

heeled silver or red lacquer shoes; a suggestion of sin that in this age of the sexual revolution has lost its meaning.

After 75,000 miles of travel Woodcock's diary must be a treasure-house. His publisher should persuade him to prepare a not-too-heavily edited version of it. And to come to Toronto!

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Continental Waterboy: The Columbia River Controversy, by Donald Waterfield. Toronto, Clarke Irwin & Co. Ltd., 1970. pp. 250. *Illus.* \$7.95.

Making comprehensive "water resource" development decisions which are in any sense "optimal" is notoriously difficult. The number of varied uses to which water and land may be put is considerable, often they are in conflict, and the public weighing of them changes over time. Some of the most significant values are intangible. A highly sophisticated analytical methodology has emerged during the last three decades to assist with the problem of choice here, but as Charles Schultze points out, paradoxically it is in just such fields as this one, where the efficiency partisan appears to have so much to offer, that the interplay of political forces limits most sharply its application. Construction costs for this type of development are hard to determine accurately, and frequently are so great as to make decisions, when taken, financially and politically (as well as ecologically), irreversible. Furthermore, quite unpredictable technological change suffuses the entire exercise with an additional and disturbing degree of uncertainty.

For these reasons, and others, the reworking of our past efforts in this field and the attempt to profit from perceived mistakes are highly desirable; hence one must welcome Mr. Waterfield's book. He writes gracefully and has a happy knack of putting the technically complex into basic English, and of interlacing the whole with a refreshing if, on occasions, cutting wit. He also is adept at evoking images of the beautiful Arrow Lakes country in which he lives, and argues well that we should be sensitive, nay hypersensitive, to the personal costs of social disruption, and extraordinarily loath to eliminate the beautiful in the natural environment. Few will disagree with his claim that if we have to consider such actions, we should take into account in our benefit-cost analyses all of the

costs or opportunities foregone in what we propose. Mr. Waterfield's writing has merit in another sense, for it is very much in the tradition of the Hopkins Morehouse classic *Deep Furrows* as it seeks to put on record the story of yet another protest movement in action at the Canadian grassroots level. His concern here is with the manner in which a group of Columbia Valley residents (of whom he was the leader) unsuccessfully sought to prevent the building of the High Arrow Dam under the terms of the Columbia River Treaty. And his account is replete with copies of letters, reports of meetings, extracts from and comments on evidence presented at public hearings, and sundry information concerning the recruitment of technical support to the protestors' cause. All this is valuable, for without an appreciation of perceptions held, as Harold Lasswell once fairly observed, we are not far along with our understanding of the political process.

Unfortunately, in an environment wherein so much introductory analysis and ultimate decision making is not subject to continuous public scrutiny, our perceptions differ, both as to what is desirable (which is inevitable) and what is possible. "Facts" themselves additionally may become the subject of extensive debate, and it is here that Mr. Waterfield gets himself into trouble. For he not only chronicles his own and his associates' views of the Columbia River Treaty's conception, painful gestation, and final delivery, but throughout his book he seeks to provide a running critique of the Treaty itself. Without having had access to the record of the international negotiations (which, to be fair, have not been released), or to many of the studies of the Canadian governments concerned, he advances interpretations of the Treaty and its emergence which are open to serious challenge.

For instance, with the hero of his piece, General McNaughton, he really does seem to believe that under the Treaty we were robbed of part of a downstream power and flood control benefit rightfully ours, that under the Treaty we lost a significant right to regulate Columbia River flows, and that the Treaty Protocol signed in 1964 somehow is not binding on the United States. He asserts that we gave away the Kootenay's water, and appears to believe that obtaining a vested interest in it (and an ultimate right to divert it for consumptive use) may well have been the major American objective in the Treaty negotiations. Thus he takes seriously the NAWAPA diversion scheme outlined by the Parsons Company of Los Angeles in 1964, and sees it as a direct concomitant of the Columbia Treaty bargain. Above all, he is puzzled by Mr. Pearson's decision not to renegotiate the entire arrangement in 1963, and asserts

that the new Liberal Government's action may have been the result of a threatened interruption of American imports of Canadian forest products.

A careful, and, hopefully a dispassionate review of the Treaty and of many of the working files and documents on this question just does not bear out claims of the sort in the preceding paragraph. Mr. Waterfield misses the point completely, for example, when he refers to the Treaty's exclusion of a block of high grade secondary energy from the quantum of downstream power benefits (p. 55); he misses also the real significance of using a ten year longer period of stream flow in calculating the Canadian downstream power benefit (p. 146). For the record, General McNaughton did not initiate the downstream benefits claim (although he was a powerful advocate of it), and the Government of British Columbia never really accepted the General's Dorr diversion plan. The province made its concern over this latter proposal and its support for the High Arrow Dam known to the Government of Canada before the negotiations with the United States began in 1960. Furthermore, it is not at all clear that the right of the upstream state to divert, as enshrined in Article II of the Boundary Waters Treaty, really was the Canadian trump card which the General so often held it to be in the long bargaining exchanges.

General McNaughton's engineering and economic analyses were far from infallible — as Mr. Waterfield concedes at one point. Indeed, the General bears not a little responsibility, in his distortion of the role of the International Joint Commission, and in the pressure he exerted on the Government of Canada, for a good many rigidities in the process by which the ultimate international agreement was reached — and, what is worse, by which it might have been amended. The record does not justify the General's belief that the Americans, tough though they were, would not strike and keep a fair bargain. Implications of this sort detract from rather than add to Mr. Waterfield's argument, as they did to General McNaughton's. The Pearson administration, by the way, received a very comprehensive and candid briefing from its technical advisors when it came to office in 1963, and was made very well aware of the extent to which post-1960 developments (such as the decision to go ahead with the Peace River project and the Pacific Northwest-Southwest Intertie) had reversed some fundamental assumptions on the basis of which the Treaty had been negotiated in 1960. In one of those tough decisions which cannot be avoided in public or in private life, it did carefully assess the benefits likely to stem from a complete renegotiation, and simply concluded that, in power economics terms alone, the likelihood was too great that these gains would be more than offset by certain losses.

One must be fair to Mr. Waterfield. Although from his title to his concluding paragraphs 232 pages later he portrays the Columbia River Treaty as an exercise in improvidence from Canada's point of view, and this is the overwhelming impression which he leaves with the casual reader, he does concede toward the end of his manuscript (on pages 191-193) that there are very valid technical answers to many of the criticisms which were directed against the Treaty after 1960. On page 149 he does agree that Canada was credited initially with a fair half share of the downstream benefit, and on page 198 he tells us that the Treaty's project selection did make engineering-economic sense in 1960, if not, in his opinion, in 1964. My quarrel with him is that he hurries on from these observations without really considering their implications. He thus does not provide an objective assessment — although again, in fairness, it must be conceded that he does not claim to.

Is this to say that Mr. Waterfield adds nothing to what we can learn from reviewing this policy determination? Certainly not; he makes some good points. Not unreasonably, he draws attention to the large overrun in Arrow Dam construction costs which he and his associates predicted in 1961. The need to be ultra careful and pessimistic about cost estimates can hardly be rubbed in too vigorously, limited though our foresight necessarily is. He makes legitimate capital out of some apparent waste in the cost of preparing the Arrow Dam reservoir. Not unreasonably (e.g. on page 149), he draws attention to a misleading generalization widely used in 1964, to support the Treaty Protocol. He is correct in his argument that the costs of hydro-electric projects properly should take into account income foregone from resources immobilized by them. (He does not reveal, however, that potential stumpage revenue from the areas flooded by the Treaty dams were capitalized and made part of project planning costs.) He is on firm ground when he draws attention to the Canadian idiosyncrasy whereby we so often debate the goals of public policy after rather than before the act of decision.

Actually Mr. Waterfield overlooks many of the most crucial lessons to be learned from this experience. Few Canadians are aware of the irrationality of so many of the claims advanced on behalf of, as well as against the Columbia River Treaty, as they compared the incomparable, or left unclarified the assumptions on which they were based. One way or another, if public and legislative exchanges on issues of this sort are to have any validity at all, in similar situations in future we shall have to get more reliable data into public hands sooner. Additionally, when

issues are so complex as to defy reasonable public evaluation in any case, it is possible that we should be thinking of a technical ombudsman with the competence and acknowledged objectivity required to review the analyses underlying official and countervailing positions.

In the water resource field there is a very strong case for keeping options open just as long as possible. If the Columbia River Treaty were needed at all (and there is room to doubt it, although this is debatable), a strong case can be made in retrospect for the proposition that a much more generalized agreement would have been advantageous. Again, while a very considerable justification can be advanced for the concept of sharing jurisdiction over policy fields, and for the impetus which the ensuing rivalry and bargaining may give to sharpening analysis, there is another side to this coin, as Dr. Corry reminded us a generation ago. The Federal Government was properly concerned with the Columbia as a trans-boundary river. But real questions can be raised about the extent to which, a decade ago and more, it seemed to move heavily beyond a facilitative data collection and analysis role, which it handled very well, to a more direct involvement with British Columbia's power development planning. There is a fundamental wisdom to the division of authority in federal states which we forget at our peril.

Mr. Waterfield quite properly suggests that British Columbians who fail to take Mr. Bennett seriously do so at their peril. A crucial dimension to this story which Mr. Waterfield does not expand on is the fact that so few Canadians in or out of government really did pay heed to this province's premier when, between 1958 and 1960, he so constantly reiterated that he wanted both the Peace and Columbia developed, and without the one would not have the other. Few stopped during these crucially formative years to consider whether or not the shibboleth concerning power exports, on the basis of which his claims were so largely discounter, had real validity any longer. Few seem to have faced up to the technical implications of concurrent river development at this time. On the other hand, Mr. Bennett, his colleagues, staff advisors, consulting engineers and the public at large all had something to learn a decade ago about the development of and the interrelationships between hydraulic resources on major rivers. Perhaps the most important lesson of those to be derived from this experience is that, within the competent jurisdiction, early in the formation of complex policy, we should put more time on trying to clarify our objectives and assumptions, and on testing the logic by which conclusions are derived from them — difficult and

limited though this exercise may be. At the same time, it may be the counsel of perfection to suggest that our leaders ought to be absolutely candid with each other, but they ought to be. Perhaps even more important, they ought to be completely candid with themselves.

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