
Editorial

Kerstin Cuhls

CC Innovations- und TechnologieManagement und Vorausschau,
Fraunhofer Institut für System- und Innovationsforschung (ISI),
Breslauer Straße, Karlsruhe 48|76139, Germany
E-mail: kerstin.cuhls@isi.fraunhofer.de

Four years ago, we had the idea of asking whether Foresight activities influence trajectories or can even create new trajectories, paths, science and technology policies, or spark transformations or even innovations – regardless of whether this occurs in a disruptive or incremental way?

But it turned out to be very difficult to answer this question. Some authors promised to send me their papers – but nothing arrived. Of course, ‘no time’ due to work pressure was often the reason cited for why nobody had the time to write the texts – everybody working in foresight is busy because foresight activities and applications are ‘booming’. Nevertheless, this seems to be part of a larger problem and there is an obvious reason why the expectations were high and the results so modest:

There are not many observers of paths and traces – and only a few ‘real’ evaluations have been performed (Georghiou et al., 2010; Georghiou et al., 2008; Cuhls and Georghiou, 2004, Georghiou and Keenan, 2005) evaluations that systematically examine the results of foresight activities or discuss the procedure in a formative evaluation.

In the meantime, a few studies on impacts have been published, but there are no studies of trajectories being influenced by foresight. The BMBF Verlaufssystem was such an attempt; this was a study by the German Federal Ministry of Education and Research (BMBF) to track the future fields of a national Foresight activity and their development over a longer period of time, but later on the tracing and monitoring part was abandoned for cost reasons. And, indeed, it takes time and resources to really follow a topic over a longer period and observe how it develops, what improves etc. Looking back at historical studies might help, but this is also problematic because the sources are often missing and the people who could tell us about the details are no longer available.

My conclusion here sounds disappointing – but is actually intended to be a wake-up-call to the need for more research in this area: We perform foresight, but, in many cases, we do not really know what impacts and trajectories we are starting. Our empirical base is still very thin. As foresight is per se explorative, we shape the future and the issue we are examining (like anthropologists do when observing the customs of people). This is acceptable in a world in which many things are experimental – and foresight is basically an experiment with ‘futures’ or ‘the future’ and therefore with a time when we will no longer be alive. Therefore, we need more evidence for our base, especially in times of Grand Challenges and Horizon Scans.

We have managed to bring together at least a few papers in this Special Issue that show the effects, traits and new thinking which are definitely fostered by foresight activities. I have tried to include papers from different levels: national, regional and company level.

The first paper describes the trajectories that are sparked or re-emphasised by a national foresight exercise, the Japanese 9th Foresight, which was performed with a view to needs-orientation and includes scenarios as well as a Delphi survey. Based on the assessment of past Delphi surveys in Japan, this study examines whether foresight exercises indicate future directions from a long-term standpoint. The study clarifies that Delphi surveys can give significant pointers to technological and other developments that are useful for people or 'the society' in the distant future, but that their effectiveness differs according to the characteristics of the fields considered.

The second paper describes a project at regional level (a German Federal State) that was performed when the discussion about 'demographic change' had just re-started, but was still stuck at the stage of arguing about social security systems. In this project, different aspects were examined and – although it was a small project from a budgetary point of view – it had a huge impact and led to follow-up paths in villages, towns and companies – all on a small scale and difficult to trace, but noticeable. Meanwhile, demographic change is also being discussed in the contexts of personnel in companies, future administration, generations and their social life together and even in the science and technology of the future.

The third paper describes the influence of scenarios in companies and how these have sparked new ways of thinking and production. It is often asked whether sustainable business models in companies can be developed by applying scenario methods. The paper shows one example of a branch study as a forecast for the automotive supplier industry in the German region of south Westphalia and some traits of dealing with this question.

The fourth paper presents the experiences of a consultant with different small and medium-sized companies and how they needed to be convinced to implement their findings. This contribution is more about organisational learning and visionary thinking as tools for guiding the companies and demonstrates how these companies are changed just by performing foresight.

All the papers demonstrate the communicative effects of Foresight which pave the way for new trajectories or trajectory changes rather than hard facts or the tools actually required to dig the foundations for innovation. Indeed, I was supposed to write a fifth paper about the German BMBF Foresight Process of 2007 to 2009 – but it is too early to describe the actual results and the tracing system (see above) had just been abandoned. Maybe next time, we will be further on and hopefully will have new papers with more empirical data to show the effects, impacts and longer lasting traces being evoked by Foresight.

I thank the authors of this issue and Barbara Curran, the Journal Manager, for their patience! To perceive the impacts and changes based on Foresight is really a long-term process which requires a lot of staying power and patience!

References

- Georghiou, L., Keenan, M. and Miles, I. (2010) 'Assessing the impact of the UK's evolving national foresight programme', *International Journal of Foresight and Innovation Policy*, Vol. 6, Nos. 1–3, p.19ff.
- Georghiou, Luke, *et al.* (2008) *The Handbook of Technology Foresight, Concepts and Practice*, PRIME Series on Research and Innovation Policy.

- Georghiou, L. and Keenan, M.P. (2005) 'Evaluation of national foresight activities, assessing rationale, process and impact', *Technological Forecasting and Social Change*, Vol. 73, No. 7, pp.761–777.
- Kerstin, C. and Luke, G. (2004) 'Evaluating a participative foresight process: 'futur – the German research dialogue'', *Research Evaluation*, Vol. 13, No. 3, pp.143–153.