

## When they stayed away from Paris

Robert Fox

**Science in the Provinces: Scientific Communities and Provincial Leadership in France, 1860-1930.** By Mary Jo Nye, *University of California Press*; 1986. Pp.328. \$39.95, £33.95.

OVER the past decade, the community and institutions of French science in the nineteenth and early twentieth centuries have been subjected to an unprecedented onslaught by historians. Oddly, the trail has been blazed by scholars working in Britain and North America, and it is they above all who have fashioned the developing consensus to which Mary Jo Nye's book makes a notable contribution. In the new orthodoxy, two points have emerged strongly. The first is that in the half century or so before the First World War the majority of French *savants* abandoned their traditional preoccupation with abstraction and pure knowledge and became increasingly concerned, even besotted, with the applications of science. The second is that the scientific life of the provinces deserves to be treated quite as seriously as that of the capital and that it is quite misleading (though understandably convenient) to equate an assessment of Parisian science with that of French science as a whole.

Both of these points are developed to good effect in *Science in the Provinces*. The book is structured around a series of studies of the science faculties of Nancy, Grenoble, Toulouse, Lyons and Bordeaux, and it uses those studies to display the faculties as seats of scientific vitality and institutional innovation, with local industrial agricultural and commercial interests often serving as a source of problems and a spur to action. Strikingly, Nye's faculties all lie in a crescent sweeping from the Gironde, through the Midi and up into Lorraine. Here, it seems the provincial tradition in science developed with special vigour: certainly, it would be hard to think of professors in the faculties of the centre or the north-west of France — at Clermont-Ferrand, Poitiers or Rennes, for example — who would bear comparison with the undisputed "stars" who sustain Nye's case for each of her five centres.

By digressing liberally on the work of individuals, rather than attempting a comprehensive prosopography, Nye allows the content of the science she treats to come to the foreground, where it belongs. Not all the science has stood the test of time, to be sure: René Blondlot's false discovery of a new radiation — N-rays — in 1903 is a case in point. But by the time

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REASONS

*Victor Grignard (left) and Paul Sabatier refused the call to Paris*

Victor Grignard (of Lyons and then Nancy) and Paul Sabatier (of Toulouse) shared the Nobel prize for chemistry in 1912, the provincial faculties of science had to be taken seriously, the more so as certain professors (including Grignard and Sabatier) ostentatiously refused the call to a Parisian chair. Their resistance was understandable: good facilities, local adulation and a sense of contributing to the regional economy were the rewards on offer and, for about 20 years from 1900, they sufficed to reduce the flow of talent to the capital. In the longer run, however, what seems to have been the natural order of things reasserted itself. By the 1930s, the provincial faculties had become once again the poor relations of a cripplingly impoverished university system, and even Grignard had lost his old assertiveness and hope that the imbalance between Paris

and the provinces might be removed.

Nye's discussion of Grignard adds poignancy to the story of a valiant but doomed campaign for diversity. It is a story well worth telling and with some bearing on present educational debates not only in France but also in Britain. It suggests, at least to a reader of gloomy disposition, that although centres of excellence can be fashioned on the margins of the traditional academic world, they are intrinsically fragile creations condemned to a thorny path and, in all probability, an ephemeral existence. □

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## Stones in the service of society

D. V. Ager

**The Stones of Britain: Landscapes and Monuments, Quarries and Cathedrals.** By Richard Muir. *Michael Joseph*: 1968. Pp.288. £15.95.

WHEN we were in the United States and our daughter was only one year old, she greatly impressed the locals by referring to the erratic blocks of the glaciated Mid-West as "rocks" rather than "stones". That came of growing up in a geological family. Geologists do not study "stones" unless they be of the "precious" or "semi-precious" variety. The only other exception is building "stones", which are the main subject of Richard Muir's book.

Muir is a geographer and tells us right at the beginning that he is not writing about geology because "geology is a technical

subject". So this is a book for the architect and the aesthete rather than the scientist. It is a book about man in Britain using the rocks beneath his feet, first for implements, then for monuments and finally for buildings.

The first part deals with "stone" in the landscape. This Muir divides into three: "Hard Rock Landscapes", which means chiefly the granites of Cornwall and the Ordovician volcanics of the Lake District; "Sandstone Scenery", which curiously includes the brick-making clay-pits; and "Landscapes of Limestone", which includes the chalk but hardly the flints which that lithology contains.

Flints come into their own in the next part of the book, on the use of stone by prehistoric communities. Here are accounts of stone tools (which, it is worth recalling, served man for nearly 99 per cent of his history and of which there is a particularly good record in Britain), cave dwellings (somewhat inappropriately) and then the first stone huts, starting with Skara Brae in the Orkneys. I have a theory