



European Communities  
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Background Report  
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A CHANCE FOR RENAISSANCE?

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Summary

Daily political turmoil makes it difficult for governments to take a cool look at the future. Yet perhaps never before has this been so necessary for the countries of the Community as Western Europe steadily loses pre-eminence in economic and political power.

In a penetrating book (1), Andre Danzin, Chairman of the European Committee for Research and Development (CERD) has sought to take just such a cool look. The picture that emerges is not encouraging. It is clear from M. Danzin's analysis that few of those who influence or wield power today recognise the change that is overtaking European society, or the implications that this has for social life in the future. Perceptions are still masked by lingering nostalgia for Europe's past.

The book seeks to shake off this nostalgia and reveal facts as they are. This is the only way, M. Danzin believes, to make possible a reformulation of our activities and engage on a 'second renaissance' adjusted both to the talents and the needs of future European society.

Painful facts

The 1960's, M. Danzin suggests, marked the apogee of Community industrial thrust. Since then Community wealth has been permanently diminishing. The failure to realise this and to combat decline by common positive, innovative policies, has been sadly disappointing.

Yet without such policies the countries of Western Europe can slip towards underdevelopment. The signs are already there. The Community population, for instance, is declining and ageing, while the populations of the developing and Arab countries are growing and young; Europe is too small and densely populated for gigantic modern development compared with other parts of the world; reliance on the import of primary materials - energy, food, minerals - is dangerous as the developing world increasingly needs these resources for itself; old established industries are in trouble as they face competition from fast developing third world countries and Japan; the capacity for scientific and technical innovation measures up badly to that of the United States, Japan and the Soviet Union with whom Community countries are in competition for markets.

Without a great effort of adjustment and innovation it will be difficult, if not impossible, to maintain the standards of comfort to which Western Europeans have been accustomed for so long. The decline may be gentle now, but by the next century could be catastrophic.

- (1) Science and the Second Renaissance of Europe by A. Danzin; published for the European Commission by the Pergamon Press at £8.

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This need not happen, M. Danzin suggests, if the natural skills and adaptability of the European heritage can be pointed in new directions. Here scientific research has an important role to play. The object of the book is to encourage debate on such research and to harness it to the real needs of the future.

#### A changed society

The major phenomenon of the last half century has been the increase in the free time available to adults in Western Europe for things other than their elementary needs and paid work.

From 1800 to 1960 the amount of time devoted to work remained, on the whole, stable at around 100,000 hours for a total life time, despite a doubling of the average expectation of life. Extrapolation and comparison with the United States suggests that by the year 2,000 total working hours per lifetime will have been reduced to 70,000. This could release energies for a whole new range of individual activities whether voluntary or paid. It provides the need for a new look at education, leisure facilities and probably the legalising of 'moonlighting', which appears to meet a general desire among people to be productive in their free time.

In the field of work, the growth industry is information (transmission, processing, servicing and equipment). In the United States the numbers employed in information activities already exceed the total of those employed exclusively in agriculture, industry or services. At the moment Western Europe lags behind here, but is expected to catch up in from five to ten years.

But there are dangers in this divorce of the majority of the population from production of tangible goods; zero economic growth is not the answer to the future; European skills should be devoted much more to social and economic innovation and quality products. This is where research has its most important role to play.

#### What kind of research?

It is clear that European research should be concerned with quality rather than quantity. But a comparison of the amount spent on research in the Nine compared with their main market rivals shows how little importance governments and others attach to this. The United States, for instance, has a population smaller than the Community, but the volume of Research and Development investment per European is less than half the American level. The situation is expected to worsen as the U.S. has stepped up its research effort since 1976 while the Nine have been tending to cut back theirs, or at best keep it constant. In the five years 1971 - 1975, 61,000 new scientists started work in Japan, a number approximately equivalent to the total research staff employed in each of the major Community countries. The Japanese priorities are nuclear science, information technologies (space, telecommunications, informatics); environment and oceanology. In the information technologies a large part is played by studies of automation and robotics to improve the productivity of industries and services.

To meet the challenge from her competitors and to make the best uses of the finite resources of Western Europe, the Community should have a common research policy, concentrating on agreed priorities.

M. Danzin suggests four, in some cases overlapping, priorities: the life and information sciences (biology, application of systems analysis, social sciences); organisation for survival (energy, improvement in service productivity, competitiveness in agriculture and industry); establishment of reciprocal economic links with developing countries; and an offensive for a better life (information technologies, development of free time activities).

Such fields of research, M. Danzin argues, tap the physical and intellectual skills peculiar to European tradition; do not require great resources of energy, but offer opportunity for imagination and innovation.

To achieve this, however, requires new thinking and re-organisation of existing research establishments. Too many such establishments are too big and cumbersome to undertake innovatory research. Such research needs to be undertaken by small units working within a common framework and diversely funded. Within the Community the Commission, aided by an executive body capable of taking rapid decisions and encouraging originality, should act as a catalyst within an agreed framework. The aim would be to avoid duplication of effort and ensure that funds are directed to promising projects.

At present Community budget appropriations for research amount to only 162.8 MEUA (£108.5m) of which nearly two-thirds (£67m) is taken up by priority programmes and the Joint Research Centre. The budget total corresponds approximately to 1.2 per cent of the total publicly funded research and development effort in the nine Community countries, or 0.6 per cent of the total funds devoted to R. & D. in the Community, allowing for expenditure by private undertakings, which is roughly of the same order as that of public bodies.

In M. Danzin's view the budgetary allocation is totally inadequate to meet a compelling need for better planned research.

#### The second renaissance?

A renaissance can only take place if the forces attaching to the past have become negligible or are challenged, and if there is a certain desire for the future to be newly constructed to comply with new ideas shaping our destiny. M. Danzin is not certain that the conditions he quotes apply to the Community at present; renaissance is possible but so is decadence.

The report has been discussed by the European Committee for Research and Development, who asked that it should be published. Members, however, disagreed about its relevance; some suggesting that it was over-moderate and the recommendations inadequate both in scope and in force; they argued that the situation called for more ambitious decisions than 'gentle therapy' in the R. & D. sector alone. Some members also resented what they considered a slight on large scale research establishments.

It was agreed, however, that the book raised important issues, in keeping with CERD's responsibilities and should be drawn to the attention of governments and the public.