

"Historical Notes: Part V:
Search for a Moral Law."

by

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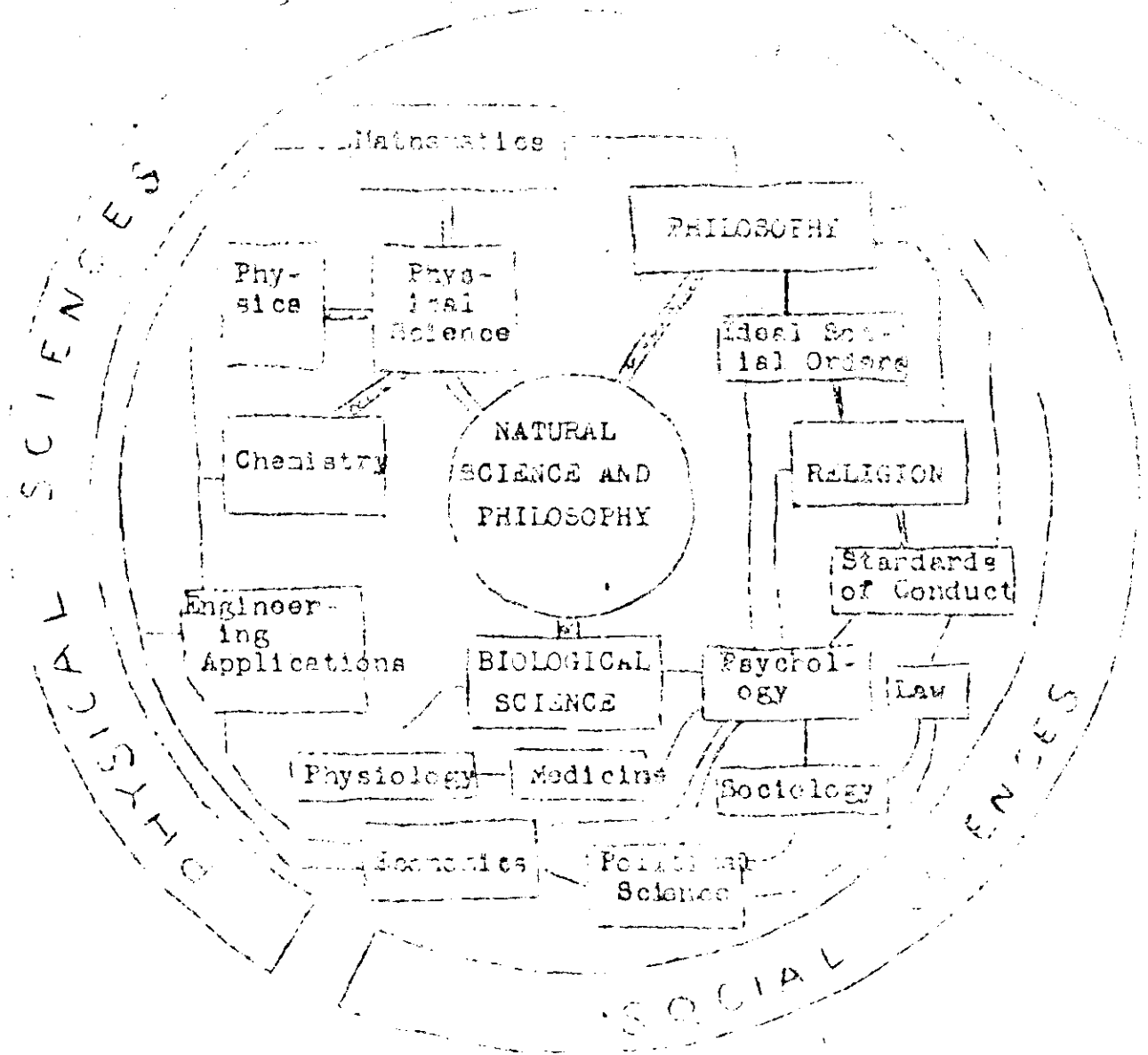
Problem 9.1: How can mankind's search for a "moral law" be formulated in a generalized way that can help people all over the world check for themselves whether their own endeavors are constructive contributions to the welfare of the human race?

Back in 1937 I gave some thought to the role of the engineer in society, but found that there was little in print in the way of interpretation of the high-sounding aims given in the constitutions of the major engineering societies. I thought that possibly taking a philosophy course would help answer some questions. When I suggested to my faculty advisor that I take a philosophy course, he said "Philosophy - - there's nothing in it." Since I didn't take any philosophy courses or other courses in the humanities, I had to figure things out for myself with some help from talks and discussion groups at church and YMCA activities.

The chart on the cover of Socio-Engineering Problems No. 1 Aug. 1958, is a reproduction of a chart I made in August 1940 to help organize my thought in planning some meetings for a college religious group.

During World War II there was a common goal - - the struggle of the democratically oriented countries against Fascism. At times such as following particular victories or setbacks, I would sometimes wonder what would happen after World War II was over. Were prepared with suitable attitudes and techniques of cooperation that would be needed after the War?

When I did contemplate the post war problems, it was usually within the framework of my previous church experiences. For example, the following notes which I wrote in 1944 and 1945 respectively: "The Moral Law," and "Our Responsibility" can be recognized as a paraphrasing of more traditional statements commonly used in religious services. I think that these statements represent a drive to integrate my concept of science, as it existed before World War II, as a search for truth with the ethics from the Hebrew-Christian base of Western Civilization.



A preliminary attempt to organize a synthesis of the specialized fields of science to assist the engineer in developing an interpretation of science in terms of human needs.

THE MORAL LAW

There exists moral law in this universe even though it may not be as clearly understood by man as physical laws. Many of the world's great religious leaders have seen these laws in varying degrees of clarity and translated them into the language of their time and social group. Even though each man's interpretation is somewhat different, we find two fundamental laws verified by many leaders in many groups.

The first is that one must love the truth with all his heart and all his mind. While the second follows that one must love his neighbors as himself. On these two laws can be constructed the detailed moral laws proclaimed by the prophets of many different religious and ethnic groups.

In our dealings with our neighbors whether they be next door or on another continent and regardless of what religious faith they may hold, we have in these two fundamental laws, a scale by which to measure the validity of our decisions and actions. We should examine our actions in business, politics, and international relations by comparison against these moral laws. From history and current experience we have seen and are seeing that even though a few may temporarily profit through violation of these laws, that the loss to humanity is greater than the gain to the transgressors.

Frederick B. Wood
November 3, 1944

Based upon Responsive Reading No. 94, "The Great Commandments" Services of RELigion, Beacon Press (1947 edition)

OUR RESPONSIBILITY

We must love the truth with all our hearts and with all our minds; we must respect that which is known today of the natural law, but we must not be insensitive to new discoveries. Secondly, we must love our neighbors as ourselves. Of the two laws, the second is as necessary as the first, but does not suffice without the sustaining strength of the first. With these two foundations we build on the good of the past toward the awakening horizon of the future.

Frederick B. Wood, May 4, 1945

Note: The preceding two statements were attempt to avoid theological terms such as "GOD." I felt that something was wrong with the way people generally used theological terms. People must be hypocrites; or there must be some outlook on "mythology" which I don't understand. The following poem by Carruth achieves some communication between people using different vocabularies.

VI

EACH IN HIS OWN TONGUE

William H. Carruth*

A fire-mist and a planet,
 A crystal and a cell,
 A jelly-fish and a saurian,
 And caves where the cave-men dwell;
 Then a sense of law and beauty
 And a face turned from the clod,--
 Some call it Evolution,
 And others call it God.

Like tides on a crescent sea-beach,
 When the moon is new and thin,
 Into our hearts high yearnings
 Come welling and surging in:
 Come from the mystic ocean
 Whose rim no foot has trod,--
 Some of us call it Longing,
 And others call it God.

A haze on the far horizon,
 The infinite, tender sky,
 The ripe, rich tint of the cornfields,
 And the wild geese sailing high;
 And all over upland and lowland
 The charm of the golder-rod,--
 Some of us call it Autumn,
 And others call it God.

A picket frozen on duty,
 A mother starved for her brood,
 Socrates drinking the hemlock,
 And Jesus on the rood;
 And millions who, humble and nameless,
 The straight, hard pathway plod,--
 Some call it Consecration,
 And others call it God.

* (C) Mrs. Katharine M. Carruth and
 G. P. Putnam's Sons.

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Perhaps a simpler statement would be Albert Schweitzer's principle "Reverence for Life."

ALBERT SCHWEITZER ON "REVERENCE FOR LIFE"

The following quotations from Albert Schweitzer are of interest to me in looking into the future potentialities of information theory in guiding mankind's search for a fuller and more ethical life.

I Live for Other Life ¹

Ethics is nothing else than reverence for life. Reverence for life affords me my fundamental principle of morality, namely, that good consists in maintaining, assisting and enhancing life, and that to destroy, to harm or to hinder life is evil. Affirmation of the world, that is to say, affirmation of the will-to-live which appears in phenomenal form all around me, is only possible for me in that I give myself out for other life. Without understanding the meaning of the world I act from an inner necessity of my being so as to create values and to live ethically, in the world and exerting influence on it. For in world- and life-affirmation and in ethics I fulfil the will of the universal will-to-live which reveals itself in me. I live my life in God, in the mysterious ethical divine personality which I cannot discover in the world, but only experience in myself as a mysterious impulse. (Ethics, p. xvi)

The Driving Force of the Ethical ¹

Thought must strive to find a formula for the essential nature of the ethical. In so doing it is led to characterize ethics as self-devotion for the sake of life, motivated by reverence for life. Although the phrase "reverence for life" may perhaps sound a trifle unreal, yet that which it denotes is something which never lets go its hold of the man in whose thought it has once found a place. Sympathy, love, and, in general, all enthusiastic feeling of real value are summed up in it. It works with restless vitality on the mental nature in which it has found a footing and flings this into the restless activity of a responsibility which never ceases and stops nowhere. Reverence for life drives a man on as the whirling, thrashing screw forces a ship through the water. (Ethics, p. 256)

1. Charles R. Joy, editor. Albert Schweitzer - An Anthology

Problem 9.2: In what direction should my own work be directed to make a better contribution to the meeting of human needs? Should I change to some field of social science such as sociology, or should I develop some perspective of the relationship of my work to the rest of mankind which would make it easier for me to specialize in my special field of electrical engineering?

The following note written in 1945 indicates the trend of my early thoughts on the question. At that time I felt that a change to the social sciences might be more useful, but I sensed the possibility that remaining in electrical engineering and helping develop communication between physical scientists and social scientists might be a more substantial contribution in the long run. The possibilities of extending the usefulness of electronic computers in the field of engineering and ultimately more generally in the social sciences are scarcely explored areas. For my earlier thoughts refer to pages 9-11, "What Shall I Do About It?" (May 13, 1945)

In October 1945, I prepared a memorandum "Proposed Social Engineering Research Program," 9 pages* Figures 1, 2A, and 3 A Three-Dimensional Chart, Astrophysics, and Alternative Form of Relationship of the Arts and Sciences of Socio-Engineering Problems No. 1, Aug 1958 are from the above mentioned 1945 memorandum. In December 1945, I added a method of denoting the stage of development of any rtes in the series to prevent preliminary hypotheses from being confused with final conclusions. The classification of stages A through T is described in the note "Why a Working Paper Draft" in Socio-Engineering Problems No. 3, pp. 111-iv.

* Now reprinted as SEP No 41

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WHAT SHALL I DO ABOUT IT?

As the struggle toward "The Brotherhood of Good Men" on this world progresses, the foremost needs of the day change. In 1917 the need of the day was for military action and the need was filled by the entry of the United States into World War I. When the armistice came in 1918 some people understood the need of the day for international cooperation, but this need was not understood by enough people, so the need was not filled.

The failure of the League of Nations to solve the international problems arising between 1932 and 1939 indicated that the people of the world had not yet learned how to put into practice the commandment "Thou shalt love thy neighbor as thyself" which had been preached for over 1900 years.

In 1939 the situation reached the point where problems could be solved only by military action or by universal passive resistance. Since passive resistance was not adopted by sufficient people at the right time, the situation changed to conditions that required military action for solution. The United States was slow to comprehend the international situation, but finally responded to the need in 1941 by entering World War II after being attacked by Japan.

As the European War is nearing the end, and the toughest part of the Pacific War is about to start, we have a United Nations Conference on International Organization which gives hope of producing something much more successful than the old League of Nations.

Even though the hopes for a world organization look bright now, there are many social problems which must be solved in order to guarantee continued successful operation of the United Nations organization. A part of the need for military action is the need for developing and designing new devices for the use of the armed forces. The need has been met and is still being met by the concentrated attack upon these problems by the scientists of the United Nations.

Although we still have a war to finish I am giving some thought to the situation after the Pacific War is over. Rapid advances have been made in recent years in physics, chemistry, biology, physiology, and related fields. Comparatively more complex fields such as psychology and religion have farther to go to make possible the proper use of the new inventions that man can use either for war or peace.

I question whether I can adequately do my part in solving the social problems of the day, if I continue specializing in electrical engineering and physics, leaving the social problems to my spare time. I am considering doing some study after the war on the problem of establishing the "Brotherhood of Man" in our time. This resolves itself into two parts. The first is the philosophical approach to establish the interdependent relationship of all men to one another in this world. The second is to study, propose, and try out improved practical techniques of cooperation between men so that people can really say that they love their neighbors as themselves.

When the Pacific War is over, I propose to do some studying¹ on two inter-related subjects. The first would be more theoretical, consisting of research in some special combination of physics, chemistry, zoology, biology, physiology, psychology, and religion. The second part would be more practical, comprising research in the field of economics on the problem of utilizing that which is gained in the first problem for the benefit of man. This plan may be too comprehensive for any one person to handle, but I believe that I could make some progress along organizing and liaison work between experts in the various fields after becoming more familiar with the fields of knowledge mentioned in the first part for which I am not specifically trained.

Frederick B. Wood
May 13, 1945

¹Note: Combination of certain undergraduate courses in social sciences with graduate study in fields for which I am qualified.

I circulated some of these notes cautiously to a few people in 1945 and early 1946. I was surprised to find that people thought that these ideas which come logically from the traditional religious ideas of our civilization and from my response to the development of science were 'radical ideas.' Some people raised the question as to whether I had been reading communist literature. Since I hadn't been reading radical literature, this criticism made it necessary to get some samples of the literature of various radical groups so I would know what these critics were talking about. I was more deeply shocked to find that a distinguished professor of history considered people who ^{read} Communist literature as the scum of the earth. How can people prepare arguments

to refute one's opponents, if one does not read their arguments? I saw engineers afraid to even touch literature that came in the mail to them which they thought might be radical political literature.

I became acquainted with some sociologists, and to my disappointment found that they were usually looking for non-controversial problems to do research on, while urgent problems of world peace lay untouched by the experts whose training came closest to that required for these problems. These experiences led me to seek a way to remain in engineering and to establish some perspective of the relationship of my work to the society in which I live.

NOTE

Problem 9.3 on "practical perspective" and the abstract of "The History of Electromagnetic Theory" are now in Socio-Engineering Problems No. 11 II-A.

The chart - PAST TIME : FUTURE TIME (Gaussian Time Scale) included in the original version of this issue will now be found in issue no. 34.

F.B.W. Jan 18, 1961



11/27/61.

SOCIO-ENGINEERING PROBLEMS REPORT NO. 53-A

Date:	8/40	1/60	1/18/61	6/29/61	10/14/62	7/7/63	7/7/63
Stage:	Chart	Draft	Stage H	SEP S-6	SEP 53-A	Revised	Part transf.
		SEP 9	SEP 9				to SEPR 61

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