

It seems that moral creeds and ethical philosophies, accepted as guidelines of interhuman relations *within* civilized societies since the dawn of occidental culture, no longer govern the 'compass of our behaviour' (MISLIN) towards human beings *outside* of these societies. The awareness that mankind is a unity (and a brotherhood) whose members ought to be motivated by fundamental laws of ethics and humanity, seems to be almost lacking in industrialized nations dealing with world-wide ecological problems. The developing nations are very sensitive to this lack of 'ecological ethics'^{5,6} on the part of their well-to-do-brothers. Apparently, a process of inner education is badly needed by the developed societies to create the feelings of sympathy for their fellow-humans in neglected areas – feelings which should not be confounded with offending charity or humiliating compassion. But this is obviously an enormous task to be solved only if everyone of us considers himself fully responsible for this educational process. Its difficulties should not be underestimated. There are considerable intellectual forces in the western world which ignore, more or less wilfully, the problems of the third world. They represent one of the 'two cultures' dominating our present age⁷. Language and mentality of modern novelists, poets and artists are usually not adapted for discussion of the complex problems of hunger and backwardness in other parts of the world.

In contrast, the scientists (including sociologists and behaviourists) being mostly open-minded to the evolutions and the dangers of present and future, may become advisers on inter-human good-will and teachers of a new ecological ethic.

There is no time to lose. World population rises at a breathtaking pace, and the army of the hungry increases every year by about 60 millions. The huge majority of people living in the developing countries will not ultima-

tely be ready to dispense with the improvements made possible by progress in science and technology. But this requires enormous financial means.

According to a working paper presented to the World Population Conference at Bucharest, investment of between 500 and 1,000 billions dollars is needed to secure agricultural and energy production to nourish 40–45 billions human beings expected to live in the year 2025. The later the industrialized countries begin their financial help, the larger is the necessary sum. The same result in socio-economic and nutritional improvement will be attained, whether \$ 2,600 millions are given within 25 years or \$ 7,300 millions within 50 years. In any case, the sacrifices to be made by the rich countries are considerable and will increase exponentially with delay.

The greatest mistake which can be committed today is to 'wait and see', and the greatest danger is indolence and 'idleness of heart'. Let us overcome these vices by fostering in ourselves the ideals of global ethics to minimize the socio-economic inequalities on our planet.

J. KÜHNAU

*Institut für Physiologische Chemie der Universität,
Martinistrasse 52, D-2000 Hamburg 20
(German Federal Republic, BRD). 11 April 1975.*

⁴ Seminar, International Institute for Applied Systems Analysis, Laxenburg, Austria, 29.4.–3.5.1974.

⁵ H. MISLIN, *Experientia* 25, 224 (1969).

⁶ H. MISLIN, *Experientia* 30, 1495 (1974).

⁷ C. P. SNOW, *The Two Cultures, and a Second Look* 2nd edn. (Cambridge University Press, London 1963).

CONGRESSUS

German Federal Republic 3rd International Symposium on Bioelectrochemistry

in Jülich, 27–31 October 1975

The Symposium is devoted to the progress and status of Bioelectrochemistry in the sections of electrochemistry of substances of biological interests, electrochemical phenomena and processes at biological membranes, bioelectrochemical actions in the function of muscles, nerves, in vision and in the respiratory chain. Further in the section of electrochemical stimulation of tissue growth and repair and in vivo electrochemical processings and measurements.

The Proceedings of the Symposium will be published in 'Bioelectrochemistry and Bioenergetics' and a limited number of papers will be accepted. Applications for attendance, as well as papers together with a brief abstract (200–250 words) should be sent to the organizer as early as possible, but until 1 May 1975 at the latest.

Further information will be obtained from: Prof. Dr. H. W. Nürnberg, Nuclear Research Centre, D-517 Jülich (German Federal Republic).

Switzerland International Symposium on Enzymes and Proteins from Thermophilic Microorganisms

in Zürich, 28 July–1 August 1975

Topics: Thermophilic enzymes (proteins): Isolation, characterization and general properties. Structural basis of 'thermophilic' properties of enzymes and proteins (thermostability, specific activity). Structure function relationships. Enzymes in thermophilic metabolism. Temperature adaptation. General aspects of the thermophily problem.

Information and registration: Prof. Dr. H. Zuber, Institut für Molekularbiologie und Biophysik, Eidgenössische Technische Hochschule, CH-8049 Zürich, Switzerland.