

Silence of science

Scotland's independence debate saw too many scientists absent from the public square.

Last month's independence referendum in Scotland was the culmination of a two-year debate remarkable for both its civility and its intensity. Scientists' contribution to the debate was, unfortunately, restricted to a cursory examination of their own short-term funding prospects. If this perspective is to become the global norm — that is, if science's relationship to democracy is to become simply that of a supplicant — then its exalted status inside society is likely to diminish.

Scotland originally merged with its larger and more populous southern neighbour in a two-stage process — a union of crowns in 1603 and then of parliaments in 1707. But it maintained its own legal code and education system and, since the late nineteenth century, its administrative autonomy has steadily grown. In 1979, a proposal for a weak, national assembly in Edinburgh was narrowly approved in a referendum, but rejected because fewer than 40% of the total electorate had backed it. In 1997, a stronger assembly proposal was overwhelmingly approved in a second plebiscite, and in 1999, a parliament sat in Edinburgh for the first time in almost three centuries.

This year's referendum on Scottish independence was triggered by the success of the separatist Scottish National Party (SNP) within that devolved parliament. The SNP formed a minority government in 2007 and in 2011 obtained an overall majority — an outcome the parliament's architects had expressly sought to avoid. Fearing endless goading on the independence question, UK prime minister David Cameron subsequently agreed to a binding plebiscite on the simple question: 'Should Scotland be an independent country?'

On Thursday, 18 September, Scotland voted 'No' to that question by 55% to 45%, on an 85% turnout (UK election turnouts barely exceed 60%). But the victory was only assured after Cameron panicked in the final days of the campaign, and pledged new, but unspecified, powers for the Scottish parliament. Given that such change seems likely to compound existing tensions between London and Edinburgh, the issue of Scottish independence hasn't been put to bed as thoroughly as supporters of the union had hoped.

During independence debate, large and vociferous interest groups emerged to do battle on behalf of both sides. Many



The Scottish Parliament in Edinburgh is set to receive additional powers.

thousands of artists, trade unionists, women and business leaders made their voices clearly heard. New media reached hundreds of thousands of readers, assisted by widespread disdain of the mainstream press (38 out of 39 daily and weekly newspapers circulating in Scotland supported the union).

Scotland has a large and vigorous academic research community, but relatively little was heard from it during this festival of democracy. The Royal Society of Edinburgh, representing the academic elite, attempted to raise some relevant questions, if not to answer them. Two campaign groups, Academics Together and Academics for Yes, were established, but failed to set the heather on fire. The debate was fought out with extraordinary verve in every theatre, pub and housing estate. But the science departments of the universities were, on the whole, quiet.

At a time when every other aspect of Scottish life was under close examination, no-one attempted to ask what its universities, or their research portfolios, are actually for, or how they could improve. Little was said of why academic research in Scotland is so strong — or why industrial research is so weak. These issues need to be explored,

with or without independence. They apply also in many European regions: academic research funding is quite widely distributed, but industrial research (most of it now in high-tech sectors such as pharmaceuticals and IT) is narrowly concentrated.

The main research issue to feature in the campaign was the implications of independence for funding that Scottish academics currently obtain from the UK research councils. The separatists said that arrangements could be made to continue this, but were low on specifics. Uncertainty about the outlook for such funding in the medium term featured prominently in the pro-union press.

This line of argument, although clearly important, was less than inspiring. Surely scientists would have something to say about the future of their country, other than to ask where their next grant is coming from? Robert Oppenheimer, Niels Bohr or Andrei Sakharov, to name but three, would have been surprised and disappointed to learn that, at the beginning of the twenty-first century, the net sum of scientific engagement with society is to ensure continuity of funding. But perhaps that is where science now finds itself. It certainly seems to be where scientific societies find themselves, worldwide, with so much of their sizeable lobbying effort devoted to the funding issue.

Now that the referendum is over, a commission chaired by Lord Smith of Kelvin is seeking agreement on further powers that will be transferred to the Scottish Parliament. These are not likely to include the Scottish activities of the UK research councils (which the Scottish government wants to retain), but may involve additional mechanisms for research funding including, perhaps, a Scottish Research Council.

Scottish universities will therefore see little change in the short term: teaching will be funded from Edinburgh, in the main, and research from London. But the process leaves them facing some tough questions. How can they work together more effectively, to raise their international profile? Can they continue to offer free tuition, when competitor institutions in England are charging £9,000 a year? Where is the industrial hinterland? And what, if anything, can they do to address the discontents that have brought the United Kingdom this close to breaking point? □