Communicating in the post-academic era of science

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It is often said that a new era is beginning, one that is founded on knowledge, thus envisaging a new society, founded on information. Meanwhile, technological innovation already characterises our daily lives and our vision of the world: no past generation saw their surroundings change so quickly and deeply as we do.

Scientific culture is the basis of the passage to the era of knowledge, of the foundation of information society, of quick innovation and of intensive technology. Scientific knowledge is the dynamic factor bringing about a change both in our material lives and in our perception of the world.

Science is, therefore, the hegemonic culture of our time. It is not the most widespread culture of our time, though, nor the most shared one.

Scientific research is the dynamic factor responsible, maybe more than any other, for the rapid changes in technology, the economy and society. Science itself, however, is subject to change. Quantity and quality of scientific items of knowledge are obviously changing, but so is the way of *doing* science. Scientists' working patterns are changing. The relations between scientific activity and other human activities are changing. The relation with technology, the economy, the other forms taken by human culture is becoming a tightly interwoven and co-evolutionary relationship.

Scientists' working patterns have changed so radically over the past few decades as to foreshadow, according to some, a time of historic change. Within the social

institution "science", the academic era is giving way to the post-academic era¹. In the academic era, major decisions concerning scientists' work were taken essentially within the scientific community. There were hardly any interactions with the rest of society. And scientists, probably with scarce resources, could live in an ivory tower.

In the new post-academic era, major decisions concerning scientists' work are taken increasingly by the scientific community together with other social groups: politicians, bureaucrats, company managers, servicemen, lobby groups and non-governmental organisations, and society itself. And scientists, probably with reluctance, are forced to leave their ivory tower.

Communication is the basic social institution of science. There is no progress in scientific knowledge if the results of scientific work are not communicated. Scientists' careers depend upon their communicative skills.

In the academic era, when major decisions about scientists' work were taken within the scientific community, science communication remained within the scientific community. Any real communication was between experts.

In the new post-academic era, any real decisions about scientists' work are taken increasingly by the scientific community together with other social groups and, essentially, with society itself. Consequently, science communication no longer occurs exclusively within the scientific community. Communicating with (wide-ranging) non-expert audiences has also become crucial for science.

The passage from the academic to the post-academic era is therefore bringing about a change in the status of science communication to the non-expert audience. It used to be optional, it is now indispensable.

Academic scientists might have communicated science to the non-expert audience. Post-academic scientists "must" communicate science to the non-expert audience.

However, if scientific knowledge is the *primum mobile*, the great engine of cultural and social change of today, then science information is (now) one of the pillars of democracy. As a consequence, science communication is (now) a social need that cannot be discarded in any full democracy. Society needs scientific information.

Finally, modern technologies and the very change in scientists' working patterns are effecting a change in the way science is communicated within the scientific

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¹ John Ziman: *Essay on Science and Society*. Science, vol. 282, p. 1813, December 4th, 1998.

community. The problems of rapid dissemination of acquired knowledge and of free access to science information have been the focal point of discussions within the scientific community over the past few months.

The evolution of science communication as a social institution is crucial in the era of knowledge and in information society. And that is why *Jekyll.comm* was born. This small journal has a great ambition: to observe and to interpret the evolution of science communication in all its guises.

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