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Reply*

John Quiggin[†]

The conclusion of Jonathan Pincus' comment, 'the search for simple but invariably efficiency-improving policy rules, as well as the search for perfect assignments of unchangeable property rights, are quests for chimeras' (p. 625) is one which aspiring policy economists would do well to commit to memory. Pincus' conclusion is applicable, not only to the complex environmental problems of the Murray–Darling basin, but to the great majority of real-world policy problems.

Rather than attempt a response to all the points raised by Pincus, I would like to respond to the points he makes about my discussion of unilateral and reciprocal externalities. As Pincus observes, following Coase, externalities may be unilateral in a physical sense, but the social interactions they generate are inevitably bilateral or multilateral. Salt may flow exclusively downstream, from irrigators in New South Wales and Victoria to domestic water users in Adelaide, but the existence of South Australian water users with constitutional entitlements to water flow affects the management of catchments in the upstream states.

It would be better, therefore, to distinguish between symmetrical and asymmetrical externalities. The classic example of a symmetrical externality is a traffic congestion problem. Each road user contributes to, and suffers from, congestion and all users are (approximately) symmetrical. Symmetry requires, in addition, that the set of users should be fixed so that there is no asymmetry between actual and potential users. In the ideal case of perfect symmetry, policy options that treat all users equally, and therefore maintain symmetry, can be ranked by the Pareto criterion. Either all users will be made better off, or they will be made worse off.

The classic example of such a policy solution is that of a Pigovian tax on road use, with the proceeds being distributed among users in a lump-sum fashion. In this special case, and in real-world problems for which it is a reasonable approximation, the Buchanan-Stubblebine critique referred to by

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Pincus is unlikely to be problematic. A symmetrical externality analysis is most likely to be applicable to policy problems in which the crucial variable is the total amount of water withdrawn from a given catchment. Water use has the same effect regardless of the water user, and the effects of price increases are, in many important respects, symmetrical.

By contrast, while it may be inappropriate to describe interactions between upstream and downstream water users, or the relationship between recharge and discharge areas in dry land salinity as 'unilateral', they are clearly asymmetrical. In such cases, Pareto-improving policy options will be particularly difficult to find.