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Valuing the Environment

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Overall this book offers a useful introduction to philosophical debates surrounding the control of long-term environmental externalities. The author seems familiar with a wide range of literature, although citations are sparse, e.g., mentioning the non-identity

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problem without Parfit. The minimal references limit the usefulness to an academic audience, as does the lack of depth on several issues. In terms of style, I found the use of quotes rather excessive in chapter 1, the language was at times circuitous, and there was some unnecessary repetition of argument. However, the clear but brief exposition of key issues make this a suitable accompanying text for teaching, or an introduction for the general public. Something to note is the misleading title: the text is concerned with developing rules to aid decision-making in the face of environmental externalities rather than with environmental valuation *per se*.

The central question being asked is: what is the appropriate action in the face of environmental problems which have the potential to cause catastrophic damages, mostly for the as yet unborn, but the control of which implies very high costs now? Such problems are referred to by the author as 'environmental dilemmas' and are familiar to economists as intergenerational externalities. The author sees these environmental externalities as problematic because of a paucity of information on the cause-effect relationships, which means that any action has uncertain consequences. The solution offered is to adopt a range of decision-rules that recognise the importance of protecting subsistence needs above all else. The development of these decision-rules relies upon a process in which knowledge is 'diagnosed' to obtain 'justified beliefs' (p.ix).

A case study of the enhanced greenhouse effect takes up the first 33 pages, although this is then largely ignored until the last 3 pages. However, despite this lack of integration, the chapter successfully sets out the issues surrounding the role of scientists and scientific information in decision-making. Controversy over the enhanced greenhouse effect is seen to depend upon four questions: is the temperature data correct; is global warming the best explanation of temperature trends; are global circulation models helpful; is the outcome of global warming necessarily bad for humanity? Relevant answers, we are informed, must come from theories which are judged (somehow) to be internally valid, and then either a majority opinion rule is used (trust the majority) or a sceptical decision-rule applied, by which all theories are seen as equally valid, even if only held by one person (trust nobody). In order to circumvent the problem of deciding between these two rules the author offers a pragmatic approach, which apparently requires appraisal of each controversy by self reflection. The conclusions related to the greenhouse effect questions are that: the data is the best we have so trust it; the explanation of trends requires GCMs: GCMs have more in their favour than against as explanations of the atmosphere so trust the majority of scientist who support them; and that socio-economic implications are incoherent so take all predictions equally seriously. Thus, the trust the majority rule is employed where the author believes coherent but distinct theories are in competition, and the trust nobody rule where all is seen as conjecture.

While the outcome is that concern should be shown for the potential impacts of the enhanced greenhouse effect the role of these decision-rules is unclear. The author started from an admission that 'my knowledge of existing research in this field is scant' (p.2), which implies he is ill-qualified to draw conclusions on the greenhouse effect. However, the application of decision-rules is far from easily separated from the depth of knowledge about the subject at hand; knowledge will be key to deciding when a theory is coherent and whether alternatives are equally valid. So the adoption of pragmatism seems to offer little comfort in terms of resolving the conflict between greenhouse activists and sceptics.

Once having argued that we should be concerned over problems, such as the enhanced greenhouse effect, a far more abstract and philosophical discussion follows. The aim, over the following four chapters, is to show why certain needs are more important than other

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needs and all desires, what to do when the outcome of an action is uncertain but threatens prioritised needs and/or desires, and how to decide whether discrimination against the future is morally valid. First 'vital needs' are identified as a superior concern because 'of how much, objectively speaking, their fulfilment matters' (p34). In contrast, self-expression and aesthetic enjoyment are deemed lower normative considerations because their loss fails to kill or cause illness. As a result 'vital needs enjoy a lexical priority' (p46). The remainder of the book is then conducted in terms of threats to these needs.

Resolving conflicts between rights is a common criticism of deontology. Here the author appeals to a maximin criterion where worst outcomes are to be avoided regardless of associated risk. This implies measuring worst; an issue circumvented by only discussing death and assuming all deaths are of equal weight. Such a comparison of outcomes, involving numbers of equally weighted lives, is the same as a utilitarian approach where all individuals are assumed to have identical utility functions. Thus, difficult issues of the appropriate action to take when trade-offs are required between different types of needs and rights (e.g., mortality versus mutilation) are avoided. So, a basically consequentialist approach is followed, weighing up various outcomes, and this leads towards utilitarianism which is in stark contrast to the arguments made for the protection of vital needs. The possibility of avoiding the trade-off is ignored.

Recognition that an action can remove some needs with certainty while only threatening others leads to a discussion of how risk should be included in the decision-rule. Early on the world is described as having 'true risk' as opposed to 'spurious risk' (p.1), and a concern is expressed for 'ordinal probability estimates' which allow us to rank alternative outcomes by associated risk (p.18). The search would then seem to be for the truth about cause-effect relationships with the aim being to achieve a view on environmental management, which presumably all truth seekers, such as the author, would have to agree upon. That is, there is a presumption in the arguments presented that an objective truth exists but that it may be difficult to identify and this leads to a dependence upon 'realism'. This realism results in much back-tracking, thus even vital needs may be traded-off for desires if the risk to needs is small and the potential gain in welfare is large (p.47).

Three types of uncertainty are presented: objective probabilities, frequency based; theoretical probabilities, model based; and subjective probabilities which are rejected as irrelevant to 'rational decision making' (p.60). Ignorance appears but the term is used confusingly both in reference to risk and, its common meaning, as lack of available information. Total absence of knowledge with the potential for surprise is dismissed as uncommon (p.63). Very strangely, the microeconomic basis of expected utility theory is accepted without question (p.59), despite the fact that the concept of vital needs, at the heart of the book, contradicts the axiom of continuity and so is a rejection of this theory. Also, this acceptance of utilitarianism conflicts with the arguments for its rejection when making trade-offs between desires, where constitutional rights are called upon (pp71-76).

An underlying problem I find with this book is the continual appeal to a vague notion of realism, which is used to circumvent the expansion on important points and to withdraw from a position which has just been argued. For example, egalitarianism in species terms is rejected as irrelevant to a theory of value informing environmental policy (tell that to Sea Shepherd, the Animal Liberation Front and the protesters in the trees fighting to stop road developments); apparently such egalitarianism is too demanding (p.120). Yet the preceding chapter called for such egalitarianism (if qualified) in the case of future generations; where we were told 'The crucial thing is to cultivate moral virtues'.

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The various camps of thought are indeed clearly set out and succinctly summarised. although, the space given to developing arguments and justifications for positions taken is inadequate. There is a repetitive tendency to fall back on 'realism' as the reason why certain positions are untenable, although the author seems to be aware of the limits this places on the potential for human development. What he appears to be unaware of is that his reality is culturally and personally defined rather than being a universal truth.

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