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Editorial

Techno-scientific hybrids. Science communication in pursuit of an academic identity

A recent article published in *Science Communication*[1] addresses the training issue in issue in our discipline. Henk Mulder and his colleagues discuss the shared features that university curricula should or could have to favour the full admission of science communication into the academic circle. Having analysed analogies and differences in the curricula that a number of schools provide all over the world, the authors reached the conclusion that much remains to be done. Science communication seems far from having found shared fundamental references, lessons that cannot be missed in the practical-theoretical education of future professionals or researchers in this discipline. What should one study to become a good science communicator? And to make innovative research? We do not know. Although successful examples are not missing, schools provide quite different answers, at times stressing theoretical aspects, at times practical ones, in accordance with the available experiences, beliefs and skills. Basically, the same conclusions were reached by Jon Turney some fifteen years ago:[2] there is so much diversity and so much vitality, but also a lack of consistency and a poor impact in the academic world. So, nothing new under the sun? Will science communication always be a disregarded discipline, tolerated by natural scientists, forgotten by the traditional history, philosophy and sociology of science, looked at with paternalistic benevolence by the social studies of science?

The first consideration is that the training issue has never seen an in-depth analysis as yet. With the exception of ESConet,[3] a project that has compared the most relevant teaching experiences in Europe, we have a limited number of reflections at our disposal, apart from the aforementioned ones. Besides, successful experiences – some examples of which are mentioned in a commentary in this JCOM issue – often focus exclusively on one of the aspects of training in science communication, the social-cultural one – certainly crucial, but not the only one. The current configuration of what many now call «knowledge society» implies a central role played also by the political and economic facets of the processes of scientific knowledge production, circulation and appropriation. What is needed today is to train communicators able to work for media, museums, press offices of research institutions, but also in arenas as different as courtrooms, offices of the antitrust authority, as well as of supranational organisations, political institutions, technical-scientific companies, NGOs. If, in fact, new players are emerging in the hybrid ecosystem of science communication – and if they are to meet new social demands – also education and research have to be re-thought and re-shaped. If we advocate the need for multidirectional, dialogical, participative, interactive practices in S&T communication, negotiation and social appropriation, then those issues should now widely reflect crosswise in contents as much as in the teaching practice of our training courses. To what extent can we say that our lessons and the set-up of our courses are participative, «upstream» and able to co-build knowledge? To what extent does teaching practice reflect the functioning of contemporary science communication?

Another consideration intertwines with the aforementioned: the crucial need for associating teaching and quality education with innovative and top-level research. The theoretical reflection, the empirical investigation, the attention placed on methodological firmness in research can importantly contribute to formulating contents and reinventing teaching methods, but also to providing conceptual tools and a cultural heritage fundamental to the practices of scientific journalism, popularisation and museum explanations. In the debate on what lessons should be given, or on whether there is a hard core of «science communication» that needs to be taught in universities, the cause should not be mistaken for the effect. Disciplines do not become academic by decree. They are so when they provide interpretation tools, when they make new perspectives or cognitive territories emerge, when they allow for a unique knowledge of science, of society, and of their mutual structure. Research on science communication deserves the title of autonomous academic area as long as it manages, now or in the future, to do so. Perhaps, a more articulated and systematic reflection on education themes can help also overcoming some weak points in the research on science communication. And, vice versa, an in-

depth theoretical reflection on the relations between science communication studies and human and social sciences *tout-court* may help to avoid isolation and to effectively highlight the special features and the founding elements of our field.

Translated by Massimo Caregnato

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Notes and references

[1] H.A.J. Mulder, N. Longnecker and L.S. Davis (2008), *The State of Science Communication Programs at Universities Around the World*, *Science Communication* 30(2): 277-287.
[2] J. Turney (1994), *Teaching science communication: Courses, curricula, theory and practice*, *Public Understanding of Science* 3: 435-443.
[3] Esconet, *European Science Communication Network*, http://www.esconet.org. Accessed on 17/02/2009.

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