

May 5, 1969

SCIENCE
1515 Massachusetts Ave., N.W.
Washington, D.C. 20005

Dear Sirs:

In the editorial note of April 11, 1969, vol. 164, Margaret Mead discusses the generation gap that, according to her, underlies the present student rebelling around the world. She claims that this generation gap results in great measure from communication difficulties between generations that do not share a sufficiently wide domain of experiences. Her point is well-taken. Indeed, communication is possible only when there is a common domain of experiences and the behavior of the "speaker" can orient the "listener" within this domain. If the older and the younger generations do not share the same domain of experiences, they cannot communicate. The solution would be to generate a common domain of experiences. However, in order to be at all able to attempt such a solution with hope of success we have to face another fundamental problem, namely, the fact that the basic questions that mankind has to solve are ethical and not technological or scientific. It is not a matter of whether we (as mankind) have or have not the knowledge to solve the particular problems that may arise, it is a matter both of the kind of world in which we want to live and the value we want to prevail in human relations, and of our commitment to bring these about without betraying the aims and the values that we have expressly stated in our desires. In this there is no gap between generations. The younger and the older generations have now equal access to know, to see, to realize and to experience what occurs in the world today. In fact, the problems that anguish the youth of today are not problems of youth, rather they are problems of adulthood that arise from their discovery that the effective values of the world in which they will have to live are not those which they have learned to cherish. It is the access of the younger generation to matters that used to belong to the older generation, before their commitments have made them old too, that brings forth their revolt. The older generation, knowingly or not, has betrayed its own avowed values; it has taught justice but justifies its injustices resorting to ad hoc rationalizations or mystical

May 5, 1969

arguments; it has taught respect for the human being, but enslaves human beings ideologically, economically, racially or politically; it has taught the need of study and knowledge to be creative for the well-being of man, but exerts prejudices and refuses to consider as legitimate problems other than those it sanctions as valid; it has taught about peace, but orients itself towards war, now with the possibility of resorting to the justification that aggression is a legitimate biological endowment of man, forgetting that the greatest of human endowments is man's ability to control his behavior in a creative manner if he so desires. There is a refusal by the older generation to accept the criticism it deserves, a callousness in front of its own errors, and a resistance to indeed behave according to the values with respect to man by satisfying his physical and psychological (ethical, aesthetic and intellectual) needs that it pretends to defend. Curiously enough all social revolutions have been attempts to implement these values and, if they have failed, they have failed when, as our older generation does, they have proposed rational justification for their mistakes and the betrayal of these very values. No man can defend and bring to function a system of values that does not guide his conduct.

We are scientists and we know that science is an instrument not an end, we know that it can be applied to any desired purpose, and we also know that the basic problems of mankind are ethical, not technological: it is the purpose for which we use knowledge not its quantity that is significant. Let us accept our share of responsibility in creating a world in which indeed the well-being of one man will not arise in any way from the suffering of another, and let us do that without rationalizing our mistakes. The greatest difficulty ahead is our reluctance to commit ourselves to such a desire, but without such a commitment we shall not have enough common ground to bridge the communication gap between generations.

Sincerely,

Humberto R. Maturana
Professor, Faculty of Sciences,
University of Chile

Visiting Miller Professor,
University of Illinois

HRM/jf