

a society where work may grow short and the right to prolonged unemployment compensation in case of technological change; the training of workers preparing them for numerous job changes within their lifetime and for increased mobility, the disruption of family life caused by increased shift-work in highly automated continuously-working factories and a great number of other "labour crises" ahead have not yet had the deeper inter-disciplinary attention they need.

The interdisciplinary study of future contingencies will certainly discover a number of danger signals unknown so far. The "warning system" of the E.L.O.I. might at relatively little cost stop social and political crises before they can do damage. It will in addition be able to warn in time against developments which would erode the "quality of life" at the expense of short term quantitative gains.

By anticipating social issues and social requirements and bringing them to the attention of the responsible leaders of government, parliament and public opinion the "warning service" will assume a function, which is not only necessary but overdue.

c. Stimulating workshops of "social invention"

"Look-out Institutions" - the idea as well as the term were put on the map by B. de Jouvenel - have been very well defined by E. Jantsch. He states:

"Look-out Institutions" are called for by many distinguished scientists and other people concerned with social technology. The principal purpose of such institutions would be to conceive and systematically evaluate alternative feasible futures so as to permit the selection of optimum solutions towards the long range goals of society..."

It is rather surprising that so far only a few ill equipped and insufficiently financed private groups have tried to put this excellent idea into practice. This may only partly be due to lack of money or official disinterests. Some of the "inhibitors" of the much needed "invention" of alternative feasible futures may be listed here:

1. for over a hundred years now only scientific and technological inventiveness have been taken seriously and brought tangible benefits as well as honours to their creators.
2. the ill-conceived rigid and monistic "social inventions" of totalitarian regimes, which turned into "nightmares" have served as a warning.
3. the greater insight on social and political processes gained in recent years, has made it clear to would-be "social inventors" that the conception of "alternative feasible futures" is hugely more difficult than thought by revolutionaries and reformers of earlier ages.
4. the effects of the current intellectual training which puts more accent on analysis than on creative conceptualisation has cut down the number of potential social innovators.

On the other hand it can be assumed that strong and renewed demand for the intellectual creation of "alternative feasible futures" would soon create a new trend towards increased "social inventiveness". Jantsch is probably right when he points out that the techniques developed in "normative technological forecasting" over the last two decades starting now from social requirements would be capable of "applying spur and guidance to fundamental research in areas of social relevance in the same way as they are applied by industry in the economic area."

Two American firms have recently tried to define the basic conditions, which favour technological invention. Most of these factors might apply equally to much needed "social invention".

General Electric's Centre for Advanced Study in Santa Barbara ("Tempo") named the following pre-conditions based on an analysis of 75 important innovations:

1. Purposeful nature of the innovator;
2. Existence of an information base;
3. Availability of a financial source;
4. Learning - a factor which seems to favour newcomers, who have entered the field recently;
5. Accidental factors.

The consulting firm Arthur D. Little pointed out the following factors as being most important:

1. A clearly formulated need;
2. Availability of resources (to be committed at once for best results);
3. An experienced body of people.

Ideally a society in the age of accelerated change would need socio-cultural "research and development units" as large and as well financed as the R. and D. departments in industry and the military complex. But such serious and well financed effort of "social invention" and controlled experimentation may still be far off.

Nevertheless a resolute start should and could be made. A "European Look-Out Institution" might at least stimulate the creation of "alternative futures" and "intellectual prototypes of new institutions" either by assembling itself inter-disciplinary "model building groups" put on to the most urgent problems (such as, intercontinental transportation, ecology, permanent education, leisure activities, prevention of crime, preventive medicine, etc.) or suggest important areas ripe for "social invention and innovation" to workshops of social invention at universities, learned societies, etc.

The "alternatives" and "social inventions" developed or