Can Humanity Learn to Create a Better World? The Crisis of Science without Wisdom

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I

Can we learn to create a better world? Yes, if we first create traditions and institutions of learning rationally devoted to that end. At present universities all over the world are dominated by the idea that the basic aim of academic inquiry is to acquire knowledge. Such a conception of inquiry, judged from the standpoint of helping us learn wisdom and civilization, is grotesquely and damagingly irrational. We need to change our approach to academic enterprise if we are to create a kind of inquiry rationally devoted to helping us become more civilized.

II

The 20th century witnessed unprecedented achievements; but it also saw unparalleled horrors: 10 million people dead as a result of the first world war, 55 million as a result of the second, Stalin's purges and programmes of collectivization, Hitler's death camps, the disasters of Maos Great Leap Forward and Cultural Revolution. There was the insanity of the cold war and the nuclear arms race, which put the entire human race at risk. There were the many hot wars after the end of the second world war. Well over 100 million people were killed in war during the 20th century, which compares unfavourably with the 12 million killed in the 19th century. There was China's rape of Tibet, the Khmer Rouge's devastation of Cambodia, the massacres of Rwanda and Burundi. Billions of people had to live subjected to totalitarian regimes, facing arbitrary arrest, imprisonment, torture and death if heard to murmur the mildest protest.

There was the steady, daily, routine suffering and unnecessary death of thousands due to poverty and easily curable disease. It is estimated that a fifth of all people alive today still live in conditions of abject poverty, without safe water, proper shelter, adequate food, education or health care.

As well as destroying each other, our environment is increasingly under threat. Tropical rain forests, precious reservoirs of diverse species are being destroyed at the rate of over two hundred thousand square kilometres a year. It is estimated that the globe's tropical rainforests hold roughly four-fifths of all species on earth: if the rainforests disappear, the diversity of life on the planet will suffer a devastating blow. We pollute the earth, the oceans and the air, thus causing a dangerous thinning of the ozone layer, and global warming (which in turn will cause the polar icecaps to melt, and the sea level to rise, flooding some of the most densely populated regions on earth). We recklessly exploit finite resources of oil, for energy and transport, without any idea as to what our sources of energy will be when the oil runs out. Given this dreadful record, how can we become more civilised?

III

Humanity can learn the elements of wisdom and civilization required to avoid such horrors in future. But a precondition for such learning is that we have in existence traditions and institutions of learning to bolster this aim. At present, we do not possess these. It may

seem quite incredible, but our finest traditions and institutions of learning, when viewed from the perspective of cultivating civilization and wisdom, are quite disastrously irrational.

Universities all over the world are dominated by the idea that the proper aim of academic inquiry is to improve knowledge and technological know-how. Academic inquiry contributes to human welfare by, in the first instance at least, acquiring knowledge. This means that everything not relevant to the discovery and assessment of knowledge, such as politics, values, human hopes and fears, problems of living, must be excluded from the intellectual domain of inquiry (although knowledge about such things is not, of course, excluded). Strictly speaking, only that which is relevant to the pursuit of knowledge, such as factual claims to knowledge, observational and experimental results, theories and arguments, can be permitted to enter academic discussion:everything else must be ruthlessly excluded. And this is done in the interests of acquiring authentic, objective knowledge (as opposed to mere propaganda or ideology) which alone can be of benefit to humanity. In the interests of serving humanity, academic inquiry ignores humanity's problems, aspirations, suffering, and concentrates on acquiring knowledge of objective fact.

Natural science, an immensely influential, prestigious core to modern academic inquiry, operates an even more severe censorship system: in order to enter into the intellectual domain of science, an idea must not just be a factual claim to knowledge; it must be a claim to knowledge that is empirically testable.

The conception of inquiry I have just outlined might be termed knowledge-inquiry. It is the dominant conception, exercising a profound influence over every branch and aspect of current academic inquiry. Knowledge-inquiry is widely taken for granted by those academics who see themselves as upholders of reason. (And, interestingly enough, those who reject knowledge-inquiry tend to see themselves as rejecting reason.) Knowledge-inquiry, academic inquiry as it mostly exists at present, is so irrational that it violates three of the four most elementary rules of reason.

What is reason? As I use the term, rationality appeals to the idea that there is some set of general rules, methods or strategies which, if put into practice, give us the best chances of solving our problems or realizing our aims. Four elementary rules of problem-solving rationality are:

(1) Articulate and seek to improve the articulation of the basic problem(s) to be solved.
(2) Propose and critically assess alternative possible solutions.
(3) When necessary, break up the basic problem to be solved into a number of preliminary, simpler, analogous, subordinate or specialized problems (to be tackled in accordance with rules (1) and (2)), in an attempt to work gradually towards a solution to the basic problem to be solved.
(4) Interconnect attempts to solve basic and specialized problems, so that basic problem-solving may guide, and be guided by, specialized problem-solving.

These four rules of reason are utterly elementary, banal and uncontroversial. No problem-solving endeavour which violates them can hope to be rational. If we are to avoid, in the 21st century, the kind of horrors that we have inflicted upon ourselves in the 20th century, we have to learn how to solve our problems of living, our conflicts in life, in more cooperatively rational ways than we have in the past. It is not primarily new knowledge or

technology that we need; indeed, rapid acquisition of new scientific knowledge and technology is a part of the problem. Population growth, environmental damage, and the statistics of death through war have all been made possible by 20th century science and technology. What we need, rather, is to discover how to act in new ways. We need new policies, new institutions, new ways of living, new responses to our local and global conflicts, our personal and global problems of living.

Therefore, if academic inquiry is to pursue the aim of helping us achieve what is of value in life in a way that puts the above four rules of reason into practice, then it must give intellectual priority to the dual tasks of (1) articulating problems and (2) proposing and critically assessing possible solutions. In addition, inquiry will need (3) to break up our basic problems of living into a number of subordinate, specialized problems. But it must also (4) interconnect attempts to solve basic problems of living and specialized problems of knowledge and technology, so that basic problem-solving may guide and be guided by specialized problem-solving. Knowledge-inquiry, as it exists in universities today, puts rule (3) into practice to splendid effect, in that it creates an immense maze of specialized problems of knowledge and technology secondary to our basic problems of living. Absolutely disastrously, however, it fails to put into practice rules (1), (2) and (4).

Having traditions and institutions of learning that are grossly irrational leads to disastrous consequences. Our whole capacity to realize what is of value, to create a more civilized world, is sabotaged. We are deprived of a kind of learning that gives intellectual priority to articulating our problems of living, proposing and assessing possible solutions. This is needed to learn how to resolve our conflicts and problems in more cooperative ways.

Rapidly solving problems of scientific knowledge and technology in a world that has not learned how to act cooperatively is as likely to do harm as good. Rapid population growth, modern armaments, the increasing destructiveness of war, environmental problems, immense differences in wealth between first and third world countries: these are all the outcome of our increased power to act, made possible by science, without a corresponding increase in our power to act humanely, cooperatively, and in our long-term interests. The crisis of our times is the crisis of science without wisdom.

IV

What, then, would academic inquiry be like were it to be devoted to helping us create a better world in a genuinely rational way?

The basic aim of inquiry would be to promote the growth of wisdom - wisdom being the desire, the endeavour, and the capacity to discover and achieve what is of value in life, for oneself and others. Wisdom includes knowledge, understanding and technological know-how, but goes beyond these to include the desire and striving for what is of value; the ability to experience, to perceive what is of value; the capacity to help solve those problems of living that arise in connection with attempts to realize what is of value. Wisdom, like knowledge, can be thought of as something possessed not only by individuals, but also by institutions or societies.

The basic method of wisdom-inquiry (as it might be called) would be to put the above four rules of reason into practice, and to promote putting these rules into practice in personal and

social life.

The fundamental intellectual tasks of inquiry would be (1) to articulate our personal and global problems of living, and (2) to propose and critically assess possible solutions, possibly increasing cooperative personal and global actions. These tasks, at the heart of academic inquiry, would be carried out by social inquiry and the humanities. Social inquiry (economics, sociology, political science, etc.) would not primarily be science, or engaged in the pursuit of knowledge: its task would be to explore imaginatively possible actions, possible policies, political programmes, institutions, ways of life, to be assessed from their capacity to promote civilization. We urgently require a wealth of vividly imagined and fiercely scrutinized possibilities for diverse aspects of our personal and social lives if we are to discover how to rid ourselves permanently of war, environmental degradation, dictatorships, injustice, poverty and hunger.

Academic inquiry would also need (3) to break our fundamental problems of living into subordinate, more specialized problems. In this way, the natural and technological sciences emerge out of social inquiry, intellectually subordinate to social inquiry. At the same time, inquiry would need (4) to interconnect fundamental and specialized problem-solving, so that each is influenced by the other.

It is essential that wisdom-inquiry is without political power, and is non-authoritarian in character. There can be no question of academics deciding for the rest of us what our problems are, how they should be solved, how we should live or what is of value. Far from depriving us of the power to decide for ourselves, the task of wisdom-inquiry is to help us enhance our power to decide well for ourselves by providing us with good ideas, proposals and arguments for our consideration. Academics need to engage in debate with non-academics, but must have no power or authority to determine the thoughts and decisions of others.

Academic inquiry must of course retain its independence, and must not degenerate into merely serving the special interests of government, industry, the nation, or public opinion. The academic world needs just sufficient power and authority to retain its independence, but no more. If we are to believe the pronouncements of experts, this should be because there are good reasons to do so, and not because experts possess some unassailable authority of expertise.

V

It is I hope clear from this thumbnail sketch that wisdom-inquiry differs dramatically from what we have at present, knowledge-inquiry. A more detailed exposition of wisdom-inquiry would further highlight this dramatic difference. There needs to be a revolution in the aims and methods, the overall character and structure of academic inquiry, so that it takes up its proper task of helping humanity. Such a revolution would affect every branch and aspect of academic inquiry: the natural sciences, social inquiry, and the relationship between the two; mathematics, the technological sciences, and the humanities; education; and the way academic inquiry relates to the rest of the society.

Could such a revolution occur, and can we learn in future how to avoid the horrors of the past? At present, academics show few signs of recognizing the need for such a change. Will

no one take responsibility for creating traditions and institutions of learning intelligently designed to help us become civilized?

Note [1] See also N. Maxwell, What's Wrong With Science?, 1976,Bran's Head Books; "Science, Reason, Knowledge and Wisdom: A Critique of Specialism", Inquiry 23, 1980, pp. 19-81; "What Kind of Inquiry Can Best Help Us Create a Good World?", Science, Technology and Human Values 17, 1992, pp. 205-227; "What the Task of Creating Civilization has to Learn from the Success of Modern Science: Towards a New Enlightenment", Reflections on Higher Education 4, 1002, pp. 47-69; "Science and the environment: a new enlightenment", Science and Public Affairs, Spring 1997, pp. 50-56; The Comprehensibility of the Universe: A New Conception of Science, 1998, Oxford University Press, Oxford; "Can Humanity Learn to become Civilized?", Journal of Applied Philosophy 17, 2000, pp. 29-44; "A new conception of science", Physics World 13, No. 8, August 2000, pp. 17-18.