
Reply to questions and comments. (From Joshua Lederberg)

My response does not fit into any of the categories, because I believe they are fundamentally intertwined. Although my primary profession is in biological science, I have worked in each of them.

The fundamental question is: How can we live contentedly and peacefully on the same planet. What are the obstacles? Obviously, at some point we must limit our numbers; else we will run out of food, of living space, of environmentally acceptable sources of energy; and we will be ever more vulnerable to new plagues. Science has made important ameliorative contributions to each of these issues. Plainly it could do much more: we have the task of the organization of intellect and of resources to be capable of the most humane effect.

The further question is how human society can be organized for the prevention of war and for the protection of individual human rights. We need a new Plato, a new Aristotle, a new Macchiavelli -- and more -- to teach not only the Prince, but, in a democratic era, also to provide leadership to the masses in learning how to function most wisely in the construction of a society. The work of Robert Jervis and others shows how the judgment of Princes can be impaired by the limitations of human rationality; we have at least as much to fear from the fanaticism of masses who embrace crusades of the utmost destruction of other peoples. The biological roots of such behavior are poorly understood: it is a far cry from the selfish aggression that is often posited as "The Ghost in the Machine" but which would in fact make impossible the mass mobilization of a people in the name of a religious, racial or political ideology. Scientific enquiry can perhaps assist in that understanding.

To speak to the most immediate issues, disarmament can scarcely be uncoupled from human rights; the right to speak out against the abuses of rulers is an indispensable assurance that treaties will be complied with, and that arms will not be concealed and abused.