

- 35 Donald Davidson suggests this as a way of reading Hume at the end of his important article, 'Actions, Reasons, and Causes', in A. R. White (Ed.), *The Philosophy of Action*, Oxford University Press, Oxford 1968, p. 93.
- 36 Martin Hollis speaks of the 'quasi-factual' character of 'models of man'. (*Models of Man*, Cambridge University Press, Cambridge 1977, Ch. 1.) Hume's psychology is something of a 'model of man' in Hollis's sense, but not a contribution to empirical psychology.
- 37 I should like to thank Terence Ball for many discussions of Hume's method, and for his helpful comments and criticisms on an earlier version of this paper.

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## Faking Nature

Robert Elliot  
Brisbane College of Advanced Education

Environmentalists express concern at the destruction/exploitation of areas of the natural environment because they believe that those areas are of intrinsic value. An emerging response is to argue that natural areas may have their value restored by means of the techniques of environmental engineering. It is then claimed that the concern of environmentalists is irrational, merely emotional or even straightforwardly selfish. This essay argues that there is a dimension of value attaching to the natural environment which cannot be restored no matter how technologically proficient environmental engineers become. The argument involves highlighting and discussing analogies between faking art and faking nature. The pivot of the argument is the claim that genesis is a significant determinant of an area's value.

### I

Consider the following case. There is a proposal to mine beach sands for rutile. Large areas of dune are to be cleared of vegetation and the dunes themselves destroyed. It is agreed, by all parties concerned, that the dune area has value quite apart from a utilitarian one. It is agreed, in other words, that it would be a bad thing considered in itself for the dune area to be dramatically altered. Acknowledging this the mining company expresses its willingness, indeed its desire, to restore the dune area to its original condition after the minerals have been extracted.<sup>1</sup> The company goes on to argue that any loss of value is merely temporary and that full value will in fact be restored. In other words they are claiming that the destruction of what has value is compensated for by the later creation (recreation) of something of equal value. I shall call this 'the restoration thesis'.

In the actual world many such proposals are made, not because of shared conservationist principles, but as a way of undermining the arguments of conservationists. Such proposals are in fact effective in defeating environmentalist protest. They are also notoriously ineffective in putting right, or indeed even seeming to put right, the particular wrong that has been done to the environment. The sandmining case is just one of a number of similar cases involving such things as open-cut mining, clear-felling of forests, river diversion, and highway construction. Across a range of such cases some

concession is made by way of acknowledging the value of pieces of landscape, rivers, forests and so forth, and a suggestion is made that this value can be restored once the environmentally disruptive process has been completed.

Imagine, contrary to fact, that restoration projects are largely successful; that the environment is brought back to its original condition and that even a close inspection will fail to reveal that the area has been mined, cleared, or whatever. If this is so then there is temptation to think that one particular environmentalist objection is defeated. The issue is by no means merely academic. I have already claimed that restoration promises do in fact carry weight against environmental arguments. Thus Mr. Doug Anthony, the Australian Deputy Prime Minister, saw fit to suggest that sand-mining on Fraser Island could be resumed once 'the community becomes more informed and more enlightened as to what reclamation work is being carried out by mining companies . . .'.<sup>2</sup> Or consider how the protests of environmentalists might be deflected in the light of the following report of environmental engineering in the United States.

. . . about 2 km of creek 25 feet wide has been moved to accommodate a highway and in doing so engineers with the aid of landscape architects and biologists have rebuilt the creek to the same standard as before. Boulders, bends, irregularities and natural vegetation have all been designed into the new section. In addition, special log structures have been built to improve the habitat as part of a fish development program.<sup>3</sup>

Not surprisingly the claim that revegetation, rehabilitation, and the like restore value has been strongly contested. J. G. Mosley reports that:

The Fraser Island Environmental Inquiry Commissioners did in fact face up to the question of the relevance of successful rehabilitation to the decision on whether to ban exports (of beach sand minerals) and were quite unequivocal in saying that if the aim was to protect a natural area such success was irrelevant. . . . The Inquiry said: ' . . . even if, contrary to the overwhelming weight of evidence before the Commission, successful rehabilitation of the flora after mining is found to be ecologically possible on all mined sites on the Island . . . the overall impression of a wild, uncultivated island refuge will be destroyed forever by mining'.<sup>4</sup>

I want to show both that there is a rational, coherent ethical system which supports decisive objections to the restoration thesis, and that that system is not lacking in normative appeal. The system I have in mind will make valuation depend, in part, on the presence of properties which cannot survive the disruption-restoration process. There is, however, one point that needs clarifying before discussion proceeds. Establishing that restoration projects, even if empirically successful, do not fully restore value does not by any means constitute a knock-down argument against some environmentally disruptive policy. The value that would be lost if such a policy were implemented may be just one value among many which conflict

in this situation. Countervailing considerations may be decisive and the policy thereby shown to be the right one. If my argument turns out to be correct it will provide an extra, though by no means decisive, reason for adopting certain environmentalist policies. It will show that the resistance which environmentalists display in the face of restoration promises is not merely silly, or emotional, or irrational. This is important because so much of the debate assumes that settling the dispute about what is ecologically possible automatically settles the value question. The thrust of much of the discussion is that if restoration is shown to be possible, and economically feasible, then recalcitrant environmentalists are behaving irrationally, being merely obstinate or being selfish.

There are indeed familiar ethical systems which will serve to explain what is wrong with the restoration thesis in a certain range of cases. Thus preference utilitarianism will support objections to some restoration proposal if that proposal fails to maximally satisfy preferences. Likewise classical utilitarianism will lend support to a conservationist stance provided that the restoration proposal fails to maximize happiness and pleasure. However, in both cases the support offered is contingent upon the way in which the preferences and utilities line up. And it is simply not clear that they line up in such a way that the conservationist position is even usually vindicated. While appeal to utilitarian considerations might be strategically useful in certain cases they do not reflect the underlying motivation of the conservationists. The conservationists seem committed to an account of what has value which allows that restoration proposals fail to compensate for environmental destruction despite the fact that such proposals would maximize utility. What then is this distinct source of value which motivates and underpins the stance taken by, among others, the Commissioners of the Fraser Island Environmental Inquiry?

## II

It is instructive to list some reasons that might be given in support of the claim that something of value would be lost if a certain bit of the environment were destroyed. It may be that the area supports a diversity of plant and animal life, it may be that it is the habitat of some endangered species, it may be that it contains striking rock formations or particularly fine specimens of mountain ash. If it is only considerations such as these that contribute to the area's value then perhaps opposition to the environmentally disruptive project would be irrational provided certain firm guarantees were available; for instance that the mining company or timber company would carry out the restoration and that it would be successful. Presumably

there are steps that could be taken to ensure the continuance of species diversity and the continued existence of the endangered species. Some of the other requirements might prove harder to meet, but in some sense or other it is possible to recreate the rock formations and to plant mountain ash that will turn out to be particularly fine specimens. If value consists of the presence of objects of these various kinds, independently of what explains their presence, then the restoration thesis would seem to hold. The environmentalist needs to appeal to some feature which cannot be replicated as a source of some part of a natural area's value.

Putting the point thus, indicates the direction the environmentalist could take. He might suggest that an area is valuable, partly, because it is a natural area, one that has not been modified by human hand, one that is undeveloped, unspoilt, or even unsullied. This suggestion is in accordance with much environmentalist rhetoric, and something like it at least must be at the basis of resistance to restoration proposals. One way of teasing out the suggestion and giving it a normative basis is to take over a notion from aesthetics. Thus we might claim that what the environmental engineers are proposing is that we accept a fake or a forgery instead of the real thing. If the claim can be made good then perhaps an adequate response to restoration proposals is to point out that they merely fake nature; that they offer us something less than was taken away.<sup>5</sup> Certainly there is a weight of opinion to the effect that, in art at least, fakes lack a value possessed by the real thing.<sup>6</sup>

One way in which this argument might be nipped in the bud is by claiming that it is bound to exploit an ultimately unworkable distinction between what is natural and what is not. Admittedly the distinction between the natural and the non-natural requires detailed working out. This is something I do not propose doing. However, I do think the distinction can be made good in a way sufficient to the present need. For present purposes I shall take it that 'natural' means something like 'unmodified by human activity'. Obviously some areas will be more natural than others according to the degree to which they have been shaped by human hand. Indeed most rural landscapes will, on this view, count as non-natural to a very high degree. Nor do I intend the natural/non-natural distinction to exactly parallel some dependent moral evaluations; that is, I do not want to be taken as claiming that what is natural is good and what is non-natural is not. The distinction between natural and non-natural connects with valuation in a much more subtle way than that. This is something to which I shall presently return. My claim then is that restoration policies do not always fully restore value because part of the reason that we value bits of the environment is because they are natural to a high degree. It is time to consider some counter-arguments.

An environmental engineer might urge that the exact similarity which holds between the original and the perfectly restored environment leaves no room for a value discrimination between them. He may urge that if they are *exactly* alike, down to the minutest detail (and let us imagine for the sake of argument that this is a technological possibility), then they must be *equally* valuable. The suggestion is that value-discriminations depend on there being intrinsic differences between the states of affairs evaluated. This begs the question against the environmentalist, since it simply discounts the possibility that events temporally and spatially outside the immediate landscape in question can serve as the basis of some valuation of it. It discounts the possibility that the manner of the landscape's genesis, for example, has a legitimate role in determining its value. Here are some examples which suggest that an object's origins do affect its value and our valuations of it.

Imagine that I have a piece of sculpture in my garden which is too fragile to be moved at all. For some reason it would suit the local council to lay sewerage pipes just where the sculpture happens to be. The council engineer informs me of this and explains that my sculpture will have to go. However, I need not despair because he promises to replace it with an exactly similar artefact, one which, he assures me, not even the very best experts could tell was not the original. The example may be unlikely, but it does have some point. While I may concede that the replica would be better than nothing at all (and I may not even concede that), it is utterly improbable that I would accept it as full compensation for the original. Nor is my reluctance entirely explained by the monetary value of the original work. My reluctance springs from the fact that I value the original as an aesthetic object, as an object with a specific genesis and history.

Alternatively, imagine I have been promised a Vermeer for my birthday. The day arrives and I am given a painting which looks just like a Vermeer. I am understandably pleased. However, my pleasure does not last for long. I am told that the painting I am holding is not a Vermeer but instead an exact replica of one previously destroyed. Any attempt to allay my disappointment by insisting that there just is no difference between the replica and the original misses the mark completely. There is a difference and it is one which affects my perception, and consequent valuation, of the painting. The difference of course lies in the painting's genesis.

I shall offer one last example which perhaps bears even more closely on the environmental issue. I am given a rather beautiful, delicately constructed, object. It is something I treasure and admire, something in which I find considerable aesthetic value. Everything is fine until I discover certain facts about its origin. I discover that it is carved out of the bone of someone killed especially for that purpose. This discovery affects me deeply and I

cease to value the object in the way that I once did. I regard it as in some sense sullied, spoilt by the facts of its origin. The object itself has not changed but my perceptions of it have. I now know that it is not quite the kind of thing I thought it was, and that my prior valuation of it was mistaken. The discovery is like the discovery that a painting one believed to be an original is in fact a forgery. The discovery about the object's origin changes the valuation made of it, since it reveals that the object is not of the kind that I value.

What these examples suggest is that there is at least a *prima facie* case for partially explaining the value of objects in terms of their origins, in terms of the kinds of processes that brought them into being. It is easy to find evidence in the writings of people who have valued nature that things extrinsic to the present, immediate environment determine valuations of it. John Muir's remarks about Hetch Hetchy Valley are a case in point.<sup>7</sup> Muir regarded the valley as a place where he could have direct contact with primeval nature; he valued it, not just because it was a place of great beauty, but because it was also a part of the world that had not been shaped by human hand. Muir's valuation was conditional upon certain facts about the valley's genesis; his valuation was of a, literally, natural object, of an object with a special kind of continuity with the past. The news that it was a carefully contrived elaborate *ecological* artefact would have transformed that valuation immediately and radically.

The appeal that many find in areas of wilderness, in natural forests and wild rivers depends very much on the naturalness of such places. There may be similarities between the experience one has when confronted with the multi-faceted complexity, the magnitude, the awesomeness of a very large city, and the experience one has walking through a rain forest. There may be similarities between the feeling one has listening to the roar of water over the spillway of a dam, and the feeling one has listening to a similar roar as a wild river tumbles down rapids. Despite the similarities there are also differences. We value the forest and river in part because they are representative of the world outside our dominion, because their existence is independent of us. We may value the city and the dam because of what they represent of human achievement. Pointing out the differences is not necessarily to denigrate either. However, there will be cases where we rightly judge that it is better to have the natural object than it is to have the artefact.

It is appropriate to return to a point mentioned earlier concerning the relationship between the natural and the valuable. It will not do to argue that what is natural is necessarily of value. The environmentalist can comfortably concede this point. He is not claiming that all natural phenomena have value in virtue of being natural. Sickness and disease are natural

in a straightforward sense and are certainly not good. Natural phenomena such as fires, hurricanes, volcanic eruptions can totally alter landscapes and alter them for the worse. All of this can be conceded. What the environmentalist wants to claim is that, within certain constraints, the naturalness of a landscape is a reason for preserving it, a determinant of its value. Artificially transforming an utterly barren, ecologically bankrupt landscape into something richer and more subtle may be a good thing. That is a view quite compatible with the belief that replacing a rich natural environment with a rich artificial one is a bad thing. What the environmentalist insists on is that naturalness is one factor in determining the value of pieces of the environment. But that, as I have tried to suggest, is no news. The castle by the Scottish loch is a very different kind of object, value-wise, from the exact replica in the appropriately shaped environment of some Disneyland of the future. The barrenness of some Cycladic island would stand in a different, better perspective if it were not brought about by human intervention.

As I have glossed it, the environmentalist's complaint concerning restoration proposals is that nature is not replaceable without depreciation in one aspect of its value which has to do with its genesis, its history. Given this, an opponent might be tempted to argue that there is no longer any such thing as 'natural' wilderness, since the preservation of those bits of it which remain is achievable only by deliberate policy. The idea is that by placing boundaries around national parks, by actively discouraging grazing, trail-biking and the like, by prohibiting sand-mining, we are turning the wilderness into an artefact, that in some negative or indirect way we are creating an environment. There is some truth in this suggestion. In fact we need to take notice of it if we do value wilderness, since positive policies are required to preserve it. But as an argument against my over-all claim it fails. What is significant about wilderness is its causal continuity with the past. This is something that is not destroyed by demarcating an area and declaring it a national park. There is a distinction between the 'naturalness' of the wilderness itself and the means used to maintain and protect it. What remains within the park boundaries is, as it were, the real thing. The environmentalist may regret that such positive policy is required to preserve the wilderness against human, or even natural, assault.<sup>8</sup> However, the regret does not follow from the belief that what remains is of depreciated value. There is a significant difference between preventing damage and repairing damage once it is done. That is the difference that leaves room for an argument in favour of a preservation policy over and above a restoration policy.

There is another important issue which needs highlighting. It might be thought that naturalness only matters in so far as it is perceived. In other

words it might be thought that if the environmental engineer could perform the restoration quickly and secretly, then there would be no room for complaint. Of course, in one sense there would not be, since the knowledge which would motivate complaint would be missing. What this shows is that there can be loss of value without the loss being perceived. It allows room for valuations to be mistaken because of ignorance concerning relevant facts. Thus my Vermeer can be removed and secretly replaced with the perfect replica. I have lost something of value without knowing that I have. This is possible because it is not simply the states of mind engendered by looking at the painting, by gloatingly contemplating my possession of it, by giving myself over to aesthetic pleasure, and so on which explain why it has value. It has value because of the kind of thing that it is, and one thing that it is is a painting executed by a man with certain intentions, at a certain stage of his artistic development, living in a certain aesthetic *milieu*. Similarly, it is not just those things which make me feel the joy that wilderness makes me feel, that I value. That would be a reason for desiring such things, but that is a distinct consideration. I value the forest because it is of a specific kind, because there is a certain kind of causal history which explains its existence. Of course I can be deceived into thinking that a piece of landscape has that kind of history, has developed in the appropriate way. The success of the deception does not elevate the restored landscape to the level of the original, no more than the success of the deception in the previous example confers on the fake the value of a real Vermeer. What has value in both cases are objects which are of the kind that I value, not merely objects which I think are of that kind. This point, it should be noted, is appropriate independently of views concerning the subjectivity or objectivity of value.

An example might bring the point home. Imagine that John is someone who values wilderness. John may find himself in one of the following situations:

- (i) He falls into the clutches of a utilitarian-minded super-technologist. John's captor has erected a rather incredible device which he calls an experience machine. Once the electrodes are attached and the right buttons pressed one can be brought to experience anything whatsoever. John is plugged into the machine, and, since his captor knows full well John's love of wilderness, given an extended experience as of hiking through a spectacular wilderness. This is environmental engineering at its most extreme. Quite assuredly John is being short-changed. John wants there to be wilderness and he wants to experience it. He wants the world to be a certain way and he wants to have experiences of a certain kind; veridical.

- (ii) John is abducted, blindfolded and taken to a simulated, plastic wilderness area. When the blindfold is removed John is thrilled by what he sees around him: the tall gums, the wattles, the lichen on the rocks. At least that is what he thinks is there. We know better: we know that John is deceived, that he is once again being short-changed. He has been presented with an environment which he thinks is of value but isn't. If he knew that the leaves through which the artificially generated breeze now stirred were synthetic he would be profoundly disappointed, perhaps even disgusted at what at best is a cruel joke.
- (iii) John is taken to a place which was once devastated by strip-mining. The forest which had stood there for some thousands of years had been felled and the earth torn up, and the animals either killed or driven from their habitat. Times have changed, however, and the area has been restored. Trees of the species which grew there before the devastation grow there again, and the animal species have returned. John knows nothing of this and thinks he is in pristine forest. Once again, he has been short-changed, presented with less than what he values most.

In the same way that the plastic trees may be thought a (minimal) improvement on the experience machine, so too the real trees are an improvement on the plastic ones. In fact in the third situation there is incomparably more of value than in the second, but there could be more. The forest, though real, is not genuinely what John wants it to be. If it were not the product of contrivance he would value it more. It is a produce of contrivance. Even in the situation where the devastated area regenerates rather than is restored, it is possible to understand and sympathize with John's claim that the environment does not have the fullest possible value. Admittedly in this case there is not so much room for that claim, since the environment has regenerated of its own accord. Still the regenerated environment does not have the right kind of continuity with the forest that stood there initially; that continuity has been interfered with by the earlier devastation. (In actual fact the regenerated forest is likely to be perceivably quite different to the kind of thing originally there.)

### III

I have argued that the causal genesis of forests, rivers, lakes, and so on is important in establishing their value. I have also tried to give an indication of why this is. In the course of my argument I drew various analogies, implicit rather than explicit, between faking art and faking nature. This

should not be taken to suggest, however, that the concepts of aesthetic evaluation and judgment are to be carried straight over to evaluations of, and judgments about, the natural environment. Indeed there is good reason to believe that this cannot be done. For one thing an apparently integral part of aesthetic evaluation depends on viewing the aesthetic object as an intentional object, as an artefact, as something that is shaped by the purposes and designs of its author. Evaluating works of art involves explaining them, and judging them, in terms of their author's intentions; it involves placing them within the author's corpus of work; it involves locating them in some tradition and in some special *milieu*. Nature is not a work of art though works of art (in some suitably broad sense) may look very much like natural objects.

None of this is to deny that certain concepts which are frequently deployed in aesthetic evaluation cannot usefully and legitimately be deployed in evaluations of the environment. We admire the intricacy and delicacy of colouring in paintings as we might admire the intricate and delicate shadings in a eucalypt forest. We admire the solid grandeur of a building as we might admire the solidity and grandeur of a massive rock outcrop. And of course the ubiquitous notion of *the beautiful* has a purchase in environmental evaluations as it does in aesthetic evaluations. Even granted all this there are various arguments which might be developed to drive a wedge between the two kinds of evaluation which would weaken the analogies between the faking art and faking nature. One such argument turns on the claim that aesthetic evaluation has, as a central component, a judgmental factor, concerning the author's intentions and the like in the way that was sketched above.<sup>9</sup> The idea is that nature, like works of art, may elicit any of a range of emotional responses in viewers. We may be awed by a mountain, soothed by the sound of water over rocks, excited by the power of a waterfall and so on. However, the judgmental element in aesthetic evaluation serves to differentiate it from environmental evaluation and serves to explain, or so the argument would go, exactly what it is about fakes and forgeries in art which discounts their value with respect to the original. The claim is that if there is no judgmental element in environmental evaluation, then there is no rational basis to preferring real to faked nature when the latter is a good replica. The argument can, I think, be met.

Meeting the argument does not require arguing that responses to nature count as aesthetic responses. I agree that they are not. Nevertheless there are analogies which go beyond emotional content, and which may persuade us to take more seriously the claim that faked nature is inferior. It is important to make the point that only in fanciful situations dreamt up by philosophers are there no detectable differences between fakes and orig-

inals, both in the case of artefacts and in the case of natural objects. By taking a realistic example where there are discernible, and possibly discernible, differences between the fake and the real thing, it is possible to bring out the judgmental element in responses to, and evaluations of, the environment. Right now I may not be able to tell a real Vermeer from a Van Meegaran, though I might learn to do so. By the same token I might not be able to tell apart a naturally evolved stand of mountain ash from one which has been planted, but might later acquire the ability to make the requisite judgment. Perhaps an anecdote is appropriate here. There is a particular stand of mountain ash that I had long admired. The trees were straight and tall, of uniform stature, neither densely packed nor too open-spaced. I then discovered what would have been obvious to a more expert eye, namely that the stand of mountain ash had been planted to replace original forest which had been burnt out. This explained the uniformity in size, the density and so on: it also changed my attitude to that piece of landscape. The evaluation that I make now of that landscape is to a certain extent informed, the response is not merely emotive but cognitive as well. The evaluation is informed and directed by my beliefs about the forest, the type of forest it is, its condition as a member of that kind, its causal genesis and so on. What is more, the judgmental element affects the emotive one. Knowing that the forest is not a naturally evolved forest causes me to feel differently about it: it causes me to perceive the forest differently and to assign it less value than naturally evolved forests.

Val Routley has eloquently reminded us that people who value wilderness do not do so merely because they like to soak up pretty scenery.<sup>10</sup> They see much more and value much more than this. What they do see, and what they value, is very much a function of the degree to which they understand the ecological mechanisms which maintain the landscape and which determine that it appears the way it does. Similarly, knowledge of art history, of painting techniques, and the like will inform aesthetic evaluations and alter aesthetic perceptions. Knowledge of this kind is capable of transforming a hitherto uninteresting landscape into one that is compelling. Holmes Rolston has discussed at length the way in which an understanding and appreciation of ecology generates new values.<sup>11</sup> He does not claim that ecology reveals values previously unnoticed, but rather that the understanding of the complexity, diversity, and integration of the natural world which ecology affords us, opens up a new area of valuation. As the facts are uncovered, the values are generated. What the remarks of Routley and Rolston highlight is the judgmental factor which is present in environmental appraisal. Understanding and evaluation do go hand in hand; and the responses individuals have to forests, wild rivers, and the like are not merely raw, emotional responses.



## IV

Not all forests are alike, not all rain forests are alike. There are countless possible discriminations that the informed observer may make. Comparative judgments between areas of the natural environment are possible with regard to ecological richness, stage of development, stability, peculiar local circumstance, and the like. Judgments of this kind will very often underlie hierarchical orderings of environments in terms of their intrinsic worth. Appeal to judgments of this kind will frequently strengthen the case for preserving some bit of the environment. Thus one strong argument against the Tasmanian Hydroelectricity Commission's proposal to dam the Lower Gordon River turns on the fact that it threatens the inundation of an exceedingly fine stand of Huon pine. If the stand of Huon pines could not justifiably be ranked so high on the appropriate ecological scale then the argument against the dam would be to that extent weakened.

One reason that a faked forest is not just as good as a naturally evolved forest is that there is always the possibility that the trained eye will tell the difference.<sup>12</sup> It takes some time to discriminate areas of Alpine plain which are naturally clear of snow gums from those that have been cleared. It takes some time to discriminate regrowth forest which has been logged from forest which has not been touched. These are discriminations which it is possible to make and which are made. Moreover, they are discriminations which affect valuations. The reasons why the 'faked' forest counts for less, more often than not, than the real thing are similar to the reasons why faked works of art count for less than the real thing.

Origin is important as an integral part of the evaluation process. It is important because our beliefs about it determine the valuations we make. It is also important in that the discovery that something has an origin quite different to the origin we initially believe that it has, can literally alter the way we perceive that thing.<sup>13</sup> The point concerning the possibility of detecting fakes is important in that it stresses just how much detail must be written into the claim that environmental engineers can replicate nature. Even if environmental engineering could achieve such exactitude, there is, I suggest, no compelling reasons for accepting the restoration thesis. It is worth stressing though that, as a matter of strategy, environmentalists must argue the empirical inadequacy of restoration proposals. This is the strongest argument against restoration ploys, because it appeals to diverse value-frameworks, and because such proposals are promises to deliver a specific good. Showing that the good won't be delivered is thus a useful move to make.

## NOTES

- 1 In this case *full* restoration will be literally impossible because the minerals are not going to be replaced.
- 2 J. G. Mosley, 'The Revegetation "Debate": A Trap For Conservationists', *Australian Conservation Foundation Newsletter*, Vol. 12 (1980), No. 8, p. 1.
- 3 Peter Dunk, 'How New Engineering Can Work with the Environment', *Habitat Australia*, Vol. 7 (1979), No. 5, p. 12.
- 4 See Mosley, *op. cit.*, p. 1.
- 5 Offering something less is not, of course, always the same as offering nothing. If diversity of animal and plant life, stability of complex ecosystems, tall trees and so on are things that we value in themselves, then certainly we are offered something. I am not denying this, and I doubt that many would qualify their valuations of the above-mentioned items in a way that leaves the restored environment devoid of value. Environmentalists would count as of worth programmes designed to render polluted rivers reinhabitable by fish species. The point is rather that they may, as I hope to show, rationally deem it less valuable than what was originally there.
- 6 See, e.g. Colin Radford, 'Fakes', *Mind*, Vol. 87 (1978), No. 345, pp. 66-76, and Nelson Goodman, *Languages of Art*, Bobbs-Merrill, New York 1968, pp. 99-122, though Radford and Goodman have different accounts of why genesis matters.
- 7 See Ch. 10 of Roderick Nash, *Wilderness and the American Mind*, Yale University Press, New Haven 1973.
- 8 For example protecting the Great Barrier Reef from damage by the crown-of-thorns starfish.
- 9 See, e.g., Don Mannison, 'A Prolegomenon to a Human Chauvinist Aesthetic', in D. S. Mannison, M. A. McRobbie, R. Routley (Eds.), *Environmental Philosophy*, Research School of Social Sciences, Australian National University, Canberra 1980, pp. 212-16.
- 10 Val Routley, 'Critical Notice of Passmore's *Man's Responsibility for Nature*', *Australasian Journal of Philosophy*, Vol. 53 (1975), No. 2, pp. 171-85.
- 11 Holmes Rolston III, 'Is There An Ecological Ethic', *Ethics*, Vol. 85 (1975), No. 2, pp. 93-109.
- 12 For a discussion of this point with respect to art forgeries, see Goodman *op. cit.*, esp. pp. 103-12.
- 13 For an excellent discussion of this same point with respect to artefacts, see Radford, *op. cit.*, esp. pp. 73-76.