

A Working Paper Draft

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SOCIO-ENGINEERING PROBLEMS No. 28-A

A series of manuscripts on the social relations of engineering and related philosophical questions dealing with the interaction of science and society. Distribution is limited to reviewers and discussion groups for criticism prior to consideration for possible publication.

OUTLINE & BIBLIOGRAPHY
FOR SEMINAR:
HOW IS YOUR SOCIOLOGICAL IMAGINATION?

Date:	6/29/60	10/1/60	6/17/61	11/23/62
Stage:	Notice	Q, No. 14	Q, No. 28-A	Q

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An Invitation To An Experimental Seminar On:

HOW IS YOUR SOCIOLOGICAL IMAGINATION?

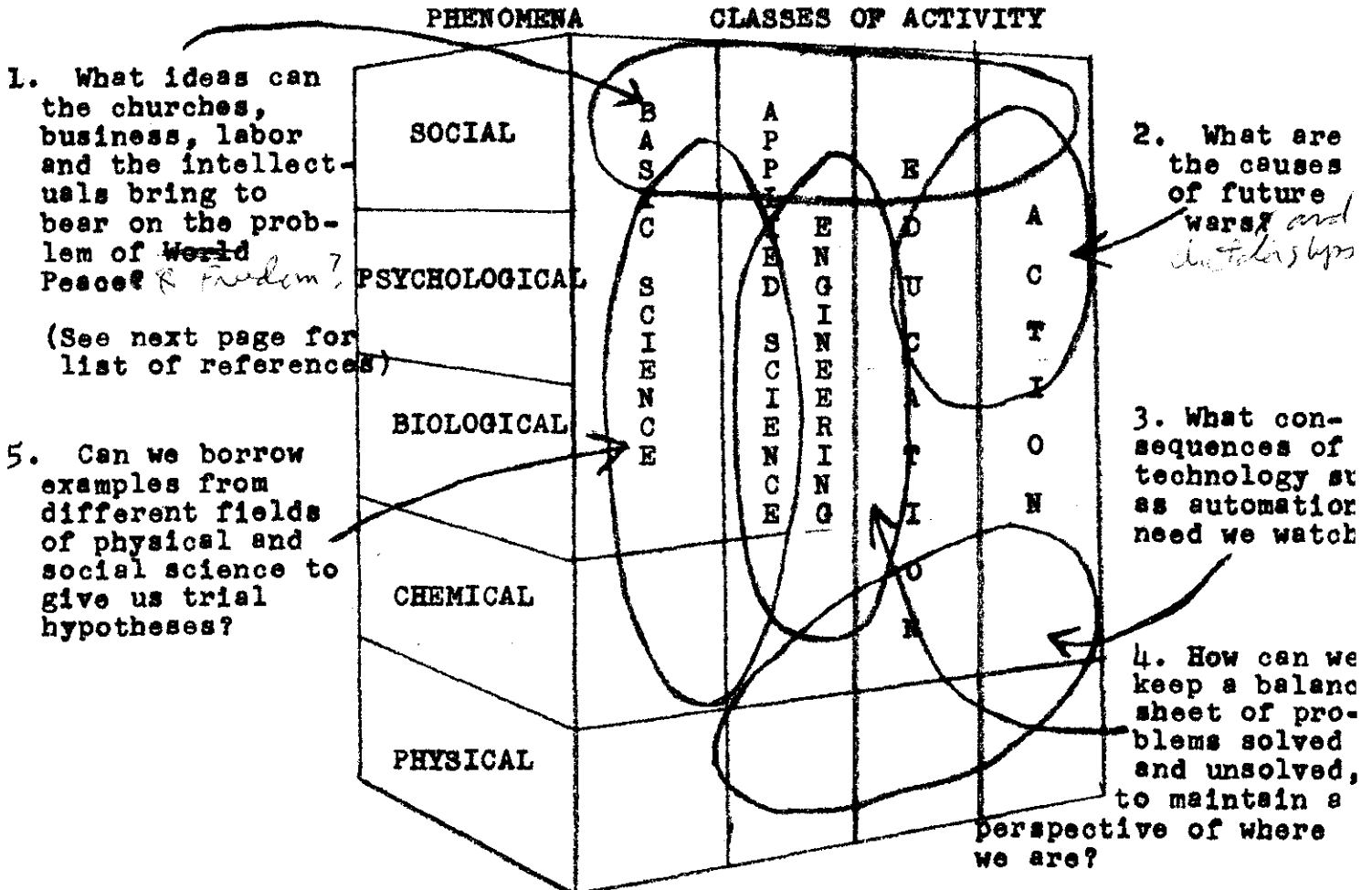
Do you like to experiment with facts and theories to see if you can construct a more useful perspective of society to be better prepared to determine what action to take on the problems of our civilization?

Thursday Evenings at 8:00 p.m.
July 14 through August 11, 1960

At the Wood residence, 2346 Lansford Ave., San Jose, Calif.
AN 9-9327.

Perhaps your forum group, church discussion group, political group, philosophers club, or whatever group you belong to or don't belong to is dormant for the summer. Here is a chance to informally discuss some important issues about the future of our civilization. You don't have to read all the references, but the discussions will be better if some of you read them. You don't have to be an expert to join these discussions.

Do you think a chart like the following can be used to help integrate the separate parts of the problems of our civilization?



Please let me know if you are planning on coming, so I will know if I will have to borrow extra chairs.

F.B. Wood
June 29, 1960

List of References for:

Seminar on How Is Your Sociological Imagination?

General Reference

C. Wright Mills, The Causes of World War III, N.Y.: Simon and Schuster (1958) or the 1960 edition in preparation by Ballantine Books.

Specific References by Session:

- 1A. J.R. Spann, ed., The Church and Social Responsibility. N.Y.: Abingdon Press (1953).
- 1B. Department of International Affairs of the National Council of Churches of Christ in the U.S.A., "Christian Responsibility in a Changing Planet - Fifth World Order Study Conference, Nov. 18-21, 1958," \$0.35.
- 1C. Marquis W. Childs and Douglass Cater, Ethics In A Business Society, N.Y.: Mentor Books (1954), \$0.35.
- 1D. Stewart Mescham, "Labor and the Cold War," Philadelphia: American Friends Service Committee (1959), \$0.35.
- 1E. C. Wright Mills, The Sociological Imagination, N.Y.: Oxford (1959), \$6.00, esp. pp. 1-24, 165-176.
- 1F. W.W. Rostow, The Stages of Economic Growth - A Non-Communist Manifesto, Cambridge University Press (1960).
- 2A. C. Wright Mills, The Causes of World War III.
- 2B. C. Wright Mills, "The Balance of Blame," Nation, June 18, 1960, pp. 523-531.
- 3A. Norbert Wiener, "Some Moral and Technical Consequences of Automation," Science, May 6, 1960, pp. 1355-1358.
- 3B. F.B. Wood, "The Social Responsibility of Engineers and Scientists," Proceedings of the Western Joint Computer Conference, San Francisco March 5, 1959, pub. by The Institute of Radio Engineers, N.Y.C.
4. F.B. Wood, Socio-Engineering Problems (A Working Paper Draft), No. 6, July 1959, "List of Problems....," (mimeographed).
- 5A. Colin Cherry, On Human Communication, N.Y.: Wiley (1957), pp. 1-51, 217-255.
- 5B. John R. Pierce, Electrons, Waves and Messages, Garden City: Hanover House (1956), pp: 243-274.
- 5C. James G. Miller, "Information Input Overload and Psychopathology," American Journal of Psychiatry, vol. 116, No. 8, Feb. 1960, pp. 695-704.
- 5D. Gregory Bateson, Don D. Jackson, Jay Haley and John Weakland, "Toward A Theory of Schizophrenia," Behavioral Science, Oct. 1956, Vol. 1, pp. 251-264.

6-29-60

10-60 File SEP 14

6-17-61 File SEP 28-A

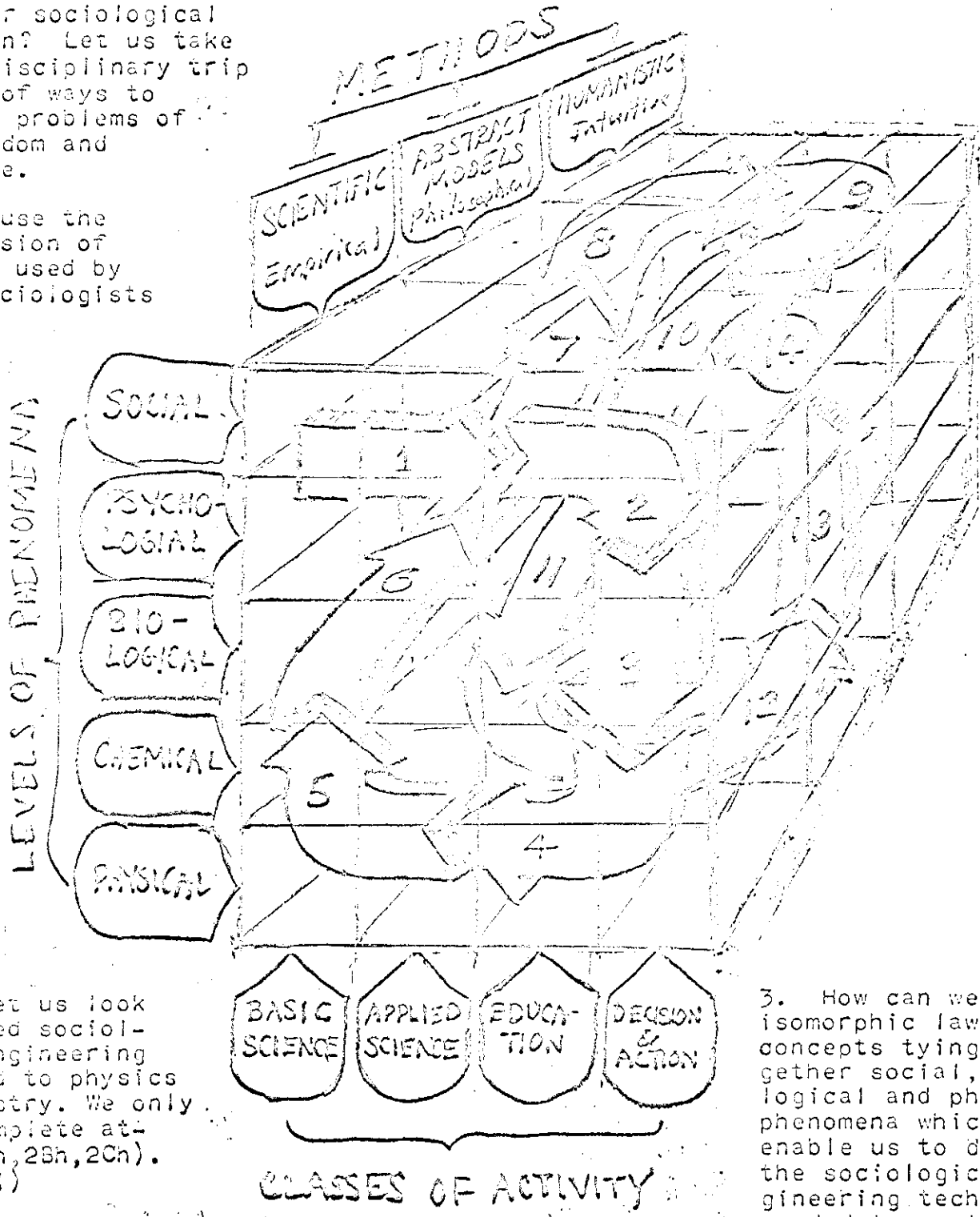
HOW IS YOUR SOCIOLOGICAL IMAGINATION? (An Outline For A Discussion)

by

Frederick B. Wood, Ph.D.*

What is your sociological imagination? Let us take an inter-disciplinary trip in search of ways to attack the problems of human freedom and world peace.

Let us use the modern version of the matrix (IA) used by pioneer sociologists in the selection of craft-ship of Wright (18). (Ideas 1, L3)



Next let us look for applied sociology, as engineering related to physics and chemistry. We only find incomplete attempts (2Ah, 2Bh, 2Ch). (Ideas 11)

3. How can we find isomorphic laws and concepts tying together social, biological and physical phenomena which will enable us to develop the sociological engineering techniques needed to protect and develop peace & freedom? (3A-C) 853

4. What empirical limits on electrical and human communication systems restrict the education process of applying new concepts? S29(Ref.4A)
5. What more fundamental process underlines all levels of phenomena?--
--negative feedback loops of cybernetics.(Ref. 5At, 5Be) L4.
6. What does an engineering feedback loop look like and what is its behavior that has analogies in fields relevant to sociological studies? S34, S37 (Ref.6Ai, 6Bt, & 6Ce)
7. How do these negative feedback loops appear in psychology? S50 (Ref. 7Ae, 7Bi)
8. How do these feedback loops determine the stability of economic and political systems? S39, S46 (Ref. 8Ai, 8Be) Automation & matrice GD
9. Is there a fundamental ethical principle to which we can refer our sociological studies of peace and freedom? -- can we use Albert Schweitzer's concept of "reverence for life"? L4 (9Ae) Are we neglecting human values in the quantitative society? GE
10. What fundamental concept of physics and chemistry is most significant to the life process? --decreasing entropy (increasing negative entropy) L17, L18 (Ref. 10Ae)
11. Does the combination of Albert Schweitzer's ethical principle with Schroedinger's definition of the life process lead to a more rigorous equivalent of Immanuel Kant's "categorical imperative."? --- namely the "Thermodynamic Imperative." L11 (Ref. 11Ae)
12. Does the "Thermodynamic Imperative" implemented with a discrete channel model from electrical communication theory give us a measure for comparing different social systems such as democracies and dictatorships? L12 (Ref. 12At) Does this also give us a chance to find an ethical base for solving the population explosion problem?
13. Does a different model from electrical communication theory, namely the continuous channel, give us a measure of a balance between freedom and stability--"dynamic-justice"? L13 (Ref. 13At)
14. Can we use this property of "dynamic-justice" and its associated political ideas distribution function to help us in international relations and in particular to aid in determining when disarmament is practical? L14 What symbols or concepts will be the core of the ideology for the "information era" or the noosphere? S30

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REFERENCES

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- 1Bi. C. Wright Mills, The Sociological Imagination. (1959)
- 2Ah. Eugen Rosenstock-Huessy, Out of Revolution: An Autobiography of Western Man. trans. from German.(1938)
- 2Bh. Simone Weil, The Need for Roots. trans. from French.(1955)
- 2Ch. Fritz Pappenheim, The Alienation of Modern Man.(1959)

- 3Ah. Daniel Bell, The End of Ideology.(1960)
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- 5At. Norbert Wiener, Cybernetics.(1948)
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- 6Ai. W. R. Ashby, An Introduction To Cybernetics.
- 6St. Tsien, Engineering Cybernetics.
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- 7Ae. Neville Moray, Cybernetics.(1962) Vol. 131 of The Twentieth Century Encyclopedia of Catholicism.
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- 8Ai. Lawrence R. Klein, An Introduction To Econometrics.(1962)
- 8Be. Karl W. Deutsch, The Nerves of Government.(1963)
- 9Ae. Albert Schweitzer - An Anthology. Boston(1956), p. 256.
- 10Ae. Erwin Schrodinger, What is Life?(1944)
- 11Ae. R.B. Lindsay, The Role Of Science In Civilization.(1964)
- 12At. F. B. Wood, "Negentropy and the Concepts of Freedom, Democracy and Justice," SEPR No. 88-B, Cleveland: A.A.A.S.-S.G.S.R. Meeting, Dec. 27, 1963.
- 13At. F. B. Wood, "A General Systems Theoretic Model For The Estimation Of The Negentropy Of Sociological Systems Through The Application Of Two Isomorphic Electrical Communication Networks," SEPR No. 92- London: First International Congress of Social Psychiatry, August 19, 1964.

The last letter in ref.
nos. indicates type:
"h" = historical
"e" = elementary
"i" = intermediate
"t" = technical

Slide Numbers Key:
"G" = Georgetown
"L" = London
"S" = Stanford

SOCIO-ENGINEERING PROBLEMS REPORT No. 28-B

Date: 6/29/60-11/23/62 5/2/65

Stage: Q, SEP No. 28-A SEPR No. 28-B

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