

P.O. Box 5095  
San Jose, Calif. 95150  
October 25, 1967

Mr. David Shapiro  
Keating Campaign Headquarters  
2290 South El Camino Real  
San Mateo, Calif.

Dear Mr. Shapiro:

Last Saturday I met Robert Vaughn, Edward M. Keating, and a number of others at the reception in Atherton. Although I am not a voter in the right district to vote for Mr. Keating, the discussion last Saturday led me to consider whether there is any way I could help in the development of a simpler perspective of some of the campaign issues.

Now I know that the tools I use to analyze social systems would not mean anything to the average voter. It would require some translation from my concepts of Information Theory which come from electrical engineering and computer sciences to make the results useful in a political campaign. Also I have to be careful about what I do in public politically, because even though the company I work for, IBM Corp., makes announcements encouraging employees to participate in political activities, my choice of political activities in the past usually generated some kind of misunderstanding with company management. It may be that my application of mathematical concepts to political and social systems disturbs them.

To avoid the type of crisis I got into in the Fall of 1964, I propose to explore the possibility of making suggestions to help campaign strategists for candidates I would like to support without personally making public speeches.

As a starter, let me explain very briefly, without providing evidence or proof, a possible way of looking at the Viet Nam War in a way that points to our country's Viet Nam policy as wrong for the era we are entering, but would have been the best policy in the era of world history we have just emerged from. This view does not condemn the present leaders of our country as wrong, but says they are following the correct policy for a past era, and perhaps they haven't perceived the changes in the dominant tools of production in human society.

I am an electrical engineer and perhaps social scientists could find better terminology. To start with, let us consider three major eras of human civilization based on the broadest classification possible of the types of tools central to the functioning of civilization.

<u>Era</u>	<u>Approx. Time Int.</u>	<u>Characteristic of Major Tools</u>	<u>Notes on Social Implications</u>
FORCE	7000 years	Force Amplifying Devices such as levers, pulleys, bows and arrows.	Led to division of labor into agricultural workers, craftsmen, and standing armies. Also the first large cities at major river deltas.
POWER	300 years	Power Amplifying Devices such as the steam engine, electrification, gasoline engine, diesel engine, atomic bomb, nuclear power generation, and hydrogen bomb.	Led to the abolition of slavery on the basis that use of power amplifiers could produce more than slaves and that educated technicians were needed to maintain the power amplifiers.
COMMUNICATION	20 years	Intelligence Amplifying Devices such as RADAR, SONAR, electronic computers, television, automated factories and chemical refineries, also communication satellites.	When half of the cost of an automobile consists of data processing*in connection with orders and production control, it safe to say that we are well into the Communication Era.(* and expeditious) The communication era gives us the tools with which we could communicate with the Viet Cong, Cubans, Red Chinese, and give any country technical assistance in a constructive way without the need for warfare; force could be restricted to UN police action in the communication era.

I do not imply that "force amplifying" tools disappear in the "power" era, etc. For example at the zenith of the power era the ratio of force devices and power devices might be 33% and 67%. When we reach the peak of the Communication Era the ratios of force, power, and communication devices in our society might be: 14%, 28% and 58%.

If you are interested in exploring such concepts please let me know. My home phone is 269-9327, and my office phone is 227-7100, ext. 5265. I would prefer to avoid the discussion of politics during working hours, but it is all right to call me at work to arrange a time to discuss such matters.

In addition to industrial managers being hostile to the application of some interdisciplinary concepts that support the above logic, some academic specialists get anxiety reactions like harem guards when people try to make practical applications of the fruits of social science research.

There is a problem of determining on what time scale it is possible to develop public understanding of concept sets like the Force, Power, and Communication Eras. Is it a few months which would be in time for the present political campaign, or is it a time scale of several years?

Sincerely yours,

Frederick B. Wood