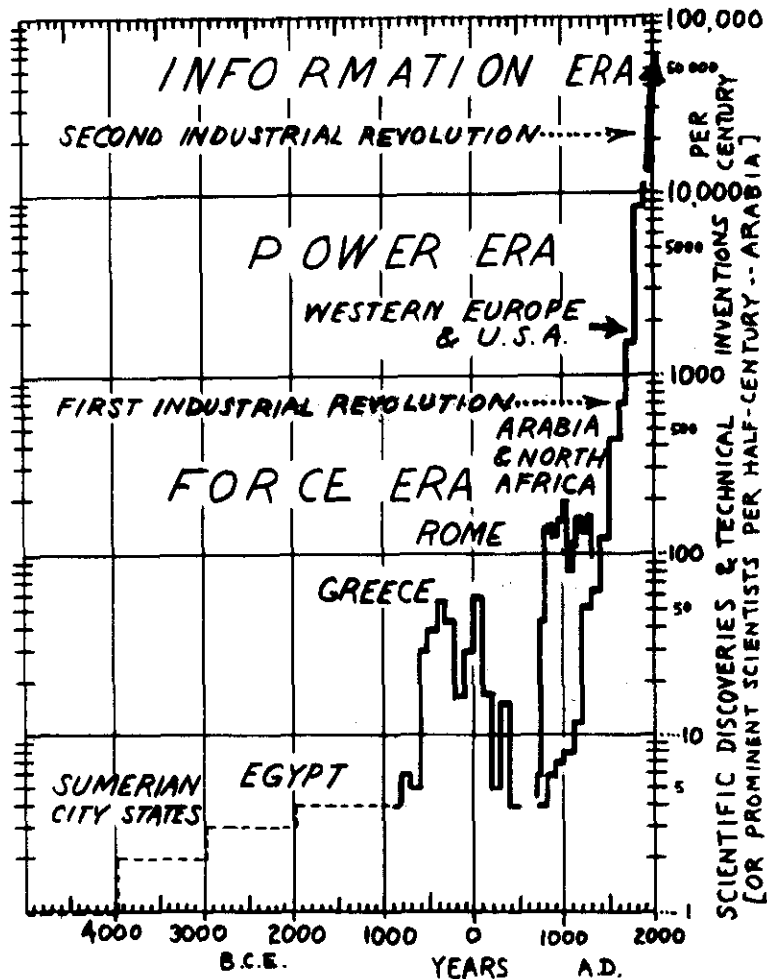SEPR No. 15-C
February 19, 1969

"Historical Trend of Number of Scientific
Discoveries and Technological Inventions
Per Century."

       To assist us in determining under what conditions the study of
CYBERNETICS becomes essential for the understanding and resolution
of social problems, I have plotted the number of scientific dis-
coveries and technological inventions by century from 5000 BCE to
1969 AD. For Greece and Rome and Western Christian Civilization, I
have used tables from P. A. Sorokin. For Arabia, I have used a count
of the number of prominent scientists per half-century from Sorokin's
interpretation of data from Sarton. For the time before Greece, I was
not able to find data, so as a first approximation, I have extrapolated
the trend backwards in time to the level of one invention per century.

The source tables are from P. A. Sorokin, Society, Culture, and
Personality. N.Y.: Harper(1947), pp. 664-665. The transitions,
marked "First Industrial Revolution," and "Second Industrial Revolution
are described by Anatol Rapoport, "Mathematics and Cybernetics," in
Silvano Arieti, editor, American Handbook of Psychiatry, N.Y.: Basic
Books(1959), Vol. Two, pp. 1743-1759(Chap. 87).

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