Some reflections on recent developments and possible initiatives to foster the role of the history of science in education and training in Europe

SOME YEARS AGO THE ALLEA (All European Academies) network working together with the European Commission and the Division of the History of Science of the International Union for History and Philosophy of Science issued recommendations about the teaching of the history of science in Europe. It was mentioned that greater co-operation and co-ordination was needed between the different institutions in Europe.

In this respect, several issues should be mentioned. We have to take into account the fact that the overall situation in Europe is still very diverse, and thus to help improving it. The real basis of our activity is research. How to improve interdisciplinary co-operation in spite of the division of labour in the structure of our universities? This is a universal problem. To solve it, several actions have been taken in some countries.

In my own country, the Louis Pasteur University of Strasbourg (a university mainly devoted to scientific research) created in the nineteen eighties a special structure called Centre de recherches transdisciplinaire sur les sciences et les techniques (which included the history of medicine, the sociology of science, and the epistemology), which later on became the Institut de recherche interdisciplinaire sur les sciences et les techniques. At the Ecole normale supérieure in Paris, a transdisciplinary structure has been also created, the Groupe Histoire Philosophy Sciences, which aims at fostering common actions between all departments of the school. Transdisciplinary doctoral schools do also exist. At the University of Paris 7 Denis Diderot, the history of science is associated with epistemology and didactics of science in a single structure, in which PhD students from all sides really interact.

This experience should be shared with other similar structure presumably existing in Europe, and we should seriously think about European Doctoral Schools, which could function at bilateral or multilateral levels. At some levels (BA, Master, or PhD) in scientific, technical, medical and other university curricula, the teaching of the history of science (and possibly of the philosophy of science) should be more strongly introduced for regular students and perhaps in a compulsory way for students who will embrace a career in general and college education.

The new subject of the teaching of the history of science at secondary schools and even perhaps at primary schools as a way of creating a scientific culture and of facilitating the teaching of science is gaining weight in some countries in Europe. The reform which is presently implemented in France, in which the Institutes for teachers training are now really integrated in universities (which was previously not the case, contrarily to the rest of Europe), is a good occasion to foster the role of young colleagues endowed with both a scientific (or other) university degree and a PhD in history of science or epistemology, in these Institutes.

The use of new technologies in education (like e-learning), for several purposes including the training of the teachers themselves and a continued interaction between teachers and students, should be especially useful in history of science. The internet is increasingly used as a way of knowledge diffusion.

We should also encourage the interest of the DG Research of the European Union, which lost interest in recent years in the humanities, after some signs of interest for master degrees. Presently there seems to be a renewed interest on Science and Society issues. Part of our legitimacy is gained by paying service to communities. Secondary school teaching is certainly a way of paying service. The agenda is now on general education. In addition, the availability of high quality teaching material is

* Ecole normale supérieure, Philosophy Department, Paris, France; email: claude.debru@ens.fr.
also a big issue. Websites are increasingly used for the teaching of science and the education of science teachers. They include, for instance in mathematics or in biology in my own country, more and more historical material.