

Being 50 in Slovakia

Doing research is not the same everywhere in Europe. Recently, we received a short essay from Lubomír Tomáška, describing that 30 years after the fall of the Iron Curtain, the spirit of old times still lingers on. Yet, he believes that in spite of these drawbacks there are still good reasons to pursue scientific career in his country.

Quinquagenarian scientists currently living in Post-Communist Eastern European countries represent a unique population. The Communism collapsed just when we graduated and we found ourselves facing a dream world full of possibilities. All barriers preventing free scientific research seemed to be lifted. We could freely apply for positions in the best laboratories, travel to scientific meetings, access uncensored scientific literature, or seek foreign financial resources to support our research. The sky (and our imagination) was the limit!

Many of us had luck with our teachers, who, in spite of being penalised by the previous regime, were renowned scientists respected by the international community. Thanks to them, we gained a good education and after opening the borders, they helped us become members of leading research groups at prestigious Western institutions. The plan was simple: spend a few years abroad, perform competitive research, learn novel techniques, be exposed to a stimulatory research and cultural atmosphere, and then return back home and implant the positive experience into the transforming society... and live happily ever after.

A number of my colleagues in Slovakia turn fifty this year; they too were exposed to a more or less similar scenario. Our personal anniversaries and almost 30 years that have passed since the fall of Communism provide good reasons to look back and ask, if the original plan held true.

Many of us would agree that the reality is not as positive as we imagined. Although firmly based in the European Union, Slovakia is one of its most corrupted countries. This does not only apply to state affairs but also to the research community. The same archetypes of people, called by Ladislav Kováč in his detailed analysis of a (Post)-Communist society 'ontological pragmatists' [1], that were successful during Communism continue to exhibit the highest fitness in science management. They use a different vocabulary but, principally, they exhibit the same types of opportunistic behavioural stereotypes.

As we have argued with my colleague Jozef Nosek elsewhere [2], not the lack of money but its nepotistic distribution is one of the reasons for Slovak scientists' frustrations. The fact that during a whole decade of its existence, there was a single ERC grant awarded to a Slovak scientist is in stark contrast with about fifty so called Centers of Excellence, generously sponsored by European structural funds. In spite of the 'excellence' label, the Centers (at least in the biomedical sciences) failed to substantially contribute to the corresponding scientific fields.

This is exemplified by a very rare occurrence (it happened precisely once) of Slovakia being among the top 20 European countries in sixty or so rankings performed by *Lab Times* during the last ten years. New, fancy and expensive monuments proudly called Science Parks were built with a promise of stimulating 'translational research' and mediating formation of 'spin-off' companies. However, being half-empty and lacking a clear plan on how to attract competent investigators, the Parks more resemble museums of modern technology than vital research institutions.

A few Slovak research groups performing competitive research are scattered around with no apparent sign of their enrichment in Centers of Excellence or Science Parks. These examples support a hypothesis that tens of millions of euros poured into the Slovak research infrastructure were to a large extent wasted to support Potemkin villages and mediocre, but 'politically correct', members of the scientific community. The others are left with the crumbs distributed by underfinanced national grant agencies.

Not that we did not try to improve the system. Following the example from the West, we started to quantitatively evaluate scientific performance. By applying measures, such as publication outputs, impact factors, citations or Hirsch indexes, we play the game of identifying the most productive scientists, excellent teams or leading institutions. Just like our western colleagues (only more so), we are becoming obsessed by numbers and at the same time losing interest in the content of the articles published by our colleagues - even at the same department. Politics of science is a more frequent subject of our discussions than science itself. We are enforcing the effects of the extrinsic sources of our frustration by neglecting an important means of emotional motivation: a collective

joy of sharing and celebrating our scientific achievements. As a result, we are burning out and habituating to the corrupting system leading to its stabilisation.

So, why then do Slovak quinquagenarians, at the peaks of their lives, not quit? Why don't we change profession or move out of the country? And if we stay, how do we persuade young colleagues, completing their postdoctoral fellowship abroad, to consider the possibility of returning home?

I admit that this is much harder than in the early 1990s, when the future seemed so bright. But the reasons may be similar as for our generation. We were emotionally attached to the microenvironment constituted by our families, loved ones and friends. We felt a debt to our teachers, who gave us education and taught us important values. We knew there were (and still are) numerous talented and smart students at our Universities, who can benefit from our experience. And we knew that teaching can be rewarding, fun and a great source of personal satisfaction. We took it as a challenge to participate in the transformation of a research and educational system, and although we seemed to fail, it should not discourage others from giving it a try. We realised that, although in science money is important, it is primarily the ideas and supporting microenvironment that can make a difference. And lastly, a perhaps not so evident point: there are examples (also from the history of science) that modest conditions associated with a need for improvisation may stimulate creativity. In this latter sense, the country surrounded by Danube, High Tatras, Little Carpathians and the Tokaj region is the best place for testing one's potential.

[1] Kováč, L. (2002). Natural history of Communism. II. Autonomous dynamics of memes and institutions. *Central Europ. Polit. Sci. Rev.* **3**, 111-164

[2] Tomáška, L., Nosek, J. (2014) Opinion: Science in a small European country. *The Scientist* (28.1.2014); <http://www.the-scientist.com/?articles.view/articleNo/39008/title/Opinion--Science-in-a-Small-European-Country/>

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