Problems of Scarcity and Pollution

In the first flush of enthusiasm for measures to control the pollution of the environment two years ago, the then British government asked the previously defunct Central Advisory Water Committee to make a study of the ways in which water resources should be conserved and, sometimes, magnified. The result, a report on the subject published last week (HMSO, £0.70), is an interesting illustration of how the management of water resources in Britain, including the control of pollution, turns out to be not so much technical as administrative and legal. To be sure, this discovery is not an immense surprise, for it has been clear from the start that the best assurance that the environment will be free from gross pollution is to have regulations which prevent the feckless from playing havoc with their surroundings. In all the excitement in the United States about the banishment of water pollution as well as in the ringing declarations on the subject such as that by President Nixon a year ago, it seems usually to be convenient to overlook the way in which the dirty rivers of America are a consequence not of industrial activity but of the failure of state legislatures to impose sensible control on municipalities and the failure of the federal government to insist that states should have sensible legislation for this purpose. In Britain, by what seems to be pure luck, the management of water resources and the control of water treatment suffer not so much from too little regulation as from too much. What the committee has discovered is what everybody knew before it began its work-that responsibility is unreasonably divided among organizations with conflicting or at least orthogonal interests.

But where is the balance to be struck between central and local government? The committee is entirely right to say that this is the crucial issue to be decided. Under the scheme which the committee would like the government to devise, something like a dozen regional water authorities would be responsible for the whole forward planning of water resources in Britain. They would, for example, assume the present function of the river boards in licensing the exploitation of natural water. They would also, under the new regime, be responsible for coordinating the plans of local authorities for new sewage treatment plants. The chances are that they would frequently wish to impose some wider plan on the intentions of individual local authorities, and they would have logic on their side.

So does technology have no part to play? One of the most striking passages in the report is that which demonstrates that the annual expenditure on new sewers and sewage treatment plant exceeds £150 million a year, and that the pace of growth of this expenditure has increased steadily for a decade. The committee has understandably been concerned with the anomalies in the present arrangements for administering water resources, but it might well have asked the question whether the present arrangements are as economical as they should be. Is it economic sense that small treatment plants should spring up on the outskirts of every township? Has the linear programming to discover where best to site treatment plants in an integrated network been begun? Is it not high time that the case for an integrated system of water resources should be based not merely on the qualitative common sense of the water committee's report but also on a calculation, yet to be attempted, of how much money could be saved by proper planning?

In Britain, the most glaring anomaly is that a scarcity of usable water can coexist with a climate so wet and damp that tourists are frightened off. The annual drought in Manchester has almost ceased to make the front pages of the newspapers. Another question neglected by the water committee is that of whether the time has not come for Britain to abandon the notion that water should be supplied to those who use it at a price which is for practical purposes, independent of the quantity consumed. In all but a few parts of the country, domestic consumers pay an annual charge calculated from the size of their house and not their consumption of water. These are the pricing policies of plenty. This, for example, is how charges should be made for telecommunications now that the cost of providing them has fallen and when many earlier limitations of the capacity which the system could provide have been eroded. With water, the trend is towards scarcity, not plenty. The proper response of water authorities is to ask that people pay for what they use.

100 Years Ago



Pangenesis

I do not much complain of having been sent on a faise quest by ambigaous language, for I know how conscientious Mr. Darwin is in all he writes, how difficult it is to put thoughts into accurate speech, and, again, how words have conveyed false impressions on the simplest matters from the earliest times. Nay, even in that idyllic scene which Mr. Darwin has sketched of the first invention of language, awkward blunders must of necessity have often occurred. I refer to the passage in which he supposes some unusually wise, ape-like animal to have first thought of imitating the growl of a beast of prey so as to indicate to his fellow monkeys the nature of expected danger. For my part, I feel as if I had just been assisting at such a scene. As if, having heard my trusted leader utter a cry, not particularly well articulated, but to my ears more like that of a hyena than any other animal, and seeing none of my companions stir a step, I had, like a loyal member of the flock, dasheddown a path of which I had happily caught sight, into the plain below, followed by the approving nods and kindly grunts of my wise and most-respected chief. And I now feel, after returning from my hard expedition, full of information that the suspected danger was a mistake, for there was no sign of a byena anywhere in the neighbourhood. I am given to understand for the first time that my leader's cry had no reference to a hyena down in the plain, but to a leopard somewhere up in the trees; his throat had been a little out of order --that was all. Well, my labour has not been in vain ; it is something to have established the fact that there are no hyenas in the plain, and I think I see my way to a good position for a look out for leopards among the branches of the trees. In the meantime, *Vive* Pangenesis. FRANCIS GALTON

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