

Preparation for a Rumpus

In the next few weeks *Nature* will publish a series of comments on the Dainton and Rothschild reports recently published in *A Framework for Government Research and Development*. The first is by Professor M. Swann, Principal and Vice-Chancellor of the University of Edinburgh.

THESE two reports make a fascinating contrast: Rothschild, on the one hand, wearing a loud check, thumps everybody and everything in sight and hurls around vulgar, academically disagreeable phrases like the "customer/contractor principle", in staccato fire. Dainton, on the other hand, in a well-cut, dark suit, analyses soberly and reasonably the troubles of a piece of the scientific establishment, in tones reminiscent of a professional man to his well-to-do client. No wonder there is going to be a rumpus.

In the light of the extensive leakages that have been seeping round the scientific world in recent months, I was certain that I was going to be a staunch Daintonite. Now that I have read the reports, and thought about them, albeit for not as long as I would like, I confess to thinking that the path of true wisdom for the well-being of science and society in Britain, lies somewhere midway between the two—perhaps even a little nearer Rothschild than Dainton. I don't expect this to be a popular point of view in academic circles.

One should not, of course, speak of the research councils in the plural. They vary enormously. NERC has been going for so short a time that one can only say it has made a good start with a difficult and diverse team. The ARC on the other hand, while it has indeed paid for itself many times over with Proctor Barley and other things, has been inviting trouble by failing in large measure to help and encourage agricultural and veterinary research in universities, and preferring to set up large specialist institutes which simply ask to be taken over by ministries. Ironically, Rothschild himself was once chairman of the ARC.

The real reputation of research councils rests on the achievements of the MRC and more recently the SRC. These are deeply impressive, and are envied and imitated the world over. These structures must not be dismantled. But (and having served on both councils, I know) their policies, by the very nature of their structure, are determined far more by the interests

and demands of academic research workers than by the needs of society. There is no harm and on the contrary much good in this. Scientists know where science is going, in a way that ministries and society do not. Research councils can, and do, present society with benefits that no customer would ever have thought to ask for from his contractor.

It does mean, however, that research councils, concerned, as laid down in their charters and as their structures ensure, to support research of timeliness and promise, find great difficulty in stimulating work that meets some immediate social need but fails to attract good research workers. As an example, years ago, when I was on the MRC, some of us were concerned to stimulate more dental research (then, as now, slender), on the grounds that dental treatment cost the nation some hundreds of millions of pounds. We failed, I fear, to make any impact on the problem, and I am not aware that our successors have been markedly more successful. Given the research council structure, these are intractable problems not to be solved simply by the optimistic policy-making of a restructured Council for Scientific Policy.

Turning to Rothschild, I think it is unfortunate that he has put forward his proposals at a time of financial stringency and that he has put all his emphasis on the customer/contractor relationship, which I believe to be, in reality, the secondary consequence of a much more fundamental and acceptable reform that he proposes.

Had times been less hard, so that he could have left the research council budgets intact, I doubt if the academic/research council world would have objected to what he proposes. On the grounds that it would have meant more science, and more power for scientists, they would probably have welcomed it. It is not his fault that things have turned out otherwise. We have to accept at this moment a total science budget that is all but static.

My second criticism, however, is Rothschild's fault—in his presentation. I believe that his real contribution is to

propose a structure, spreading through most if not all the departments of government, that builds in scientists, not in some pallid backroom advisory capacity, but in positions of influence.

This cannot be achieved, however, unless the departmental scientists can themselves call for research that will solve the departmental problems. And this in turn implies something like the customer/contractor relationship.

In another way, if we adhere too closely and universally to a research council structure that was expressly (and for good reason) designed to keep science and the scientists detached from the governmental structure, we can hardly be surprised that the governmental structure remains detached from the scientists. Rothschild wants to alter this, and he is right. But we must see that the civil servants do not, wittingly or unwittingly, torpedo his good intentions. Then we should have the worst of every world.

While I accept that some transference of research council budgets to ministries is essential, in a time of financial stringency I am concerned that the transfers should not be such as to shatter the research council structure, which undoubtedly, is far too valuable to lose. Moreover, if it is right that there be a 10 per cent surcharge on contracts for basic work, as I am sure it is, then it is surely also right that research councils be encouraged and allowed to do applied work on their own initiative. They may, after all, see the problems more clearly, and commission the work more skilfully themselves. I suggest, therefore, that the transition be decidedly more cautious, and initially smaller than Rothschild allows.

To sum up, I can do no better than say that the Green Paper recalls vividly the days when I and others, before our paths diverged, used to collaborate in research with Rothschild, on the mechanisms of fertilization in the sea-urchin egg. This was a hilarious business, conducted in marine biological stations around the world, and involving much noisy argument. It resulted in quite a lot of joint scientific papers. Sometimes one of us wrote the first draft and sometimes Rothschild did, in a style indistinguishable from his current report (doubters may care to look at his book on fertilization). In the latter event, even more noisy argument was needed to convert his first draft into a smooth acceptable manuscript. But we liked to think that the end results were good. And so perhaps they could be on this occasion.