The Next Step Forward

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Science popularization is a changing field these days. Now we want to know how many "fans" an event has gathered on Facebook, and the European SciCafe project is even planning to open coffee shops in "Second Life." How well are we keeping pace?

As I write, Polish efforts to raise public awareness of science have been passing through an interesting period, encouraging one to be positive about the future. Soon the Copernicus Science Centre in Warsaw will be celebrating its first year of operation in its new and magnificent building, and even previously it had been spreading its exciting initiatives countrywide. Two European congresses of associations have just taken place: for ECSITE network of learning centers (held in Poland, at Copernicus), and the EUSEA association of science promoters, at its 10th anniversary in Gothenburg. Poland's annual springtime Science Festivals have now finished (Kraków, Toruń, Gdańsk, Dąbrowa Górnicza, and so on), but we still have the autumn festivals to look forward to, with Warsaw and Lower Silesia leading the way. The 2011 Science Picnic in Warsaw, as is traditional, proved to be a great success, this time unfazed by the city's paralysis due to Barack Obama's visit. The semesters of Poland's numerous Open Universities, Third Age Universities and the increasing numbers of Children's Universities have ended. Przekrój nauki, Poland's oldest science café, has completed its annual cycle and, as usual, the series of science meetings at Lake Wdzydze has taken place - a lovely event in the woods which was initiated and run by PAS employees at a leisure center.

It's all good!

The wide variety of events, the broad-based involvement, the great host of science popularizers who are supported by Polish Radio, some commercial stations (last year the Radio TOK FM team won an award from the Ministry of Science and Higher Education and PAP), newspapers and periodicals (high quality publications in *Gazeta Wyborcza, Rzeczpospolita, Przekrój*, and *Polityka*), and the awards established for the best book about science (Warsaw Science Festival with the

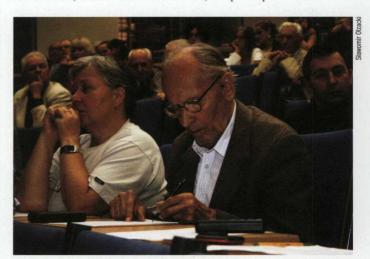
Book Institute) and for the best articles about science (Polish Science Journalists' Association) – all this testifies to the fostering of social and public initiatives by scientists who no longer claim that trying to communicate science to the public is a waste of academics' time. It's all good!

But if it's all good, a certain warning light goes on for me: the field needs to be looked at again, because maybe it has gone stale and has plunged its creators into complacency.

In meetings of European popularizers, new trends are emerging. When the great science-themed festival and picnic movement started (in the 1980s worldwide and in the late 1990s in Poland), the hippest way to communicate with the public was a website – if you didn't have a website, you didn't exist. Today the web is seen as a source of essential information, but we don't actually think of these sites as fascinating reading. Today we ask: How many Facebook "fans" has an event gathered? Can you see it on YouTube? Who's mentioned it in their blog or on Twitter? Recording your own DVD has become trivial. The European SciCafe project for the development of scientific cafés is planning to online coffee shops and even cafés in "Second Life." And all this has to be straight-to-the-point and wicked, awesome, cool! Are science popularizers keeping up with these trends?

Active thinking

The ECSITE conference in Warsaw was formally divided in the traditional way into plenary lectures and sections (one of the plenary sessions dealt with the case of WikiLeaks!). In the sections, after a short introduction, the participants were



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sometimes invited to create groups where specific problems were discussed. How can we best depict experimental science? How can we draw in various excluded social groups? How do we get children to "get" science? How much art is there in science? What is the best way to harness social networking sites? How can we work with schools and teachers? Common answers to such questions were sought, and the participants had a chance to voice and defend (many) different views. In fact, the dominant impression of this conference was that it draws all participants into active thinking and teaches them how to engage an audience.

We value science festivals because they allow participants to "experience" experiments by performing and evaluating them themselves. This hands-on approach also lies at the heart of successful learning centers. But alongside such experimental workshops, festivals (in Poland) also host numerous lectures. A "lecture" usually means that someone wiser than me bestows their knowledge unto me, and, if there's enough time, I can at most ask a question at the end. Basically, that means the festival is not interested in what I think; it wants to provide me with information and knowledge. The kind of interaction that is present during the workshops is almost non-existent here.

Getting to know society

The meetings during ECSITE were a new concept for me, where the interactions covered not just experiments, but also ways of thinking. The promoters of these forms offer talks on a chosen topic with whatever audience happens to have come to see us. Imagine that we're holding a workshop on genetically modified organisms (GMOs). I asked the teacher at the congress how he sees the role of the expert; how we can discuss GMOs without basic knowledge of genes, genetic modifications, monitoring of these phenomena through science, and so on. "You can't," I argued, "just launch into a discussion without giving an introductory lecture." And so I had reverted to the traditional festival mindset...

The workshop leader (I think he was from a very experienced group of Brits) said: "Everyone who comes to such a meeting has a view on the topic. We allow them to present it without trying to teach them at this stage. You'd be amazed how many opinions there are, and even more so what the motivations are. The point is not to get everyone to think the same, but to learn about as many different views as possible. Even an expert can learn a lot, and certainly understand what the concerns of the public (people thirsty for knowledge, and so the above-average public) are in your country, your city, in your community. How else can we create a reasonable program for further discussion with the public? After all, we assume in advance what people think and plan our lecture in advance."

On the threshold

Without a social dialogue about science, modern society will find it difficult to develop. Existing forms of festival activity were a refreshing novelty when they first arose, but maybe it's time to go a step further. Especially because, for example, social networking portals now exist, and they are great to use if you only know how! Videos can be posted online and direct broadcasts can be streamed. New modes of communication will continue to appear, and soon everyone will be online one way or another. This technological reality will also help solve the problem of locations remote from large academic centers, as long as one can join in a dialog in Warsaw while sitting at a computer in distant Suwałki. But for such old-school popularizers as myself, I would also continue to have those real encounters with prominent scholars from Poland and around the world, because nothing is as enjoyable as seeing and listening to a "real" person, like plugging in a "real" power supply.

I have only touched on a narrow range of issues in the future of popularization of science - a field which is also important because it is a source of real pleasure for the masses of scientists working to promote scientific knowledge. I am sure the "newcomers" are standing on the threshold; we just need to see them.