"Discussion of 'Social Engineering,'
'Engineering Sociology,' or
'Communication Theory in the Cause of Man'," <—— New Outline at

by

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Abstract

This note reviews some present prospects for developing the concept of "social engineering" discussed in SEP No. 41-A(12/45-6/21/61). A first approximation to a trial time table is prepared based upon SEP No. 32-C(3/13/48-5/6/63) and SEP 32-B(3/10/48-5/6/63). The relationship of "ethical rules‡ in SEP No. 62(1/15/61-11/29/61) with the ideas in Dr. Carl Rogers' book, On Becoming A Person*are also discussed.

A set of rules, developed entirely on my own, are postulated for the successful carrying out of these procedures.

Frederick B. Wood

*Note: Carl Rogers material is delayed, to apperar in SEPR No. 72-B.

Review of SEPR Nos. 32-A, 32-B, and 32-C (Some copies consolodated
in one document with additional page on end consisting of map
"The Moslem World.")

SEPR No. 32-A, "A Visit to Klopstockia." (47-8)
The concept of this monument to mankind's progress might be useful
in the planning of ISLAMABAD, the new capital city of Pakistan,
which is being planned as a jewel of the Moslem World to shine
like a bright star over most of Africa, the Eastern Mediterranean,
the Southernmost Republics in the Union of SovieT Socialist
Republics, Pakistan, Malaysia, Singapore, Brunei, Sarawak, North
Borneo, and Indonesia.

If the intellectual leaders of the Moslem World develop
understanding of "maximizing the negative entropy", the rise of
nationalism in the Moslem countries could be tempered with a higher
level of respect for individual differences. Such a development
could reduce the probability of future tragedies such as the loss
of large segments of the intellectuals in countries like Iraq with
each revolution. (The 1965 troubles in Indonesia with the subsequent
killings of the order of a few hundred thousand people in Indonesia
might have been prevented if this concept had been further developed.)

I propose to send outlines of the possibilities of Information
Theory and Cybernetics to a few leaders or potential leaders in
Pakistan and Indonesia. At present the monument idea is only
considered suitabel for Pakistan. (5/6/63)

For more details on "maximizing the negative entropy" see
SEP No. 19-A, "Communication Theory in Science and Religion."
(This has been developed further in SEPR's 88-B and 92-B.) Of
the choices discussed in SEP 19-A, I think that

$$f(x) = \sigma^2 \, p(x)$$

is the most useful parameter at present.

To be effective it is important to release all the basic
ideas to scientists and philosophers of any country interested,
and to withhold part of such notes relative to strategy which might
irritate some people by giving them the impression we are putting
something over on them.

If Dr. Hsue Tsien(*) is in the Chinese People's Republic,
it might be to our advantage that there is someone there with
sufficient understnding of Cybernetics to perceive the value of
the proposals in SEP No. 65-D.

* H. S. Tsien, Engineering Cybernetics. N.Y.:McGraw-Hill (1954).
  [Dr. Tsien is in American Men of Science, 1949 edition, but not
  - in 1955 edition.]

H.S. Tsien's preface starts:

> "The celebrated physicist and mathematician A. M. Ampere
> coined the word cybernetique to mean the science of civil
> government. (Part II of "Essai sur la philosophie des
> Sciences," 1945, Paris)

> 'Amperes grandiose scheme of political sciences has not,
> and perhaps never sill--- come into fruition.'

SEP No. 32-B, "Uniform Continuity and World Peace Justice Vector."

This material is preparatory for the book project proposed in

SEP No. 65-D, Section I.B(2): [a. Covering Theorem]
[b. Partial Derivatives of History
and Series Expansions.]

In 1948, when these ideas were proposed in preliminary form, I initailly succeeded in organizing a group of scientists to cooperatively pursue these questions. The work did not continue for long, before people bacame scarred to discuss such questions. One engineering professor withdrew from the group, because he was afraid there might be communists in the group. One social scientist told me he had to stick to the research projects that might help his promotion in his department at the university. He said that if he really tackled the major problems of world peace, he might come up with some results that could not be published. In fact I ran into censorship in the graduate economics seminar I participated in when the U. S. State Department requested the University of California to prevent publication of a number of important points in our paper. Soon the crisis ofve the University of Californ loyalty oath developed and disrupted any further interdisciplinary developments.

Now focussing upon the curves of SEP 32-B, the zig-zag line between individual development and social institutions is illustrative of two complimentary trends in a developing society. Initially the press of acute social and economic problems forces all energies on the basic social institutions. However an idealist government can soon degenerate into a dictatotship, if attention is not paid to the development of individual personality. For material along this line see the recent book by Carl Rogers.*

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*Carl Rogers, "On Becoming a Person." N.Y.: Houghton(1961) $6.75

Extension of the Time Charts of SEP 32-B:

The notes on the scroll [or folder filed at 7456] is a first draft of
a time table for the development and use of the concepts proposed in
the proposed book on "Communication Theory in the Cause of Man."
This time chart concept is an extension of Fig. 3 of SEP 32-B,
extended by my later learning of cybernetics and information theory.

From here on in the noes the original material will be listed in
the left column, and the right column will be reserved for notes
on actual developments.

SEPR No. 71-A Notes of 5/6/63	Later Developments and Comments
May 1963: "H. Kahn Analysis"	12/3/63 Draft notes on the concepts in the two books indicated a general increase in negentropy in Herman Kahn's published theories. Publication deferred until concepts could be checked more carefully.
I propose to comment on the increase in negative entropy of the viewpoints of Herman Kahn between his two books: "On Thermonuclear Warfare" "Thinking About the Unthinkable"	
	April 1965. "Escalation aa a Strategy" Fortune, P. 110- appears to reverse the trend. Details in draft notes in File 89-A.
	See also: Herman Kahn, On Escalation: Metaphors and Scenarios. N.Y.: Praeger (May 1965)
May 1963: "A Literature Distribution, Peace Center."	The Spartan Y(YM-YWCA) at San Jose State College used to have a literature shelf that empirically achieved a maximizing the negentropy of distribution of political views.
I propose to examine the negentropy of the literatrue collection displayed by some groups such as the San Jose Peace Center and some church.	
	The concept is partially hinted at in SEPR No. 45-A, "The Demise of the Spartan YMCA-YWCA And The Negentropy Of The United Fund OfSanta Clara County," 10/1/64.
	Some rudimentary notes for further development are in File 79.

Later Developments and
Comments

June 1963: "SEP No. 2 ...application
   to ISLAMABAD."

I propose to review SEP No. 2 for
possible value to the planning
consultants for ISLANABAD.

Sent copies of some SEPR's
to engineer in Lahore,
Pakistan. No reply rec'd.

Sept. 1963-------- August 1964: Book/
   Communication Theory in the
      Cause of Man.

This represents the book writing
period. I may change to publishing
sections as magazine articles. This
would require judicious choice of
magazines. Perhaps a selection of
minority viewpoint journals such
as TMO, Nation, Liberation, etc.,
may be best starting points.

Temporarily dropped book
writing plans in favor of
developing a series of papers
and articles. Then the
articles could be regrouped
into modified book.

12/27/63: SEPR 88-B, presented
paper at AAAS-SGSR, Cleveland,
Ohio: "Negentropy and the
Concepts of Freedom, Democracy
and Justice."
May1964:SocResp inBulCNOF,Paris
Submitted less mathematical
version to TMO, which was
remected.

June 1964, New York City:S.O.S.
and First Annual Conference On
The Cybercultural Revolution"
[Proceedings published as
The Evolving Society edited
by Alice Mary Hilton. N.Y.:
I.C.R. Press(1966)

August 1964: presented paper
at First Internationa/ Congress
for Social Psychiatry, London.
Conference paper same as SEPR
No. 92-B.

November 1964: Participated in
Symposium on Cybernetics and
Society at GeorgetownUniv.,
Washington, D.C. Manuscript
filed as SEPR 93-J.

1965 ---- "Principle Established"
   i.e. //Maximizing Negentropy//

This indicates objective of having pub-
lished journal articles on subject,
and in sufficient distribution to
obtain acceptance of concept by
leading philosophers and some po-
litical leaders around the world.*

4/28/65 MANAS article published.
Some uncertainty as to best
strategy: whether to follow
this or reorganize whole book
to hit people with a complete
interpretation.
Sept. 65: BASG Phil. of GST paper
Oct.65: Paper at Unitar. & Humnst
Dec. 1965: Paper on testing
hypotheses at AAAS-SGSR, Berkeley.

*To achieve this it is necessary to promote open discussion of concepts
of "maximizing negentropy" in the major intellectual centers of the
world,in UNESCO, etc, including the USSR, Chinese People's Republic,
Cuba, etc.

SEPR No. 71-A Notes of 5/6/63

Later Developments and Comments

1966 "Red China in the U.N."

I feel that the use of "communication thoery" concepts in political problems will show that more communication is needed with potential enemies such as Red China, and that the judicious bringing of Red China into the United Nations would help lay the groundwork for a better international climate.

It appears that the United States is trying to resolve problems that have characteristics of the "Information" or "Communication" Era in terms of policies that were suitable for the "Power Era." while picking an area of conflict in which seventy-five percent of the area involved is still in the "Force Era." This confusion as what era events are in and what strategies are relevant tends to reduce the immediate chances of international cooperation. This in turn is disabling the United Nations and further delaying the bringing in of Red China into the international community.

1966 "Research Institutes and College Curriculuia"

This means that I feel we would be ready at this time (1966) for some reorganizing of existing research institutes and college curriculum to make better use of cybernetic concepts.

The A.I.E.E. Cybernetics Committee operated in a rather feeble manner. Its successor, the I.E.E.E. Systems Science and Cybernetics Group has done a little better. It has actually got the Transactions printed.

The Institute for Cybercultural Research ran into some ripples from the conflict between two segments of the establishment: (1) those in favor of neutralizing engineers and scientists, and (2) those in favor of polarizing engineers, scientists, and philosophers into a team to save the "free world" from "communism."

The American Society for Cybernetics apparently was slowed down by the same conflict of interest in the establishment.

San Jose State College has succesfully started a seminar on Cybernetics Systems Engineering as a step toward an option as an undergraduate major of the same title.

SEPR No. 71-A Notes of 5/6/63

Later Developments and Comments

The trend in some universities is to move more material into the curriculum under the broad title of Computer, Information and Systems Sciences, rather than use the term cybernetics.

1967 "International Development Agency"

The concept here was that more international development such as the Mekong Delta Project could be done under U.N. auspices.

This stage of development has been set back by United States unilateral action in Viet Nam.

1967 "Social Responsibility Recognized"

A substantial logical argument for the social responsibility of engineers and scientists has evolved from the work of the Center for the Study of Democratic Institutions, Santa Barbara, Calif. The essence is that the deterioration of political democracy that has accompanies the rise of the large corporations, and the dissaperence of the "upper middle class" into "corporate citizens" has made the survival of political democracy dependent upon the engineers and scientists developing a social conscience. See Andrew Hacker, The Corporation Take-Over Doubleday-Anchor(1965)

1968 "Disarmament Procedures Worked Out"

This time schedule may be too optimistic, but the developing understanding of the role of different dideciom bases in the various eras civilization is going through can lead to a projected sequence of developments based on going through the force, power, and communication eras-- ---each country at differnet paces .with the United Nations monitoring the developments.

SEPR No. 71-A Notes of 5/6/63 | Later Developments and Comments

1968 "Economic Homeostat in Operation"

By "economic homeostat" I mean a computer program entailing a sequence of Leontiev matrices for monthly time intervals (compared to the 8 to 11 year intervals for U.S. Input-Output Tables). This would be dynamically like the Klein-Goldberger model. See April 1965 Scientific American for 1958 tables completed in Nov. 1964. See also the estimated 1967 U.S. Table with $750 billion GNP distributed by Sci. Am.

For regional model see paper by R. G. Kokat, "The Economic Component of a Regional Socio-economic Model" at 4th Conf. on Urban Planning Information Syst., Berkeley, Aug. 19, 1966.

The competition between IBM and CDC can bring about the increased computing speeds necessary for more detailed dydnamic models.

1969 "World Science Re-Established"

See J. Bronowski, Science and Human Values, Harper(1956, 1959) for basic principles of science. The "thermodynamic Imperative" implimented with a communication theory model can provide the base for breaking the national boundaries to much of the present applied science work.

1970 " U.N. World Economic Homeostat"

A world economic model should be practical about this time.

1975 "Major Weapons Destroyed"

The logic for this possibility is that the development of tests for the direction a country is moving on the basis of the thermodynamic imperative implimented by an appropriate communication theory model could give the countrie of the world confidence in a U.N. supervised time table of disarmament.