LANCASTER
UNIVERSITY

Department of Philosophy

THE THINGMOUNT WORKING PAPER SERIES ON
THE PHILOSOPHY OF CONSERVATION

# FOUR ESSAYS ON ECOLOGICAL ECONOMICS

by

Alan HOLLAND with Jeremy ROXBEE COX

TWP 96-09

**Essay 3**

**The Assumptions of Cost-Benefit Analysis – A Philosopher's View**

**Alan Holland**

BANC
British Association of
Nature Conservationists

ISSN: 1362 - 7066 (Print)
ISSN: 1474 - 256X (On-line)

## ACKNOWLEDGEMENTS:

"The Valuing of environmental goods: A modest proposal" first appeared in *Valuing the Environment* eds. A. Coker and C. Richards (Belhaven Press, London, 1992) and is reproduced with the permission of the Rood Hazard Research Centre at Middlesex University.



"Natural Capital" first appeared in *Philosophy and the Natural Environment* eds R. Attfield & A. Belsey (Cambridge University Press, Cambridge, 1994) and is reproduced with the permission of The Royal Institute of Philosophy.



"The Assumptions of Cost-Benefit Analysis: A Philosopher's View" first appeared in *Environmental Valuation: New Perspectives* ed. K. W. Willis & J. T. Corkindale, CAB International, WalIingford, 1995) and is reproduced with the permission of the publishers.



"Getting the Measure of Sustainability" is forthcoming in *Environmental Valuation and Public Policy* ed. P. Lowe.

# Essay 3

# The Assumptions of Cost-Benefit Analysis – A Philosopher's View

**Alan Holland**

# "The Assumptions of Cost-Benefit Analysis – A Philosopher's View " [1]

**by**

**Alan Holland**

**Abstract**

This critique focuses on some of the framework assumptions which are implicit in cost-benefit analysis as it is currently practised and applied in environmental contexts, involving (a) its concept of the environment, (b) its picture of human nature and (c) its role in the social/political process. Central to its concept of the environment is the 'itemising' of environmental goods; central to its picture of human nature is the 'homogenising' of preferences; central to its role in the political process is the 'privatising' of judgement. Each of these aspects is discussed and criticised in turn. It is shown how each may tend to frustrate rather than promote the objectives which many practitioners of environmental economics hope to achieve. Nature is misrepresented, it is suggested, by being itemised, and human nature by being homogenised. Moreover, the privacy of the cost-benefit exercise truncates people's political aspirations. The conclusion suggests that more imaginative uses of the cost-benefit exercise might help to remedy the situation.

Keywords: cost-benefit; itemise; homogenise; privatise; preference

## *Queer questions*

Some things in our lives matter to us more than others; some things are particularly precious and have a particular significance. For a longstanding member of the Church of England, for example, it may matter very much whether women are to be made eligible to be ordained as priests. For a person with a longstanding lover of the countryside, it may matter very much whether a new road is to be built through a tract of ancient forest.

In the environmental case, the practice has grown up of approaching such questions by pretending that the situation is akin to that of a market, where the continued existence of the forest is regarded as a good which we must purchase. I refer, of course, to the procedure which economists know as contingent valuation. According to this procedure, how much the forest matters to us is established by asking how much we would be prepared to pay to secure the continuance of this good. An example of the procedure can be found in a recent paper discussing the viewing value of elephants. An average 'willingness to pay' (WTP) of $89 was elicited from those asked how much they would pay to help ensure that the population of

---

[1] Both the conception and the development of the themes of this paper owe a great deal to the discussions of the Environmental Economics Research group at Lancaster University, held under the auspices of the Philosophy Department and the Centre for the Study of Environmental Change. I am most grateful to the members of this group for their support.

African elephants was maintained at current levels (Gardner Brown, 1993, 152-154).[2]

It is worth asking how a similar approach would work for the religious issue or, say, for an issue such as hanging. I guess that economists might consider these issues as raising a question about what they call 'existence value', by which they mean the value that we attach to the fact that something exists, irrespective of any actual or potential use we may make of it. So the equivalent questions would, I suppose, be these: 'how much would you pay to secure the ordination of women priests/have the Church of England maintain its all-male priesthood?' or 'how much would you pay to see hanging retained/abolished?' Now, looked at dispassionately, it has to be said both that these are very queer questions, and that this seems to be a very queer way of dealing with issues of this kind. One would expect there to be debate, with appropriate considerations being adduced and weighed. And except for the fact that we may be starting to become acclimatised to such questions, one suspects that, from a dispassionate point of view, the question and the manner of dealing with the issue are just as queer in the environmental case too. One reason for such a reaction would no doubt be the fact that the issue of women priests, or of hanging, is regarded as an issue of principle. And to be asked to trade one's principles, even hypothetically, is likely to seem inappropriate and even morally disreputable.[3] Yet the environmental case may equally be viewed as raising issues of principle - about cultural identity, for example, or rights - and therefore as giving rise to exactly the same grounds for disquiet. At any rate it feels more like the religious or moral issue than it does the street market transaction. Before proceeding to explore the grounds for this disquiet further, I shall first offer a very rapid resume of how the demand for environmental valuation has arisen.

## *How has it come to this?*

Our environmental sensibilities have come a long way since Daniel Defoe commented on the desolation and "inhospitable terror" which he experienced when travelling through the area of England known locally as the 'three peaks', now part of the Yorkshire Dales National Park and judged an area of outstanding natural beauty (Defoe, 269). In fact, he expressed a distinct preference for the cheerful productiveness of the Yorkshire mill town of Halifax. In time, however, this cheerful productiveness (the industrial revolution) got out of hand, and slowly spawned its own kind of desolation - a humanly induced kind. People then began to ask themselves how this situation had come about, and economists came up with the answer that it was because we had not taken proper account of the cost of things. We had imagined that 'the things which nature provides' were free when they were not. The next question was: how do we take proper account of 'the things which nature provides'? Economists came up with the answer that we must bring them into relation with the things we do know the cost of, such as a bag of sugar and other such commodities. So we make out that the things which nature provides are commodities. However, we cannot introduce many of these things into real

[2] Factored by the 250,000 to 300,000 people on safari each year, this helped to suggest a 'viewing value' for elephants of around $25 million.

[3] In the case of accepting payment to give up one's principles this is fairly obvious. But the idea that willingness to pay is a measure of how much something matters to us is in general somewhat suspect. In the sphere of parent/child relations, for example, we might reflect that paying out large sums of' money is precisely not the way for a parent to demonstrate how much their child matters to them.

markets; therefore we make extrapolations from real markets w here we can, using indicators such as travel costs and differential property prices. Where we cannot - the ozone layer, biodiversity, the species of elephants - we create the idea of a hypothetical market, and ask people what they would pay, if there was a market and they had to, for such a thing as the maintenance of the current elephant population. How much we are willing to pay is supposed to reflect the strength of our preferences; and social welfare is supposed to be optimised to the extent that our preferences are satisfied. Hence, if everyone pays the cost of the things which nature provides, as measured by their willingness to pay, we achieve the most efficient allocation of resources and thereby, it is assumed, an optimum of social welfare. The whole situation has come about through imprudent accounting: the solution, therefore – prudent accounting – is obvious.

Two questions arise:

**I** The first is: what is involved in the project of making the value of the things which nature provides commensurable with commodities which are bought and sold ?

**II** The second is: how likely is it that this procedure will help to resolve the problems it is designed to address?

## I

Among the leading features of the project as it is currently concei ved, three in particular deserve to be singled out:

- the itemising of environmental goods. Just as marketed goods have to be itemised, wrapped and packed for consumption, so too must the goods which nature provides. The sea (bits of it, at any rate) must be packaged as 'bathing water', or elephants (glimpses of them, at any rate) as items for viewing - 'spectacles', and so forth.

- the homogenising of value. The value of marketed goods is measured in terms of money. Because of this common measure the value of any such good can be compared with that of any other. If the value of environmental goods is to be brought into relation with that of marketed goods, then the same has to be true of them also. But not only must their value be comparable with that of any other environmental good; it must also be comparable with that of any marketed good.

- the privatising of decision-making. What transpires at the checkout between the consumer and the person at the cash desk is a very private affair. The contents of the trolley are the issue of the consumer's own individual choices. So too, w hat transpires between you and the person conducting the cost benefit survey is a private affair. The question is what you and you alone would pay to view the elephants. There is even a virtue made of this privacy - that it issues in unadulterated choices.

Each of these three elements would appear to be features of cost-benefit analysis (CBA) as it is currently practised. The question arises whether they are in principle essential to the project. This would certainly seem to be true of the first two. One cannot buy and sell what is not in some way itemised. And one cannot tell the cost of what nature provides without a measure which relates these items to others which are already costed. It is not so obvious, however, that the third element is essential; for it would seem to be contingent upon some theory of what constitutes an adequate basis for democratic policy-making. All three elements are, however, equally prob1ematic.

## II

Our consideration of the effectiveness of cost benefit analysis applied to the environmental context

will be conducted by looking at each of the elements identified above in turn.

### Itemising

**1.** One might say of the goods which are the usual subjects of market transaction that they are by and large fit to be itemised i.e. that they are by their nature suitable for itemising. The reason is that most goods which are bought and sold in actual markets are artefacts. Those which are not artefacts are natural or semi-natural items which are artificially circumscribed in some way, by being categorised as, for example, a flower, a vegetable or a plot of land. Artefacts are fit to be itemised because they have a function. A screw or a nail is an item with a particular function; the only question is how many are needed for the particular job in hand. Although a plot of land does not have a function, it is artificially circumscribed to serve a particular purpose - to build a house on, for example. (And even if you buy it precisely to prevent its being built on, you still have to pay the price it will fetch as building land.) Similarly, the parts of a plant by which it nourishes or reproduces itself are sold as vegetables or flowers. The goods which nature provides, on the other hand, prior to being assigned a function, are not by their nature fit to be itemised - or at least not fitted to be itemised.[4] Indeed, the very description of them as 'goods which nature provides' already compromises their status. Buttercups and daisies, unlike nails and screws, are not anything. There is nothing which dictates what function they should have.

A corollary of this point is that these kinds of environmental goods can be assigned value, or lack of value, on any number of grounds. But since the price one puts on the value of a thing is presumably guided by the value one takes it to have, it becomes a crucial question how it is to be decided which value or values are appropriate in the case of natural goods. This in turn will be guided by how the natural items are identified and what functions they are assigned. In practice, such identifications are to a greater or lesser extent built in to the particular questions which the subjects of a CBA study are asked, and are therefore determined by those who devise the questions. So a prejudgement affecting the valuation of the natural good is already built in to what purports to be a procedure for the discovery of value. The significance of the results which are obtained using the procedure is therefore called into question in a quite fundamental way.

**2** The itemising of goods further assumes that they can be given a value independently of

[4] This is intended as a logical point, not as the moral objection which says that environmental goods ought not to be traded.

their context.[5] This is largely true of goods which are the normal subjects of trade, and is connected with the fact that they have a standard use. However, this assumption is a quite unreasonable one to make in the case of environmental goods. Consider, for example the quality of silence. In some contexts, it may be this very quality which makes a particular place special, a place of peace and tranquillity. In other contexts, this same quality may be disturbing, a source of unease - perhaps because it is an unnatural silence - and therefore detracts from the value of a place. Screws, on the other hand, make pretty well the same contribution to whatever structure they help to keep together.

In response to this point, economists can restrict their questions, and their interpretation of the validity of the answers, to a particular context. For example, they can focus upon the value of silence on Coniston Water - clearly a pertinent question if the discussion is about whether powerboats are to be allowed on the Water. However, this does not quite meet the point. The reason why the silence cannot be valued independently of context and why, therefore, the 'value' obtained cannot be extrapolated to another context is that the value of Coniston as it is is not the sum of the value of two things, the Water and its silence.

**3** The questionable status of the project of itemising the goods which nature provides may have some bearing on a problem which has arisen in the conduct of contingent valuation surveys: the so-called 'embedding effect' (Kahneman & Knetsch, 1992, 58). People are apt to declare themselves willing to pay almost as much to preserve a single elephant or rhinoceros as they would pay to preserve the whole of African wildlife. Or again, they declare themselves willing to pay almost as much to provide decent watering for 2,000 migratory birds as for 200,000 (Desvouges, 1993). Economists are puzzled by this phenomenon and have produced a variety of hypotheses to explain it. It has been suggested that those who give such responses are not rational, or have failed to understand the question; or that the question has not been clearly articulated (NOAA Panel, 1993). It has been suggested that the phenomenon is due to the operation of diminishing marginal utility: the satisfaction derived from helping 2,000 birds quickly palls as the number helped increases. The ingenious suggestion put forward by Kahneman and Knetsch (1992, 64) to explain this anomaly is that what respondents are hypothetically purchasing is not an environmental good at all, but simply the moral satisfaction they derive from contributing to a good cause. It is notable that what all these hypotheses have in common is that they impugn the wits and/or self - knowledge of those involved whilst leaving the credentials of the methodology intact.

A simple alternative explanation is available, however, which is that 2,000 migratory birds cannot sensibly be treated as an item subject to independent valuation and aggregation, and that what is at fault is not the rationality or self-knowledge of those questioned, but the assumptions and methodology which are built in to the cost-benefit exercise. Perhaps people simply do not see 2,000 migratory birds in the way they might see a pound of butter, so that l00 of these 'items' somehow has to compute and be regarded as 100 times more valuable. To reintroduce the analogies with which we began, let us suppose that someone declares themselves willing to pay a million pounds to ensure the ordination of women priests, but would also pay no more to ensure 20 being ordained than to ensure just one; or would pay no more to prevent 20 people being hanged than to prevent one. Should we question their rationality, or suggest the operation of diminishing marginal utility - so that once one has been ordained or hanged the increasing utility of subsequent ordinations or prevented hangings rapidly evaporates? Or should we suggest that they are not really interested in the

[5] Of course, they may have a different value to different people because of their different circumstances, but that is a separate point.

priesthood, or the fate of those w ho are hanged, but are out to secure their own moral comfort? At least as likely an explanation is that a single ordination, or a single hanging, is not viewed as an item subject to independent evaluation and aggregation. That way of measuring the importance and significance of these issues simply does not map onto the way it is perceived by those involved.

A lesson from this might be that more concerted attempts should be made to capture the integrated vision people often have of these issues rather than to refine the techniques based on an itemising procedure, which really does seem a lost labour. As the embedding phenomenon seems to show, people's responses are highly dependent on the way in which the issues are presented. Moreover, the difference made by how the issue is conceived and presented for evaluation quite outweighs any difference made by refining the results gained under any particular conception, introducing a radical uncertainty into any results which are gained. This source of uncertainty matches and compounds that which also arises from (a) the aggregation process itself, which will magnify any 'errors'[6], and (b) the choice of the population whose preferences are to count (Common et al., 1993309). All of these are problems which attend the itemising approach.

## Homogenising

**1.** One objection to making the value of the things which nature provides commensurable with commodities which are bought and sold, which at present has a certain 'currency', is that it effectively turns everything into money. Nature is not simply a supermarket, but a bank (wherein, presumably, natural capital is to be found). In response to this objection, economists insist that it simply rests on a conflation of the measure with what is measured, and that the use of money to calibrate people's preferences is an entirely contingent matter of convenience. Indeed, what seems to confirm this as a justified response is that one can well imagine another measure, such as time, being used to serve exactly the same function at present served by money. Instead of being asked how much money they would pay to help protect species, people would be asked how much time they would be willing to give up (their WTST – their willingness to spend time). This would actually have a number of advantages over the money measure. For example, not everyone has the same amount of money, and some WTP studies are said to be unreliable because of this. Everyone, however, lives through the same number of hours in a day. Moreover, there are said to be doubts about whether people respond to WTP unrealistically in relation to their available budget. In the case of the time measure, it would at least be clear if a person were doing without any sleep, or living a 75-hour day.

There still remains the objection to the monetary measure that, as John'O'Neill observes, acts of monetary evaluation have a very definite cultural significance (O'Neill, 1993, 118-20). Monetary transactions cannot be treated as if they take place in a social vacuum; unfavourable connotations cannot be ignored. It might be replied that, just as the use of this particular measure is contingent to the CBA exercise, so also is the cultural significance of money a contingent phenomenon, and therefore capable of modification: we could come to think differently about money. In other words, this objection to the use of the money measure cannot be regarded as revealing an inherent flaw in the CBA project. But what this reply

[6] Whether any procedure exists for the detection of 'errors' is a f~urther troublesome issue (Common et ale, 1993, 306).

shows is only that money could be divorced of a particular social meaning, not that it could be divorced of any; which means, at least, that its claim to 'neutrality' cannot be upheld.

Moreover, the claim that money is 'merely a measure' is, in a sense, too successful. Money is 'merely a measure' in ordinary markets as much as it is in hypothetical ones. This suggests that the 'monetary' objection to bringing environmental goods into the market place is partly aimed, not at the use of the monetary measure itself, but at what it signifies. What it signifies is transferability. In other words, we accept the idea of monetary exchange for items which are readily substitutable: one bag of sugar is much like another. To bring environmental goods into the market is effectively to pronounce them also substitutable; and this is an idea which meets some resistance. It seems to be true of certain environmental goods, as of whom and what we cherish generally, that their very irreplaceability is part of what we value, so that any value assigned as if they were substitutable is bound to be wide of the mark.

One reply would be to point out that we do accept the idea of monetary exchange for items which are irreplaceable. Financial damages are awarded, for example, in reparation for injury or injustice. However, what is wrong with this reply is that the question of compensation is one which arises ~ an event which has been involuntarily undergone; it is a concept which arises in the context of a system of justice. The question of willingness to pay, on the other hand, is raised before an event which is voluntarily entered into. Therefore, to suppose that the practice of compensation for injury in any way vindicates contingent valuation is to confuse a system of trade with a system of justice. It should be noted that the point holds just as firm if no money at all is involved, as when developers propose compensation in kind - for example the creation of a meadow on another site to compensate for one which is needed for a supermarket.

A second reply would be to instance the art world, where 'priceless' and irreplaceable works of art are regularly the subject of monetary transaction. The problem with this reply, however, is that the cases are far from analogous. What is bought and sold in the world of art is the right of exclusive possession, not, as often in the environmental case, the right of demolition. If environmental transaction really were about the transfer of 'stewardship' over some environmental good, then environmental concerns would no doubt be far less acute.

**2.** The beginnings of another troublesome objection are to be found in Mark Sagoff's insistence that there is a categorical distinction to be drawn between our preferences and our values, and that cost benefit analysis mistakenly assimilates the two. He conceives of preferences as essentially self-regarding affairs, the sorts of things we indulge only when we are playing the role of consumer and are at leave to consult only our own interests (Sagoff, 1988b, ch.1). Thus CBA encourages everyone to think of themselves as consumers and their relation to the environment to be that of consumption. In fact, however, many of our environmental concerns are idealistic in nature, expressing our commitments, principles and values, so that the human response to the environment is ~represented, when it is presented as lying entirely within the sphere of human preferences. It is as if one were to try to settle the question of what the speed limit should be by asking people at what speed they like to drive, rather than at what speed they think they ought to drive.

It seems certain that Sagoff's distinction is overdrawn. As the phenomenon of the 'green consumer' shows, consumption is rarely a matter of 'mere' preference. Even such an inoffensive object as a bar of soap may be objected to on aesthetic, moral and religious grounds - if, for example, it is frog-shaped and made of animal fats in a factory on the protestant/catholic side of town. Moreover, environmental economists appear increasingly loath to restrict their understanding of the concept of preference in the way that Sagoff imagines; and understandably so. Not only will they miss out on crucial elements of environmental valuation, recognition of which helped to inspire this branch of economics in the first place, but it lessens considerably the importance of economic valuation if economic value has to be ranged alongside too many other kinds of values before a policy-decision can be reached. Hence one response of environmental economists has been to go for an enlarged notion of economic value embracing any contribution to human well-being, which is equated with anything for which a human being can be said to have a preference; this is taken to include aesthetic 'preference' and a 'preference' - say - for the protection of some species irrespective of its utility to humans, so-called 'existence value'. "To the economist, economic value arises if someone is made to feel better off in terms of their wants and desires. The feeling of well-being from contemplating a beautiful view is therefore an economic value." (Pearce, 1992, 6). All that is excluded is value, if such there be, which is not somehow reducible to the preference of some human being somewhere; Pearce equates this with 'intrinsic' value.

According to this response, what economists are trying to get at is what is important to people's lives and to how they would like the world to be. They also believe that a social policy will be for the best to the extent that it manages to track what people consider important. So far, and with one qualification which we shall come to later, both these positions seem plausible. What is implausible and so far as I can see has nothing whatever to commend it is the addition of the thesis of psychological egoism - the claim that people are incapable of regarding as important anything other than their own interests. Nor do I see that economics has any need of this thesis. The development of the concept of 'existence value' would seem to confirm this. For the hopeful significance of the 'existence value' concept is precisely that it jettisons this bit of unnecessary flotsam. It recognises that people's vision of how they would like the world to be extends far beyond the furthering of their personal interests (cf. Turner & Pearce, 1993, 183). If they care about species protection then they will consider themselves as living in a better world - it is closer to how they would like the world to be - if species are protected.[7] Back comes the well-worn response: 'Better for whom? And if 'for them', then this is psychological egoism vindicated after all!'. But this response simply confuses human <u>perspective</u> and human <u>interest.</u> It is better only <u>from their point of view:</u> it is something they would work to bring about and - yes - pay to bring about also, if that is what it takes. This does nothing whatever to show that they perceive it to be 'in their interest', and certainly not that they do it <u>because</u> it is in their interest. And, to repeat, economists are (or should be) interested in tracking this response because it shows what is important in people's lives, and because this is precisely what social policy should be seeking to track, - because social policy should be seeking to track individual self-regarding interests, and because the only thing people are capable of working for or paying for are their own self regarding interests, both of which latter propositions have little to commend them. The point is that there are other ways of achieving personal well-being than by pursuing it; and the pursuit of well-being is not always the best way of achieving it. The corollary is that a policy-maker will be a long way off achieving well-being across a population if he or she simply aggregates the results of studies designed to elicit where people perceive their own personal interests to lie.

---

[7] It may be objected: if a person's well-being is enhanced as a result of species being protected, and they realise this, then they will protect species in pursuit of their well-being; hence the wider and the narrower conception of economic value will be identical after all. However, species protection carried out for the sake of one's own well being may well not yield the well-being which results from species protection carried out for the sake of the species.

It seems, then, that economists can respond to Sagoff's critique by denying that they are assimilating values to preferences narrow1y understood, and insisting that the notion of preference with which they operate is an enlarged 'technical' notion embracing anything towards which a human being may be said to be favourably disposed. But this still leaves a substantial objection, which is that all favourable attitudes are being treated as the same in kind, as homogeneous.

**3.** The view of the human psyche as a 'bundle of preferences', each one having as much right to be satisfied as any other, was pilloried long ago by Plato in his famous treatment of the 'democratic soul' (Plato, 1945, 561 a-e). In this account, the human soul is pictured as operating in a totally egalitarian fashion, with preferences being satisfied turn and turn about. The disastrous consequences of such an arrangement are revealed when, for example, 'decent desires' such as self -esteem cannot survive the satisfaction of a shameful desire and are destroyed (573a). Plato favours a conception of the human psyche as a hierarchical structure - the 'tripartite soul' - composed of the elements of 'reason', 'spirit' and 'appetite', each having a distinctive role to play in the construction and maintenance of a well-ordered psyche. In some ways this foreshadows contemporary discussion of the idea of 'lexical ordering' among people's preferences, by which is meant, roughly, that people have different *kinds* of preferences such that whereas 'trading off' is permitted within kinds, it is not permitted between kinds. Plato's point, however, is more subtle than this. His model of the human psyche is more like that of an ecosystem, with different species of desires, ideals and concerns bound together in subtle interdependencies. Thus, it is reason and spirit which together, for example, determine the proper limits to be placed upon the satisfaction of appetite. Plato's idea of a well-ordered psyche as the foundation of well-being appears to find echoes in Etzioni's notion of a 'balance' of purposes underlying human behaviour - moral commitment and the pursuit of well-being (1988,83), whilst his concept of the 'spirited' element finds a modern resonance in the 'heroic ethic' which Boulding (1969, 10) postulates as necessary to explain certain features of human behaviour (see Common et al. 1993, 312-3). Like Plato, both thinkers find it necessary to postulate a heterogeneous self.

The claim being advanced here is not that the homogenised model of the human psyche is necessarily wrong and the ecosystem model right. I am not, therefore, supposing that there is an empirically discoverable 'fact-of-the-matter' about the human psyche;[8] the capacities which self - reflexivity makes possible precludes our thinking of the human psyche in this way. On the contrary, the danger is precisely that we probably could learn to see ourselves in the way that CBA requires us to see ourselves. My question is whether that is what we want.

Although many variations on Plato's threefold structure of appetite, spirit and reason are possible, the basic idea is surely a helpful one and has a degree of contemporary support. Our 'preferences' (understood here in the wide sense) are not all of the same order. Nor is the relative contribution of their 'satisfaction' to the well-being of the individual by any means a straightforward matter. For example, there are some - call them 'appetites' - whose

[8] Common et al. (1993) cite empirical evidence for the fact that people actually do find difficulty in assimilating questions about – say – species preservation to questions about commodities. And it seems a step in the right direction to raise and investigate this empirical question. Nevertheless, it seems far from satisfactory to treat this phenomenon as a 'given', requiring only empirical investigation, because this fails to take account of the human capacity for self -creation.

satisfaction seems to contribute to well-being only if they are well-ordered.[9] There are others which might be thought of as 'second order' preferences, in that they express some attitude towards our appetites - for example, as to when and under what conditions it is appropriate to satisfy them. These second order preferences key into our values and the ideals which we try to live up to. To take health as an example: this is something everyone wants, but it may also be an ideal we have. And the attempt to live up to that ideal might involve curbing certain appetites.[10] Thus, the satisfaction of these preferences also keys in to notions of self -respect. Moreover, Sagoff seems correct in his assertion that much of the concern we feel over environmental issues is expressive of our ideals rather than of our appetites. CBA, on the other hand, proposes to treat all the preferences we may have concerning environmental goods as if they were on a single level and can be traded off, one against the other.[11] This completely ignores the fact that some of these 'preferences' may be ones we would prefer we didn't have. Should the former be weighed in the scale and allowed collectively to outweigh the latter? Arguably, it is just this process (which CBA seems to commend) which has generated the transport chaos affecting major cities across the world and constituting one of the environmental problems which CBA is supposed to be enlisted to combat. There is no doubt that many of us enjoy the freedom which individual car ownership brings. And it is precisely the unconstrained expression of this (strong) preference which causes the problem. The situation is unlikely to be changed by a procedure which in effect protects the unconstrained status of such a preference and which does not somewhere and somehow register the view that this is a preference which should not count (so much) in the first place.

What is true, of course, and what economists will no doubt keep reminding us of, is that, ultimately, decisions have to be reached. But the question is: given the understanding of the human psyche just sketched, are they best reached by the process of disassembling and aggregating which seems to be part and parcel of the cost-benefit analysis method? This leads us to the third problematic aspect of the CBA project.

**Privatising**

Associated with his distinction between values and preferences Sagoff introduces the idea of two distinct roles which we all occupy in our capacity as human agents, that of citizen and that of consumer (1988b, ch.1). As consumers we are concerned with our private interests and the satisfaction of our preferences. As citizens, on the other hand, our concern is for the public interest, about which we may come to form judgements, often consequent upon a process of reflective debate with others about matters of value. A crucial distinction between the two is that our values call for discussion and justification in a way that our preferences do not. Accordingly, so far as Sagoff is concerned: "The contingent valuation method...insofar as it tries to make respondents express preferences rather than form judgements, denies their

---

[9] cf. Sagoff 1994, 137: "Contentment depends more on the quality of one's desires and on one's ability to overcome them, than on the extent to which they are satisfied. "

[10] A symptom of~ the logical distinction involved here is that failure to act on 'ideal' preferences typically gives rise to guilt, whereas failure to satisfy an appetite is simply' cause for regret.

[11] This would make guilt unintelligible and eradicate the distinction between guilt and regret (see previous note).

status both as thinking and political beings" (1988a, 74). There is more than one reason, therefore, why environmental matters may require another form of discourse than that provided for by the procedures of cost- benefit analysis. One is, to risk oversimplification, that public goods require public discussion. The other is that the environment raises questions of value which require our engagement as citizens, that is, as people playing a certain sort of role in a community and contributing to its culture in a certain sort of way, including the making of considered judgements. And what is seen to be important here, perhaps indeed to be an obligation, concerns not so much the content of the judgement as the way it is formed; this should not be casual, but should involve such processes of trying and testing as are available.[12] CBA is seen to short-circuit these processes; it is charged, in a word, with the cuckolding of judgement.

One reply that economists might make is that discovering how people feel about the environment by the method of cost-benefit analysis is in some ways a particularly 'democratic' procedure; or, at any rate, that it "gives results that better reflect the welfare of society as a whole" than alternatives which are on offer, such as pressure group politics, because it "takes into account not only large effects on small groups...but small effects on large groups" (Robert Laslett, this volume). But the force of this point does seem to depend upon taking a somewhat one-sided view of the matter, and perhaps focusing on a narrow range of cases. For first, a number of different criteria can be offered for deciding what best reflects the 'welfare of society as a whole'. On some views, for example, the level of welfare of a society is to be judged precisely by how well it caters for minority interests. Second, there may well be occasions when sounder decisions emerge from heeding the silent majority rather than the vociferous minority. But this can hardly be claimed to be the case as a general rule. Some may think, for example, that unwise decisions in the sphere of the EC's common agricultural policy emerge as a result, say, of pressure from French farmers. But the other side of this coin is the possible justification of gang rape, in which the victim may be cast as representing only a sectional, if vociferous, interest. It is true that special interest lobbying can be corrosive of the democratic process, but only if it exerts undue influence; there are many occasions when vociferous representation is only too appropriate.

Another reply to the charge is that the procedure of cost benefit analysis in itself lays down absolutely no stipulation about how the answers to a particular survey of attitudes should be arrived at. Thus, any amount of citizen deliberation may have preceded the CBA exercise. Indeed, briefing sessions may be introduced prior to the exercise to counter the problem which sometimes arises, that the results of the exercise may be deemed unreliable because the participants lack information. However, the substance of Sagoffs objection will remain as long as the CBA exercise requires answers to questions, and thus the delivery of a judgement rather than its formation. For once delivered it is then taken away to be used in ways over which the participant has no control. To answer the objection CBA procedures need to be adapted, or new procedures adopted, which allow human subjects to become reunited with their judgements and which both allow and facilitate the expression of an integrated vision of a preferred world.

## Conclusion

[12] The solemnity of this obligation is a favourite theme of nineteenth century writers; see J.S. Mill's *Essay on Liberty* and W.K.Clifford's essay *The Ethics of Belief*.

The laudable aim of environmental economics is to identify and calibrate the ~ environmental cost of a project or policy, motivated by the belief of its practitioners that the neglect of such costs is largely responsible for our present environmental predicament. Its more specific objectives are:

(i) to discover how people feel about and value environmental goods

(ii) to aid the process of decision-making, and

(iii) to deliver good policy and good decisions - in particular, ones which better recognise the value and the role of the goods which nature provides in human economic activity.

The tenor of this critique has been to suggest that cost-benefit analysis, as currently practised, is as likely to frustrate as it is to forward these objectives, and that it remains to be demonstrated whether it is in principle an adequate method for achieving such objectives. At the same time it is manifestly a resilient discipline showing hopeful signs of self - examination, and it would be nothing short of a tragedy if the existence of both internal and external critiques should lend strength to those economic forces, already virulent enough, which look set to continue the processes of environmental devastation. It seems clear that the threefold critique which has been offered cannot be addressed piecemeal; for the several strands of the critique are closely interrelated. There would be little point encouraging citizen deliberation, but restricting its subject matter to items presented solely as items for consumption; a citizen would want to raise the question whether they should be so presented. There would be equally little point asking people to make consumer type choices between items invested with idealistic significance. But the corollary is that steps to address one of these strands will also help to address the others. For example, dealing with the itemising critique by introducing more participant control over how natural goods are described and itemised, could well involve sessions of public debate, and therefore go some way to address the 'privatising' critique.

Among the positive points to have emerged are the potential for cost-benefit studies, or the descendants thereof, to play an educative and investigative role. Even the 'homogenising' tendency which has been noted is capable of opening people's eyes to the extent to which their consumer choices constrain the attainment of states of affairs they would ideally like to obtain. Moreover, existing cost benefit exercises are open to be used more creatively than they often are at present. It is well known that these exercises throw up anomalies of various kinds. There are people who refuse to engage with the questions at all, and there are others who give responses which are 'off the scale'. Usually, and in obedience to the axioms of neo-classical economics, these anomalous cases are 'written out' – regarded as so much 'noise' in the system and ignored. Increasingly, economists themselves appear unhappy about this response to the problem. An alternative response, suggested by the above critique, would be to heed this 'noise' and try to figure out what it signifies and how economics might try to take account of what is going on. Initially, this might be to accord the cost benefit exercise a different kind of role - not the summarising of some total 'benefit' which might accrue from the adoption of some project or policy, but the interactive discovery, articulation and refinement of the responses of participants, which will be an educative process both for the participants and for those who administer the exercise. It is important to recognise that this might be as much a creative exercise as a process of discovery. For cost benefit exercises, by their nature, frame questions which participants may not have thought of before, and therefore are capable of creating new ways of looking at things. In short, what might function negatively as an appropriation of judgement may function positively as an educative process.

## Coda

Wider issues lurk in the wings. It is hard not to notice, for example, the massive *non sequitur* implied in our earlier story about 'how it has come to this'. The thing which brought on the *crise* was the environmental degradation; what is proposed as the solution is the efficient allocation of resources. Is there not a great deal of explaining to be done to show how there can be any connection at all between the two? The bold response is to insist that the problem of environmental degradation is after all an exclusively human problem. A more cautious response is to allow that scientific and ecological considerations must be taken into account <u>alongside</u> any of the deliverances of cost-benefit analysis (Turner & Pearce, 1993). A move of this latter kind can also serve to deflect objections to cost-benefit analysis which derive from its utilitarian ancestry - specifically its neglect of questions of justice and rights. Here again, economists seem increasingly to recognise that when it comes to making policy, their results will, and should, be moderated by considerations of equity, rather than function as the sole determinants of policy.

My claim, however, would be that some more radical departure from the utilitarian vision is needed. Received wisdom (albeit now a little long in the tooth) has it that it was the values associated with the Graeco-Christian world view which did most to fuel the practices which have wrought such environmental havoc (e.g. White, 1967), because it idealises the status of humans and legitimises their dominion over the rest of nature. But the truth is that environmental economics, as currently practised, with its anthropocentric outlook[13] and its emphasis on nature as a resource, would seem to accentuate those aspects of the Graeco-Christian view which most need to be discarded. Whether a fundamentally utilitarian approach really can contrbute to turning this situation around, therefore, must be seriously questioned. A more hopeful move might be to tap into strands of the Graeco-Christian world view other than those which utilitarianism accentuates. Nowhere, for example, does the Bible suggest that it is the <u>maximisers</u> who will inherit the earth, and we have seen how Plato reserves a special scorn for the idea that a happy individual or a happy society might be built upon the 'democratic' satisfaction of desires. Most of all, in the domain of policy-making at any rate, we seem to have completely lost sight of the central theme of Aristotelian ethics, which also pervades New Testament Christianity, that happiness is attained through the practice of the virtues and the moderation of desires. There is something just a little incredible about the fact that we should even now be attempting to build the castles of public policy upon sand which the ancients discarded.

Having begun with a religious analogy, I shall end with a political one, prompted by dissatisfaction at the thought that the discussion of environmental issues should settle down to be conducted in terms of the citizen/consumer dualism. For there is a sense in which the environment is an arena not only larger than the domain of consumer choice but larger also than the domain of citizen choice: in political terms, one would say that it is more like a <u>constitutional</u> matter. The idea is that the environment stands to society in general rather as does its constitution to a particular society. It is notable that in a number of societies, and

[13] Paradoxically, neo-classical economists still, in the main, flinch from the full implications of the utilitarian philosophy, which would include taking account of the preferences of non-human as well as human subjects (Attfield and Dell, 1989).

perhaps with good reason, constitutional matters are so hedged about as not to be easily manipulated by the citizens of the day. I do not mean that they are, or should be, beyond all citizen reach; in many cases the safeguards will have been devised by a particular citizen body. But they are thought to be matters of a particularly fundamental kind, on which it is appropriate, as it were, to 'consult' both the citizens of the past and those of the future. They are thought to be matters requiring wisdom and statecraft- certainly not to be determined by consumer choice but not, in any simple way, by the direct exercise of citizen choice either.

## References


Attfield, R. & Dell, K. eds. 1989. *Values, Conflict and the Environment. Report of the Environmental Ethics Working Part.v.* Oxford: Ian Ramsey Centre.

Boulding, K.E. 1969. "Economics as a Moral Science", *The Americ'an Ec"Oonomic Review* 59: 112.

Brown, Gardner Jr. 1993. "The viewing value of elephants", in *Economics and Ecology. New frontiers and sustainable development,* ed. E.B.Barbier. London: Chapman Hall.

Common, M.S., Blarney, R.K. & Norton, T. W. 1993. "Sustainability and Environmental Valuation", *Environmental Values* 2 (4): 299-334.

Defoe, Daniel. 1927. *A Tour through England and Wales* 1724-26. London: Dent.

Desvouges, W.H. et al. 1993. "Measuring Natural Resource Damages with Contingent Valuation: Tests of Validity and Reliability", in *Contingent Valuation: A Critical Assessment,* ed. J.A.Hausman. Amsterdam: North-Holland.

Etzioni, A. 1988. *The Moral Dimension.. Toward a New Economics.* New York: The Free Press.

Kahneman, D. & Knetsch, J.L. 1992. "Valuing Public Goods: The Purchase of Moral Satisfaction" , *Journal of Environmental Economics and Management* 22: 57-70.

NOAA Panel. 1993. "Report of the NOAA Panel on Contingent Valuation", *U.S. Federal Register* 58: 4602-4614.

O'Neill, J. 1993. *Ecology, Policy and Politics.* London: Routledge.

Pearce, D., 1992. "Green Economics", *Environmental Values* 1 (1): 3-13.

Plato. 1945. *The Republic,* tr. A.D.Lindsay. London: Dent.

Sagoff, M. 1988a. "Some Problems with Environmental Economics", *Environmental Ethics* 10 ( 1): 55- 74.

1988b. *The Economy of the Earth.* Cambridge: Cambridge University Press.

1994. "Should Preferences Count?", *Land Economics,* 70 (2): 127-44.

Turner, R.K. & Pearce, D. W. 1993. "Sustainable economic development: economic and ethical principles", in *Economics and Ecology.. New frontiers and sustainable development,* ed. E.B. :Barbier. London: Chapman Hall.

White, L. Jr. 1967. "The Historical Roots of our Ecological Crisis", *Science* 155 (37): 1203-7.