was a scientist alright. But did he make a discovery, did he propound a new theory found by him? He did nothing of the sort. He was like a journalist, who got hold of a good story, Charles Darwin's story. And like a good journalist, he made the most of it, mixing truth with falsehood^{and} dubious conclusions (you refuted him a number of times) and suppressing stories which did not fit his story. We know by now that Wallace had come to the very same conclusions, and completely independent and even earlier than Darwin. This has been admitted by Darwin himself. In all fairness to scientific ethics every reference to Darwin's theory must be a reference to the Darwin-Wallace theory. But Wallace is forgotten, thanks to Thomas Huxley. And this is not the whole story. The Darwin-Wallace theory was not new. Lamarque had taught the same idea

half a century before. Why was then Lamarque not hailed as Darwin was hailed later? You give an answer by quoting Max Planck from his autobiography (see below). And was Lamarque really the first man to think of the idea of Evolution of living creatures? Not at all. Others came before him. But Lamarque was an installed and salaried scholar. He could command and got publicity and therefore we know today of him. ^{But} the idea of Evolution was known centuries before Lamarque. Leonardo da Vinci when roaming the countryside came upon seashells embedded in stone, fish bones outlined in geological strata and he deduced correctly the evolution of living things through ages of time. It was of course heresy and contrary to academic teaching.

The very same story could be told of every new idea. It takes centuries until a new idea becomes respectable enough to be taught in universities.

Judgement upon our scientific Leaders.

I cherish very much your book, because for me it is a mine of important ideas, quotations and clarifications of problems of which I was only dimly aware. I shall cherish your book, and be it for one item only. This item is the proof I have been searching for during the last years. During the last 14 years I have approached thousands of teachers, hundreds of professors, institutions and universities. Having had no success I concluded (and my friends too concluded) that my approach was wrong, that I was impolite, discourteous. My letters to the great men prove that I was not. Not I am to blame. The salaried scholars themselves must bear the blame, because what happened to me happened to every pioneer of a new idea, and be he himself a professor. And here is the proof. You quote in your book on p. 63 the great scientist Max Planck, the famous discoverer of the quantum theory. And he said with regard to opposition of scientists against new ideas (and his ideas) this:

"This experience gave me also an opportunity to learn a fact - a remarkable one in my opinion: A new scientific truth does not triumph by convincing its opponents and making them see the light, but rather because its opponents eventually die, and a new generation grows up that is familiar with it."

And this is said not by an outsider who hammers in vain at the doors of universities(as I do). Max Planck had all the facilities and all the honours of a great professorship in Germany. I remember vividly my introduction to Planck's quantum theory when I was a student at the University of Technology of Vienna. It was Professor Emil Abel who lectured on it. He became later on my friend when we both found ourselves as refugees in London. Later he listened to me with sympathy when I wrote to him about my discovery in biology and anthropology, and it was he who introduced me to Professor Ashley Montagu's writing on the same subject.

Another significant point in Planck's statement is this: He said that a new generation of scientists has to grow up, not one which is more enlightened than the foregoing, no, the next generation "is familiar" with the new idea which has been attacked by the foregoing generation. It's not new any more.

It is my firm determination to use the remaining years of my life to show to mankind that mankind's best sons, the pioneers of new ideas, are opposed not by the "men in the streets," but by the "men in the chairs," not by the charwomen, but by the chairmen who profess to foster the progress of mankind. Max Planck was lucky in so far that he started young and grew old to be 90. He had an opportunity to see his opponents die. Usually it is the contrary. The pioneers are driven into debt, despair and death by the experts of their time.

My wife is reading every concluded page and grows more and more unhappy, as she is when she sees me being overcome by my bitterness. She believes that I shall forfeit your sympathy and goodwill. After all, you are president of a college, you are bound to uphold the sanctity of professional scholarship, and you might indeed be much annoyed by what I have said before.

Well, I can't help it. I suppose all fighters for new ideas had to become irascible in the end, angry, wild, rebellious. And you too have said enough in your book to make me believe that you are on my side. And to show you that pioneers are not opposed by professional scholars only, here is my story of my experiences with men whom you know personally and intimately. I am telling this story because it is one of the bitterest of my memory.

My symbols for the meaning of Good and Evil are a blow to most religious sects and their teaching. They are however supported by the theory of a great psychiatrist. My symbols by which I transform physical laws into ethical laws give a great impetus to the idea of Humanism. I hoped then that the American Humanists will take an active interest in my work. This hope was substantiated by a decision of the 1952 annual meeting: "The next contest be directed to discover symbols suitable for the extension of Humanism."

To this decision Felix H. Frank, a prominent humanist who has read some of my writings wrote to the editor of the Humanist: "The A.H.A. has already the symbols we need." In spite of this, the prominent members of the A.H.A. refused to study my work and to promote it. They even refused to tell their readers about it. All they did was to accept a paid advertisement on Semantography.

How can such an attitude be explained? The men who direct the A.H.A. are good and honest workers for Humanism, just as the professors in the universities believe that they are good and honest workers in the cause of progress. How can I maintain that I see conscious purpose in Nature and at the same time say that the leaders of mankind are consciously obstructing that purpose. I believe that there is a force in Nature which works consciously for progress, for a betterment, for a higher harmony. How then do the obstructors fit into that design? It took me years to overcome this dilemma and to find an answer.

In your book, you Dr. Morgan, the engineer, marvel about the wonderful mechanism which we find in living creatures. A motorcar, running out of petrol, will stop running. But a living motorcar, such as an animal, has a phantastic device, which makes him seek and run after new petrol. This device manifests itself in the feeling of hunger. This is Life Mechanism No. 1, a device to keep the machine going. Life Mechanism No. 2 is even more miraculous. A motorcar approaching (without a driver) a wall or an abyss, will plunge headlong into destruction. But a living motorcar has a device which makes it shrink back from dangers. We call this device fear. These two safety devices are working in every human mechanism. When evening approaches we feel hunger. To go hungry to bed is a fearful experience. To wake up and have nothing to eat makes it worse. After a few such experiences we begin to fear hunger. And there is only one way to overcome that fear: by having a job, a salary, a recurring income to pay the grocer in order to satisfy our recurring hunger. By the sheer working of these natural safety devices we fear to lose our livelihood. If we happen to be teachers of certain doctrines, any newcomer who threatens our doctrines, threatens our livelihood. We simply cannot help being against him. But how can we fight him, even if we feel that he has something to say, perhaps something better than that what we said? To fight him, we have got a marvellous weapon: language.

First Blame must go to the Leaders of Language.

When we compare the mechanisms of the higher animals with the mechanism of our bodies, we find striking similarities. Animals have, just as we have, eyes, ears, noses, teeth, lungs, hearts, blood circuits, etc. etc. Their automotive design is strikingly similar to ours. Moreover, even their brain actions are similar to ours. We see them express sympathy and antipathy, love and hate. We see them employ intellect in the solving of life problems such as the search for food, the building of a nest, etc. And we see them display a high conscience. They will nurture their young ones, protect them, and even sacrifice their lives for them in an heroic stand against overwhelming odds.

There is only one great difference between man and the animal. Man has evolved articulate language. Not only names for the things he sees, but also abstract notions. But the evolution of language is still in its very beginning. We have just found a tool, like primitive man who found fire, but we have not yet learned how to handle it. At present language is used between human beings not only to communicate with each other, but to hurt each other. Those who can handle language better than others are at a great advantage. They will be able to fight those who must be fought for fear (see before). Whatever argument is brought forward against them, they know how to defeat it, how to make it dubious, how to contradict it, even if their counterargument is utter falsehood. This is the weapon they use against all the pioneers of new ideas.

The keepers of the languages of mankind, the language teachers have no desire to make language simpler, to make it easier, to free it of non-sensical spelling and meaning monstrosities. On the contrary. The man who can use high-

brow language is admired, revered, considered wise. When he expresses himself in technical terms, abstract notions, long words and sentences, in short in a different idiom than that which the common people is speaking, he feels himself superior and the readers who can't understand him feel very much inferior.

We cannot expect progress on a large scale, we cannot expect that many of the common people will apply conscientious purpose to their lives as long as we exhort them in books which they cannot understand. Instead of filling the libraries, they fill the racecourses, the gambling dens, the sports arenas and other places where they do not read. Oh yes, they do read. They like to read avidly. But their reading interest is exploited by those who can write in common terms in the idiom they understand. They get religious tracts the non-sense of which repels them, and they get crime thrillers instead of thrillers about the wonders of this world. Alas, the professional students of these wonders do not care and do not cater for the common people. They delight in making their books difficult to read. And the sorry result of this adoration of abstract and highbrow language is that the laypeople, who penetrate the idiom of the professors and start to write too about the wonders of the world, imitate the highbrows and write highbrow too. I belong to them and you too. And the result must be frustration. Our books will not be read by the professional students because we are not professional students ourselves. And the common people who should benefit by our books cannot hold them longer than a few minutes before giving up hopelessly in the face of a half-scientific language, that is a language which mixes common and uncommon terms, and seems understandable, yet is not.

But this is not all. The keepers of language try to preserve all incongruities of language which is grown haphazardly. They are concerned with the form, with grammar only, that is: whatever we write must be written correctly, that is correct spelling, correct word order. If we do this, we can write the biggest nonsense and can get away with it, provided we cloth it in highbrow language. We can write of "spiritual materialism" or "materialistic spiritualism" and the common people will marvel about our deep thoughts.

Language and the Mystery of Life

For many centuries the churches held the minds of men in bondage with their nonsensical dogmas and doctrines. At last the pioneers rebelled, and they repudiated everything the churches proclaimed, including the existence of a higher intelligence which works within the Universe. They did away with the Creator, and gave a simple "explanation" for the marvels of this world. Nature does it. It all came just "naturally". And a new trick was performed by the professors. They deceived us and themselves by using a new word for an old unexplained mystery, and they made us believe that the new word is an explanation.

As said before, not until my 45th year did I question the wisdom of professors working in the field of biology and other sciences. I learned obediently their technical terms and repeated them without giving them much thought. They appeared to me as "explanations" whereas in truth they were but new words for old mysteries. You too, are a victim of this falsehood. And to prove this (not to disprove you) I shall cite some of the familiar words which the biologists use and which you repeated.

P.40: Dobzansky, the genetist wrote: "Natural selection favours.... Natural selection possess no foresight.... Natural selection always tends to suppress... Natural selection seems to be short-sighted..."

P. 133: Dobzansky wrote: "The evolution of life has only one discernible goal, and that is life itself."

Since my student days I too repeated the "explanation" of "natural selection." It was only when I tried to bring order in our words and built up a grammar which is based on the physical sciences that I began to realize the falsehoods perpetrated. My first semantographic grammar rule runs: For every action in this universe there must be an agents which performs this action. To select is an action. Some agents must do the selecting. "Selection" itself cannot select, cannot favour, cannot possess foresight, cannot tend to suppress, cannot be short-sighted (as Dobzansky wrote). All this can be done and must be done by an Agents, a force, a power, not by a Verb. Then we have the adjective "natural". Natural selection must mean "Nature selects".

But who, for Goodness sake IS "Nature"? We see for our very eyes how from one single cell the most complex and most purposeful organisms develop, are set in motion and kept in motion. It is miraculous, mysterious, supernatural. But no, to the non-thinking people it is "natural" and that is of course an explanation.

In order to realize the nonsense in Dobzansky's words "The evolution of life has only one discernible goal and that is life itself" let us translate this into something we understand. Let us say: "The evolution(development) of a motorcar has only one discernible goal and that is the motorcar itself." Life, like the motorcar are both manifestations which we can observe in our world. They are manifestations of some power, force or agents which sets a material machine in motion. Surely we would realize the nonsense when we would say that it is "Nature" which keeps the motorcar going and which has made the motorcar. Sure, the forces of Nature have been used to build a motorcar and they keep it going. But "Nature" is no answer, no explanation, just a word for something intricate and miraculous, yet biologists and other students do not hesitate to use it and to believe that they have said something intelligent.

Someone has built a motorcar, and something keeps a motorcar running. The very same question must be asked with regard to living machines. Alright, it is not a man with a beard, who has a son called Jesus. But some force, some power IS there, working in the Universe, and all we have to do in the present review is to find whether or not this power works for a purpose or not. If it does, then we, parts of that power must work for purpose too. What is that Purpose?

The Purpose of living Machines.

As a boy I read a popular science book "Der Zellenstaat", the Cell State. It told of the amazing working of a living organism, or a human organism. Now I find in your book a wonderful description, and as I hope that other people will read this review and will be attracted to your book, I shall quote from p. 174. Allow me to underline important statements, and to leave out unimportant ones:

"It is probable that for long ages the only living things were one-celled organisms, each living its individual one-celled life...Then slowly there developed the process of associations of cells for mutual benefit...Of the billions of cells that compose a human body, each lives its own individual life, carefully separated from its neighbours by a cell wall, but carrying on constant communication and traffic with them. These cells unite to form tissues, and they into organs, each carefully separated from its neighbours, but cooperating with them. Finally they are united to form the human body, which has a life and purpose of its own."

"This great cooperative of the human body strives to maintain an ideal environment for each cell. The cells thrive best when floating in a liquid bath, so each one is kept in a solution of remarkable uniform quality. The salinity is kept nearly constant, and the balance...is delicately, but powerfully, maintained. The temperature is kept within about one degree, whether in tropic summer or arctic winter....internal pressure and the electric charge in each cell are controlled."

"Almost never could one-celled creatures, each working for itself alone, achieve such perfect environment. Seldom has any dreamer pictured for man so perfect a utopia as has been achieved for the individual cells of the human body. If one-celled creatures, which live and fight for themselves alone, could philosophize, knowing nothing but their one-celled world, they might hold that the only sound philosophy is "Each for himself, and the devil take the hindmost"; but the course of organis evolution would give the lie to that doctrine. Supremacy has come, not chiefly by competition of individual cells with each other, but by replacement of competition by cooperation in living and working together as organisms."

Well, these are your own words, and I have never read better words which describe those most purposeful machines which you consider an utopia. Indeed an utopia for an engineer who can appreciate the smooth purposeful working of an intricate marvellous machine. But you have forgotten to add, that this very machine when damaged, does its own repairing, and that the individual cells not only come to the rescue, not only rebuild broken parts, but they also manufacture complex medicines in order to bring the injured colleagues back to health. And you have forgotten to add the miraculous working by which out of one special cell

new machines are formed by a miraculous purposeful building process. Alexis Carrel, in his great "Man the Unknown" asks us to imagine one single brick laying on a building site. Then suddenly this brick begins to produce more and more bricks, and they in turn form themselves into walls, leave openings for the doors and windows and the various rooms. Then these very same bricks begin to manufacture wooden boards for the floors, tiles and taps and pipes and hotwater heaters for the bathroom and the kitchen, glass for windowpanes which put themselves into place, etc. etc. and this house goes on working, repairs itself, etc. etc. It is as if the first building cells have "a knowledge of the future edifice" says Carrel. Surely they display a skill, an intellect, a craftsmanship, a scientific wisdom which is indeed utopic. You said that only man and to a limited degree the higher animals show conscious purpose. But here we have conscious purpose in every single cell which unite in cooperation to build a complex machine.

But this is not the whole story. You are picturing the single cell individuals who ages ago (and today in the amoeba) are roaming around like vagrant knights and only living for themselves. Only later on do they intelligently realize that association and cooperation for mutual benefit represents more conscious purpose. But you have overlooked that every single cell individual is itself composed of billions of atoms who have united into the most complex molecules in order to live together in the vast community which is a single cell individual. We must admit that association and cooperation for mutual benefit is existent also in the single cell individuals. We can imagine that millions of atoms and molecules drift together and stay together as they do in a rock or a mineral. But here they have united to create a living machine. Even an amoeba has a good life in which all share the satisfied feeling after a meal and in which atoms and molecules get busy when an accident has occurred or when it is time to create an offspring.

Here we have the supreme evidence of the supreme purpose of the supreme force in the Universe. We see the Utopia of association of individuals for cooperation for mutual benefit. It works in every living creature. But this purposeful cooperation does not stop at the development of the individual. Individual bees form themselves into a vast cooperative. Individual deers form a herd in which there is a leader and others keeping a watch and warning the cooperative when danger comes. And we human beings have found long ago that the best thing to do is to form a community, a cooperative. Have we done so because we have thought it out with our superior intellect? Of course not. The idea of co-operation for the common benefit is simply inherent in every atom, every molecule, every single cell of our body.

How then is it possible that you Dr. Morgan, you the engineer could not see this conscious purpose in Nature? How is it possible that you decided on a special chapter heading "Do the Processes of Nature disclose Conscious Purpose?" And how is it possible that you, after describing that Utopia of purposeful cooperation which you see in Nature, could deny that there is purpose in Nature? This I shall answer in the next chapter. You Dr. Morgan, and we all who think similarly like you are simply victims, victims of the biologists who have perpetrated a stupendous crime.

The Crime of the Biologists.

The unbelievable happened. After you wrote of the working Utopia of purposeful cooperation of living things you add another paragraph (p. 175). There you said:

"Yet the object of the great cooperatives of cells which we call plants and animals is not the total elimination of competition, but rather to make possible more effective competition on a larger scale."

This is the "object" as the biologists deduced it, and you and most of us are their victims. We have come to believe in the theory of "Natural Selection by Elimination of the Weak and by favouring the Survival of the Fittest." This theory is rampant among scholars and students and intelligent lay people and I have believed it since I began to think. It was only since I began to think about the meaning of words that I realized the falsehood perpetrated and the crime committed.

We have been told to believe that there is no purposeful Providence in this world. That this is a brutal world in which only brute force and fierce competition prevails. Down with the Weak. Long live the Strong who are ruthless. Now let us ask again some grammatical questions: Let us imagine a pack of animals finding themselves in a very cold climate. Those who have a better fur will survive and bring forth offsprings with better fur. But how comes the better fur into being? How comes a fur into being at all?

Survival of the Fittest - Fittest in What?

In 1953 I had a discussion with Julian Huxley, world's foremost protagonist of the idea of "Natural Selection by Survival of the Fittest." Afterwards we exchanged letters. He wrote about my work that "it provides something of real importance." Of course, I could not convince him about the semantic fallacy of his favourite theory. No scientist gives easily up the belief of his life (see your quotation of Max Planck). But I hope others will come after Huxley and they will see the light and rectify the crime committed by the biologists.

A favourite "explanation" of Huxley about evolution of Life on earth is this: "When the waters of the seas receded, the fish found themselves on dry land. They grew legs and learned to walk." It was as easy as that. And it was quite "natural!" Nature did it naturally. But let us think a bit. How can fish grow legs? Surely they can't do this of their own free will. We too would sometimes be glad to have a third hand or a sixth finger. It would be immensely practical. But we can't grow one, much as we like to do it. But those intelligent builders of living machines, those cells can do it. They have, as Carrel said "a knowledge of the future edifice" and they have one terrific advantage given to them by the force which throbs in them, they know of the great advantage of teamwork, purposeful cooperation for the common benefit. They are imbued with the will to survive by overcoming all obstacles. The fish which were left on dry land were great individual communities of cells in distress. Something had to be done, and the cells did it. They and only (not the fish as such) they applied their builders skill, wisdom and craftsmanship to grow legs.

Later on, they shed the scales for something better, a skin and when cold set in, they, the utopian engineers, invented hairs and the animals grew furs, the best protection against cold. Which animal did then survive? That which had a better fur. Yes, but how came the better fur into being? By better teamwork, by better cooperation of the cell builders of that particular animal. If an individual man thinks over a construction job does he do the thinking, or do the cells of his brain do it? We are only the outward outcome of the working of our cells about which we have no control. And if we human beings decide that teamwork and cooperation will get a big construction job done, we think so only because our brain cells make us think so, and they the cells are driven on by one great purpose: teamwork, cooperation for mutual benefit. It appears then that Survival of the Fittest could mean only Survival of the fittest community of cells that is that community in which cooperation for the mutual benefit is strongest. But how disastrously have the biologists perverted this truth.

Hitler, Stalin and the Rest - good pupils of the Biologists.

In Russia Darwin is a semi-god. His teachings are sacrosanct. But they are not his teachings. Darwin always spoke of Creative Evolution. He used the words Creator often. He realized that the wonderful building process in Nature could not be the result of chaotic chance but of cooperative planning and building. But the Darwinians outdarwined Darwin. Brute Force does it, they cried. And their political pupils learned quickly. There is no Creator, no retribution. We can do what we like provided we are the fittest in brute strength. Down with the weak ones. We only follow Nature when we deport them, exterminate them, kill them off in the name of Science. Those Nations will survive which have the better battalions, bajonets, bombers and bombs. And those individuals will survive which have better brute strength and bodyguards. History gives them the lie. The despots have ended in bloodshed. A group of men stranded on a lone island and relying only on brute strength for survival have usually murdered each other. Only those communities survived which cooperated for mutual benefit and thus followed the divine urge which we see throb in every single living cell. The divine - ah!

God and our Vale of Tears

The atheists have a good case. For ages God has been pictured as a good old father who protects his children. But never could we find him. And instead we found our planet a vale of tears with killings and sufferings around. How could the existence of a just and kind God be justified? The theologians did the trick with vague language, which did not convince but the feeble-minded. As a result many people do not go to church. How can I justify the killings and sufferings and still speak of the natural urge of cooperation in living beings?

Let us imagine a motorcar set in motion on a plain and running around all by

itself. It will run out its natural life and come to a standstill. On an undulating terrain it may plung headlong into an abyss and be killed. Let us now imagine that by some chance very many motorcars are set in motion all driven on by the "natural" fire within them, the will to live and all that. There will be collisions and accidental fratricide - a vale of tears for motorcars.

Let us imagine that climatic conditions become favourable for grasshopper eggs. Soon there will be myriads of them, all imbued with the will to live and the search for petrol for their engine. They will darken the sun in flight and they will eat bare the meadows, fields and forests. They just can't help it. But if we come to think of, this is just what meadows and fields and forests of trees are here for: to give food to other creatures. It is part of that amazing design that plants were developed first before other creatures were developed. But sometimes a draught might wipe out plants and there will be starvation around. That must have happened many a times in the history of the earth. Then those utopian engineers, the cells did the most remarkable construction job. They invented an organ which provides food within the mother animal the moment the baby is born. There are pipes and nipples like a good plumbing job. Milk is the most wholesome food and surely cats and other animals could live their whole live on milk alone. But if milk gets scarce, they will look for other food. And if they once taste bodies of other creatures as food they will do this again. Killing will start. This is totally different from plant food. The fruits develop on trees and they cry out (so to speak) to be relieved of their fruits. Next year they will grow fruits again. They continue to live. Only in great draught will sheep as in Australia eat the bare roots and thus kill the plants. Only men cooperate with plants and animals will such disasters be overcome. Today we have many millions of contented cows in contented watered pastures who give contented milk for contented millions of people. In short, our planet is a place full of dangers to living things. But all living things are imbued with the will to overcome those dangers by mutual cooperation. This is my contention, and now I come to my great discovery of which I claim that no other discovery of the 20th century is of greater importance. Of course a century might have to pass until mankind sheds the catastrophic thinking of the scholars of the 19th century. And here hinges my story. I am writing in such detail, addressing myself all the time to you dear Dr. Morgan, because your voice is listened to in America and you may help along the discovery of mine for the betterment of the human race.

Helmholtz, my Father and I.

With great sorrow I read in your book on page 125 the story of Helmholtz saying:

"According to Darwin, the great Helmholtz, foremost student of the human eye up to his time, remarked of the human eye that if an optician had sold him an instrument so carelessly made, he would have thought himself justified in returning it. Such is an end result of five hundred million years or more of evolution of the eye. It is the growing opinion of biologists that this does not supply any very effective argument for conscious design, but rather the contrary."

To this I can only say that you are yourself one of the victims of the biologists, who see no conscious design. The other victims are the new scientific political leaders who in turn have caused millions of victims to die in extermination camps.

I heard of Helmholtz's saying as a young boy. And it happened that my father was an optician. Already as a baby I played with lenses, with telescopes and microscopes sold in my father's shop. And I was extremely fascinated by a few drawers the content of which I was not allowed to touch, because of its delicate brittleness. They contained hundreds of human glass eyes, blue, and brown, and grey. My father sold and fitted glasseyes. But he sold also animal eyes to the taxidermists who stuffed and mounted animals for the local museums, schools and hunters. I was fascinated by those hundreds of eyes in father's drawers, big ones for deer and bears, smaller ones for foxes and others, and very small and tiny ones for birds. Father got them from Germany together with the human glass eyes, and the lenses for the spectacles father fitted and sold. The German optical industry meant very much for us, and the names of Helmholtz, Zeiss and others were much revered. What Helmholtz said of the human eye must be true. He is the foremost expert. Yet, I could never overcome a grain of doubt. I saw the difficulties which father faced in fitting different spectacles, one for reading, the other for seeing afar. I realized that this changeover is done automatically in a healthy eye, and I learned with wonder that a human eye by automatic contraction changes the curvature and therefore the focus. How marvellous an instrument I wondered. But there was Helmholtz! Later I became an amateur photographer, and during 1943 to 1945 in Shanghai I handled

cameras for a living. Many cameras were faulty, many damaged and in need of repair. I studied the intricate mechanism of cameras and I compared it with the mechanism of the human eye. There all the change-over of focus, of the opening according to the amount of light is done automatically. I handled photoelectric exposure meters and realized that the eye of every living seeing creature has all these mechanisms. I realized that a damaged eye repairs itself. I realized the automatic reflexes when a dangerous object comes near an eye. I realized the purposeful working of the eyelashes, and I stood in wonder at the pictures of embryos showing how the intricate mechanism of an eye is built up from one single cell. Then I realized that what Helmholtz said must be a shameful lie. No optician could ever produce such a miraculous instrument as the living eye is. Then I began to realize that the biologists must be bloody ignorants, liars who deceive us and themselves.

Biologists and biological Warfare.

The most terrifying manifestation of life on earth is war. I have gone through it as a soldier in world war I. I have been in the concentration camps of the Germans and the segregation camp of the Japanese and I have seen brutal and senseless killing. I laid on the ground trembling when American bombers came over Shanghai and killed people around me, people who were their friends, Chinese and Europeans. Nobody can forget such terrible experiences and everyone ponders about that terrible scourge War. Must it be? Is it necessary? Is it unavoidable? To this the biologists give a ready answer. War, was, is and ever shall be among living creatures. It is part of the design of Nature, it is natural, it is the way by which Evolution on earth takes place. It is unavoidable. It teaches us only one thing: To survive by being the fitter in brute strength, to kill instead of being killed.

My Discovery and the Blunder of Biologists and Anthropologists.

I said in the beginning that I came upon all this by pondering about the meaning of controversial words. Here I shall tell the story in the reverse. The reader who is interested in my findings may study my respective writings mentioned in the Index at the end.

I was intensely interested in the beginnings of writing and studied the writings of the early Chinese, Babylonians, Egyptians etc. They go back to 5000 B.C. Those oldest written records hewn into stone told usually of victories over enemies. Even today great monuments and memorials are devoted to commemorate some great victory. I searched older records of man and came upon the oldest known the paleolithic cave paintings, supposed to be 30,000 to 50,000 years of age. And here I was struck by one great difference. Those cave paintings show too victories over enemies, but the enemies were animals only. Never do we find depicted men lifting arms against other men. This I considered a strange difference. Apparently primeval man was very proud of his victories over animals (just as hunters today are) and therefore he commemorated those victories on the walls of his caves. But to attack his fellowman, this did not enter his mind. Otherwise he would have depicted those victories too. I came to the conclusion that man in the early stone age did not attack his fellowman. I searched the books on anthropology and archeology and found there statements by a few scholars who too concluded that human warfare was apparently unknown at that time. But this did not fit in with the common belief that biological warfare was, is and ever shall be in Nature.

I turned therefore to the study of biological warfare and found that among the same species there is no warfare. Lions don't kill lions, tigers don't kill tigers, wolves will roam through the wintry forest howling mad of unbearable hunger, but not wolf will kill and eat a fellow-brother-wolf. Apparently, I concluded, the same universal law which we observe within the cells of one living organism, the law of cooperation for mutual benefit, holds good also between the individual organisms which form a herd, or which belong to the same species. This was in contradiction to the fights for a female. I studied these fights and found that both opponents have no intention to kill each other, least of all to eat the vanquished. On the contrary. The highest sportmanship is the rule. The loser counts himself out and retreats grumbling, waiting his turn with that female. When I wrote about all this to my friend Prof. Paul Abel of London he introduced me to the writings of Prof. Ashley Montagu of Rutgers University. He proved by experiment and with many instances that "among the same species the highest ethics is supreme law." That was tremendous news for me and I searched for similar statements. I came upon a scholar who recorded the fact that only within the human species is there killing of kindred individuals. It is totally unknown in the animal world. Only man kills man. Human warfare is a totally different phenomenon from biological

warfare. Biological warfare means the killing between different species for want of food which is otherwise not available. Many, many species are not killers, but live by the food which "Nature" provides, plants and fruits. In contrast, human warfare is killing not for food, not for satisfying that craving of the human engine for petrol. Man kills man for other motives, to which we shall soon come.

In short, the biologists and the anthropologists have committed a terrible blunder. They have mixed up two different phenomena. They have been culprits in inventing a composite meaning: biological warfare, and they have fallen victim to this meaning by attaching it to human warfare. They have identified the desire for food from other species with the desire for destruction of the same species. They have thus acknowledged to all mankind that war is a "natural" phenomenon, that war WAS, IS, and ever SHALL BE with the human race.

When I explain all this to other people I meet blank eyes. Bliss must be crazy. It can't be true, they think. After all, the proper men to know are the experts, the professional and competent biologists and anthropologists. Bliss is a nobody and no expert whatever. When I ask them to look whether lions kill lions, tiger kill tigers, etc. etc. they simply refuse to look and to think. The idea that war is "natural" and part of the overall picture in Nature is too much ingrained in the minds of mankind, thanks to the generations upon generations of scholars who upheld war and thus sanctified it scientifically with that cry "Survival of the Fittest". As I proved, Survival of the Fittest means the opposite, the survival by better cooperation of cell communities.

The two kind of Discoveries.

As said in the beginning there are two kind of discoveries, the ones which are word constructions, hypotheses, theories, and the other is a real discovery in nature, a find which was hidden to other eyes. But there is a third kind of discovery and I am the unhappy one who made it. I discovered something which was not hidden at all. It was there plain to everyone to see, be he a scholar or layman or even a child. Animals of the same species do not kill each other. Few laymen will admit that they haven't been clever enough to see it. But no scholar will admit his own mistake and blunder. On the contrary, he will use his weapon, loose language, to defend his theories, his mistakes, his blunder. And true enough, I haven't found anyone who stated outright: Bliss is right and I was wrong all the time.

Now to my second discovery which makes it even worse. The first phenomenon was there for every child to see. But the second phenomenon was hidden in caves, and was uncovered by archeologists only and interpreted by anthropologists. We do not need proof to see that only man kills his own kind. Now I come along and say that human warfare was totally unknown say 30,000 years ago. This should be nothing less than a bombshell for the whole of humanity. It says in plain language that human warfare is only a temporary incident. It is not "natural", it is like a disease, a plague, an epidemic which we can make to pass.

But here is my greatest trouble. The anthropologists should have seen the proof in the caves of paleolithic man. Warfare is depicted there, yes, but only warfare against animals, never warfare against its own kind, its own brother. And they, the anthropologists, victim of the semantic fallacy of 'biological warfare' haven't realized the significance of the total absence of human warfare in paleolithic cave painting. That I, a bloody amateur, have now pointed to this, that is unbearable, unforgivable. There is only one way open, This generation of experts must die, and a new generation of experts must come up which "is familiar" with what I found, as Max Planck said.

Julian Huxley when confronted with my discovery could say nothing more than pointing to cannibalism in animals, but he had to admit that it is extremely rare, and as Ashley Montagu ^{said} found, only due to extraordinary circumstances. In ordinary circumstances/Ashley Montagu, we find the overwhelming picture that "among the same species the highest ethics is supreme law." And this in turn must lead us to realize that ethics is not something which man conjured up by juggling words. Ethics is inherent in Nature, ethics is inherent in animals the cells of which work by one ethical principle only, cooperation for mutual benefit. Only in extraordinary circumstances, when the natural food provided by nature in plants and fruits is not available, only then is this ethical principle been broken, only then do animals develop a taste for other species.

There is another significance to be found in the cave paintings of paleolithic man. Pictures of animals hunted, pierced by arrows and spears are rare. Most pictures show animals only in their natural pursuit, grazing, standing, galloping, etc. Let us think of Southsea islanders who live with an abundance of food around, just for the plucking, coconuts, bananas, sweet potatoes and docile animals which let themselves easily ^{to be} domesticated for milk and cheese and butter, and yes, meat too. There is no need to take on the dangerous task of going to war against formidable animals, just for satisfying hunger.

But prehistoric man lived in a terrible environment. There was cold and scarcity of food. There was no other way out to obtain the extra food than by risking lives and going to war against animals. There might have been animals which in turn, for want of food, attacked human beings. They were dangerous and bad. They must be killed. And then, somewhat around 30,000 - 5000 B.C. man began to attack his fellowman, not for food. Why did human fratricide begin?

The Origin of Human Warfare - a Theory by Dr. Brock Chisholm.

When the holocaust of war ended in 1945 mankind was very much concerned about "The Re-establishment of Peace-Time Society" and one great American, Dr. Brock Chisholm, Canadian Minister of Health, later Director General of the World Health Organisation of the United Nations gave two talks with the title mentioned above. He added a subtitle "The Responsibility of Psychiatrists". Because Chisholm is a world-famous psychiatrist. And what he said seemed crazy enough. He said that human warfare is only due to a disease of the mind, a temporary epidemics which medical men can eradicate once they have found that bacillus which attacks the human mind and makes it ready to kill its own kind. That bacillus, said Chisholm is the abstract concept of Good and Evil. Men will kill their fellowmen when they are told that the others are evil and must be eradicated. Religious massacres have started in this way, either instigated by the religious leaders because of their belief, or instigated as a camouflage for loot and plunder. Even today peaceful Chinese killed peaceful American boys because their leaders told them that the American creed is evil and if they do not kill Americans, they in turn will kill them.

Chisholm's theory caused an uproar in American and Canadian clerical circles, but this quickly subsided. Chisholm did not mention the fact that only man kills his own, simply because he himself was a victim of the 'biological warfare lie'. He did not mention the fact that paleolithic men had no idea of killing his fellowman. He could not offer any proof for his theory. But he was courageous enough to defy the keepers of language and their henchmen the religious leaders who have sanctified abstract meanings, like the concept of Good and Evil. Exactly these meanings caused me the greatest headache, when trying to find a scientific symbolization. How could I find a good symbol to explain that whatever Mahomedans considered good, Christians considered evil, or whatever Communists considered good, non-Communists considered evil. It was then a tremendous find for me when I learned of Chisholm's theory which encouraged me in my symbols. From there I pondered that abstract meanings must have evolved slowly in primitive man, and that there must have been a time when primitive man was unconscious of the meanings of Good and Evil. Then human warfare must have been absent in that primeval paradisiacal time, if Chisholm's theory is correct. This thought started me on the trail and led me to search the records of primeval man for signs of the absence of human warfare. And sure enough I found what I was looking for, and what the anthropologists never looked for.

Nature and Ethics

But if the Concept of Good and Evil is to be abolished then what is to become of our Society? What of our Ethics? 'This is not our concern' cry the natural scientists, the biologists and even the physicists. 'We are ready to settle for the administration of a province' (as you wrote). And you cite Max Planck who said "All the problems of ethics are outside of the field of natural science" (p. 59). The sorry fool, the misguided victim of biologists' theories of the survival of the fittest in brute strength. I have tried to prove Ashley Montagu's saying that "among the same species of animals the highest ethics is supreme law". I have tried to show that Survival of the Fittest means survival of that community of cells in which cooperation for mutual benefit and for overcoming extraordinary circumstances is strongest. And then I went one step further and proved that my algebraic symbols can

be used to deduce ethical laws directly by transformation of physical laws. I showed how this can be done in my 3rd book on Semantography and then in a letter to Prof. O.L.Reiser (Semantography Series No. 27) in which I proved to him how my symbols can be used for an universal ethics which can transcend all religions, all countries, all languages. Reiser is the protagonist of the idea that his Scientific Humanism can do just this. He found my symbols as a great help and he showed my symbols for ethics in his "Unified Symbolism for World Understanding in Science"(see below). Before this, he related my findings in paleolithic caves in a foregoing chapter. Now here is an interesting fact. Reiser distributed over 100 copies of his brochure to scholars and other students and he sent me some of their letters. I searched those letters for one word which would show me that the reader has grasped the significance of my findings for ethics, for human warfare, etc. But no! I found nothing, not a word ^{even} in contradiction to my findings. All they have found in my work was a "picture writing" idealistic, unrealistic, utopic. They have only browsed through the brochure. And if anyone should have read my findings on biology and anthropology, he must have gently overlooked the deliberations of a man who is not an expert in these fields. This is why Reiser said unkind words about the experts in his introduction to my work. (See the quotation from Reiser's brochure in p. 5)

How then can I justify a natural ethics, based on the natural sciences? It's simple enough. I start with Newton's law who said that for every action in nature there is an opposite reaction. Kick somebody, and his molecules and cells will be filled with the overwhelming desire to kick back. Give him a good turn and he in turn will try to give you a good turn and will help you. From Newton's law to Jesus' law "Do ye unto others..." is only a step and what was missing was a system of symbols to write such algebraic equations down. But this is not the whole story. If we do an unethical action against our fellow-man, what happens then? Then the reaction is taken up by our own cells. We feel remorse. We feel bad. In turn when we do an ethical action we feel good, happy elated. Which agents create those feelings within us? Why, our atoms and cells of course, which work according to the universal law of cooperation. And psychologists have uncovered a phantastic thing. ^{Some} People who have accidents with their cars, are driven into an accident by their minds, by their cells which make them feel guilty and ashamed of the dastardly deeds they did to their fellow men. They, induced by their cells, are driven into their own punishment. Those who do not feel remorse do so because their minds have been victims of theories, religious and scientific. And some medical men say today that most of our organic maladies are mental in origin. We are sick because of our unethical doings, because we do not follow the course of natural ethics.

Dr. Morgan's "Community Service" and his Vision of the utopic Community.

All these pages have one primary aim: to show you that your own ethical and purposeful living and working for your fellowmen is the direct result of the natural ethics which works in every cell of every living thing. And here I cite your own words about those cell communities in living organisms (p. 174):

"Each cell lives its own individual life, carefull separated from its neighbours by a cell wall, but carrying on constant communication with them...and cooperating with them." (see for the detailed quotation on p.11)

Isn't this a wonderful description of how a human community consisting of cells(families) should live, each in their own house, separated from their neighbours "but carrying on constant communication with them." What is wrong with our communities? The communication system is not yet in order: language. We use it mostly to hurt our neighbours, to point out the girls which are "bad", the neighbours which are "evil", etc. etc. What we need is a re-education of mankind, which the psychiatrist Chisholm demanded. But he had no tool for his proposed treatment. I now maintain that I have evolved the tool, the simple "Algebra of Thought" which the great mathematician Leibnitz prophesied to come. We cannot discard the dangerous concepts of all our abstract notions, just as we cannot discard the dangerous concepts of high speed, electricity, fire, etc. But girls and boys in the schools of the world have learned the mathematics how to recognize these dangers and how to overcome and avoid them. My symbolic mathematics will one day be taught in school and will help to overcome the miseries which we inflict on each other by words. Until then I greet you dear Dr. Morgan as a fellow pioneer in our Search for Purpose.

C.K.Bliss

References: Prof. O.L.Reiser's brochure on Bliss's work "Unified Symbolism for World Understanding in Science"(\$ 1.50). Relevant Issues of the Semantography Series (\$1.50) from the Institute of Semantography, 5 Maroubra Bay Rd, Pagewood, Sydney N.S.W. Australia