

The spiritual value of ecosystem services: an initial Christian exploration

Nigel Cooper; Anglia Ruskin University and the Diocese of Ely. nigel.cooper@anglia.ac.uk
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Introduction

There is currently an active debate on how to value nature, or, more specifically, ecosystem services. “Ecosystem services are the wide range of valuable benefits that a healthy natural environment provides for people, either directly or indirectly” (Defra, 2007b). There are many categorisations of ecosystem services, but the most commonly mentioned is that set out in the Millennium Ecosystem Assessment (MA, World Resources Institute, 2005). This mentioned Supporting Services, e.g. soil formation, Provisioning Services, e.g. food and fuel, Regulating Services, e.g. flood regulation, and Cultural Services. These last were briefly listed as aesthetic, spiritual, educational and recreational, amongst other possibilities. Although these Ecosystem Services are most often thought of in connection with wild or semi-natural ecosystems, or, perhaps, agricultural ones, they in principle apply also to urban ones. Urban soils provide drainage services, street trees reduce noise and particulates, parks and gardens are constructed for cultural reasons, and in cemeteries and churchyards ecosystem services render human bodies back into earth and modulate our encounter with loss and our forthcoming deaths.

The term ‘services’ picks up on, uses metaphorically, the same word in economics, where terms such as commercial services are commonplace. Commercial services are marketed and thus priced, and investment and other decisions made on the basis of comparing costs and benefits in monetary terms. To what extent is it possible to put monetary values on the costs and benefits of ecosystem services? That is a lively debate.

Some hope that putting prices on ecosystem services will provide persuasive economic arguments for increasing the care and protection afforded the environment. It is relatively easy to see how Provisioning Services might be costed – crops are sold and the inputs of labour and materials can be priced too. Various other methods can be used to calculate values for non-traded services, and these may be useful even for traded services to elicit the consumer surplus and thus the total value rather than market price. These methods include calculating avoided costs (e.g. savings in reduced flood defence), discerning revealed preferences (e.g. how much people pay to travel to visit a nature reserve), and surveying stated preferences (e.g. asking how much are people willing to pay to preserve a nature reserve). All these figures can then be included in a cost-benefit analysis (CBA) to arrive at a net value of a proposal which determines the decision on the basis of whether it is positive or negative.

However, there is an argument that some ecosystem services just cannot be valued economically, or, at least, their value exceeds any economic valuation. This is not just that an economic value is hard to elicit, but that some values attributed by humans may not be price-able (what price faithfulness in marriage, for example), while yet further values may be intrinsic to nature and so cannot in principle be incorporated into human financial calculations. Thus the beauty of nature may lie in the eye of the beholder, but if asked in a contingent valuation survey at what price they would be

willing to accept the loss of natural beauty in an area under a proposed development, respondents may either refuse to answer or suggest an extravagant sum in protest at the question. Some environmental philosophers argue that nature has an intrinsic value by virtue of certain properties (Curry, 2005). These properties may be sentience, in the case of animals, a will to self-perpetuation or reproduction in all living things, or even just their very existence, e.g. rock formations. One move made by environmental economists is to try and capture a price for this value by asking what respondents are willing to pay for the continuing the existence of natural creatures and features, even if they may never have contact with them, the so-called existence value (Defra, 2007a). This may produce some insight into the value humans put on the existence of the other-than-human, but the relationship of such prices to the true intrinsic value is hard to discern as the nature of the question throws the respondent into the mode of self-reflection, what is the value to *me* if I am to pay? A different style of question is needed to help the respondent reflect on what is the true worth of an aspect of nature that it holds independently of any human attributions. From a religious perspective, such a question might be phrased, ‘What worth does God see in this creature?’

Various deliberative methods, such as discussion groups, may be used to express non-quantifiable and intrinsic values in words rather than in numbers. If these non-economic values are significant they pose the problem of how to combine them with numeric economic values in a decision making process; how this combination might be done is also much debated.

The spiritual value of ecosystem services is frequently listed among the non-economic values:

“Fundamentally, there is the ethical question about the extent to which some life-supporting functions of biodiversity can be fully addressed by economic valuation and be considered as part of possible trade-offs instead of being dealt with as ecological constraints. Similarly, economic valuation may not be appropriate to address spiritual values.” (Sukhdev, 2008)

The frequency of reference to spiritual values is notable. A search through about 138 papers and reports on ecosystem services reveals that spiritual value is mentioned in 63 of those documents with 183 references between them. The Millennium Ecosystem Assessment set a significant example in this with 348 occurrences of the word ‘spiritual’ throughout the reports. Outside the Millennium Ecosystem Assessment the most common theme is that the spiritual value would be very hard to quantify, let alone put a price on. None of the documents attempts to put a monetary value on the spiritual. Is that all that can be said?

This paper aims to explore the spiritual value from a Christian point of view. Is it inimical to an economic valuation? If so, is it purely other-worldly or can it still engage with economics in terms of allocating limited resources mediated by money? Can the practices of religion offer a model for decision making when non-economic values are to be included?

A typology of conceptions of the spiritual services of ecosystems

Implicit in many of the brief references to spiritual services are two main understandings of what might be involved. Both are understandings that conservationists are likely to encounter through their work. One is the value held by indigenous people, the other by those in developed countries who seek inspiration

from nature in their lives. This dual typology is evident in the Millennium Ecosystem Assessment.

“Forests play important cultural, spiritual, and recreational roles in many societies. For many indigenous and otherwise traditional societies, forests play an important role in cultural and spiritual traditions and, in some cases, are integral to the very definition and survival of distinct cultures and peoples. Forests also continue to play an important role in providing recreation and spiritual solace in more modernized, secular societies, and forests and trees are symbolically and spiritually important in most of the world’s major religious traditions.” (MA, 2005, C21)

The ecosystem service of spiritual enrichment

The MA defines ‘cultural services’ as “The nonmaterial benefits people obtain from ecosystems through spiritual enrichment, cognitive development, reflection, recreation, and aesthetic experience, including, e.g., knowledge systems, social relations, and aesthetic values.” And, rather similarly, “Well-being: A context- and situation-dependent state, comprising basic material for a good life, freedom and choice, health and bodily well-being, good social relations, security, peace of mind, and spiritual experience.” (MA, 2005, Glossary in each Appendices) The nouns to which spiritual is applied are ‘enrichment’ and ‘experience’. Although fairly neutral, these nouns apply better to the experience of ‘more modernised secular societies’ where a proportion of people seek:

- spiritual enrichment (MA, 2005, C01)
- spiritual inspiration (MA, 2005, C17)
- spiritual enlightenment (MA, 2005, C17)
- Spiritual and inspirational: personal feelings and well-being (MA, 2005, C20)
- spiritual solace (MA, 2005, C21)
- spiritual fulfillment (MA, 2005, EHW Synthesis)
- spiritual renewal (eftec, 2005)
- spiritual sustenance (Defra, 2007a)
- Spiritual stimulation (Daily *et al.*, 1997)
- Spiritual reflection (Hein *et al.*, 2006)
- Spiritual revival (Foster, 2008)

All these terms apply principally to individuals rather than to a group such as a tribe and they apply to the inner life, especially feelings. They are a Twenty-first Century echo of the tradition epitomised by John Muir at the start of the Twentieth Century; “Everything in [the Sierra] seems equally divine – one smooth, pure, wild glow of Heaven’s love” (Muir, 1911). It would be possible to trace this back to the European Romantics, e.g. Wordsworth, and forwards through American writers such as Leopold (“the classic work by Aldo Leopold (1949) on land ethics and the feeling of spiritual enlightenment that many people experience when viewing wildlife (whales, for instance) or ‘inspiring’ landscapes.”(MA, 2005, C17). It is shared to some degree by those who ‘commune with nature’, ‘recharge their batteries’, or wish to ‘get away from it all’. Usually in this tradition spiritual benefits are sought in relatively wild areas and through the encounters with untamed animals, wild flowers and ancient woods. This complements other contemporary traditions that seek spiritual encounters in gardens, museums, concerts or the arts generally.

There may be some potential to put a monetary value on this spiritual service. The wild areas are a resource with margins (in the economic sense): bits can be nibbled away, which induces sorrow, but, while there are still other unspoiled tracts, they can still fulfil this spiritual function for those who visit them. Muir wrote that all in the Sierra was equally divine, yet, if the Sierra Nevada is lost, there are still the Canadian Rockies to visit to obtain the same spiritual benefit (and the Andes if the Rockies are then lost). There is the potential for estimating a value from examining what people are prepared to pay to visit such places, together with travel, accommodation, guides etc. (travel cost methods). In fact this is 'commercialisable' and many companies trade in this field, offering wildlife holidays or even spiritual retreats in wonderful locations.

The spiritual value of ecosystems to traditional societies

The spiritual value traditional societies ascribe to nature is conceived differently in the MA. "Traditional societies all over the world have institutionalized sacred landscapes and ecosystems in a variety of ways, large and small, as part of their belief systems... There are also sacred or culturally valued species that stand out as a class apart." (MA, 2005, C17). "A number of the MA sub-global assessments found that spiritual and cultural values of ecosystems were as important as other services for many local communities, both in developing countries (the importance of sacred groves of forest in India, for example) and industrial ones (the importance of urban parks, for instance)." (MA, 2005, EHW Synthesis)

This understanding is much less amenable to valuation. If a sacred site for a tribe is destroyed it cannot be replaced by a newly created alternative, nor by sharing the sacred site of another tribe; neither can a totem species that becomes extinct be substituted by another. A question such as 'How much compensation would you need to be paid to accept the alteration of your sacred site out of all recognition?' would be considered sacrilegious.

The MA highlights the social cost of losing the spiritual benefits of ecosystems. "Many cultures attach spiritual and religious values to ecosystems or their components such as a tree, hill, river, or grove (C17). Thus loss or damage to these components can harm social relations — for example, by impeding religious and social ceremonies that normally bind people... Damage to ecosystems, highly valued for their aesthetic, recreational, or spiritual values can damage social relations, both by reducing the bonding value of shared experience as well as by causing resentment toward groups that profit from their damage (S11, SG10)." (MA, 2005, EHW Biodiversity) "While the aesthetic, material, and spiritual loss of a comparatively small number of such people may be viewed by the majority as acceptable, such loss and grievance could still fuel guerrilla wars, insurgencies, protest movements, and legal action." (MA, 2005, S11) It is worrying that this train of thought might lead to a valuation of spiritual services based on the costs foregone in maintaining a security apparatus! At the very least this language is transmutating the intrinsic spiritual value traditional societies perceive in nature into instrumental values to developed societies. It would be better to recognise that these spiritual values have an absolute quality that cannot just be traded off against other benefits; there has to be a more complex negotiation.

The spiritual value of sacred sites and species is of a local scale. This was most clearly identified by the sub-global assessments of the MA. "In contrast, spiritual, religious, recreational, and educational services tended to be assessed only at a fine

scale in small local studies, typically because the data required for these assessments are not available at a broad scale and because of the culture-specific, intangible, and sometimes sensitive nature of these services (SG8.3).” (MA, 2005, EHW Synthesis) “Several community-based assessments adapted the MA framework to allow for more dynamic interplays between variables, to capture fine-grained patterns and processes in complex systems, and to leave room for a more spiritual worldview.” (MA, 2005, EHW Synthesis).

A worldview of a World Religion

Yet maybe “a more spiritual worldview” can prompt an adaptation of the framework on a wider scale, a scale such as that of a World Religion – Christianity even, that has adherents across all continents. The conservation movement has traditionally been wary of religion, not infrequently seeing Christianity in particular as a threat rather than an ally. There are good reasons for seeing it as both, and better reasons for recruiting it as an increasingly dependable ally than antagonising it as an inevitable opponent. Some in the conservation world have identified this rapprochement as the second most important environmental task (Environment Agency, 2008).

Oelschlaeger (1994) begins by writing, “For most of my adult life I believed, as many environmentalists do, that religion was the primary cause of ecological crisis.” But a few pages on he claims, “I think of religion, or more specifically the church... as being more important in the effort to conserve life on earth than all the politicians and experts put together. The church may be, in fact, our last, best chance.” Those leading the church may be rather anxious at this attribution of responsibility, but it is a very significant area of our common life.

This study is a theological, and not a sociological one. The religious scene in Britain is very complicated. There will be many who hold a Muir-like reverence for the wild. Many local people will hold their native area as greatly precious, but might not use the word ‘spiritual’ to express what is important to them. There are many organised religions here, but their members may hold unorthodox views, even supposing there were a single orthodoxy, such as within the Church. This study does not attempt to assess this diversity. Instead the question is posed, what might be the implications of a Christian worldview for the practice of valuing ecosystem services, particularly spiritual ones?

Since the rise of the modern environmental movement in the 1960s, Christians, both environmentalists and theologians, have been busy expounding various green versions of the Christian account of life. The discourse of ‘ecosystem services’ is a relative newcomer on the scene and there are as yet few specific publications addressing it from a Christian standpoint. This exploration is, therefore, very much a preliminary effort from a particular perspective.

A biblical exploration

Nature as a place of divine encounter

The Western Romantic tradition and the practices of traditional societies as presented in the ecosystem services literature both look to spiritual encounters in nature, especially the wild. There are apparent parallels to this in the bible, in both the earlier Hebrew Bible and the Christian New Testament. Various figures are presented as going into the wilderness to encounter God, or are encountered by God there. Jesus

goes into the desert to pray (e.g. Mark 1.35); Moses meets the angel of God as a flame in a burning bush (Exodus 3.1-2).

However, there are important differences. While divine encounters do occur in wild places, they also occur in other types of places. God meets Adam and Eve in the designed landscape of the Garden of Eden (Genesis 2). God meets Samuel in the built environment of the Temple (I Samuel 3). A threefold divine visitation to Abraham occurs under a tree, the Oak of Mamre (Genesis 18). God also meets people in their homes such as the Annunciation of the birth of Jesus by the angel Gabriel to Mary (Luke 1). As God fills all places, God can appear in any place. “‘Do I not fill heaven and earth,’ says the Lord” (Jeremiah 23 v24).

The wild places where God appears possess different connotations to those of Romanticism. Mountain tops are sublime, i.e. both beautiful and inspiring awe, but they are also close to the heavens and so are particularly suitable places to encounter God – so the burning bush that Moses finds is on Mount Horeb (or Sinai). Mountains play a rather similar role in the New Testament Gospels and are often the locations for the revelation of the divine aspect of Jesus, e.g. the Mount of Transfiguration where the divine sonship of the human Jesus is made visible (Mark 9). Deserted places, or wilderness, usually typify the places almost empty of the presence of God and so are the home of evil, e.g. the location for the devil’s temptation of Jesus (Matthew 4). Yet they are also places claimed on behalf of God, such as the redemption by the praying Jesus by his authoritative presence in the desert (Mark 1).

There is also a strong sense that God never comes on demand. One cannot force the experience of an encounter by going to a special place or performing a certain ritual. The initiative lies with God and God will come in unexpected ways. A good example is where Elijah is led to Mount Horeb where he experiences a mighty wind, an earthquake and fire, but God was not in these. But after the fire there was a gentle breeze and God’s presence spoke in this (I Kings 19).

All these features demonstrate that nature, especially wild nature, does not have an instrumental spiritual value in this analysis; one cannot command a spiritual experience from it as you would need to do if one were to sell the experience. Experiences happen anywhere and everywhere. Romantically wild parts are not privileged as places where one can go to find a god much as one might go to find an animal in a zoo. Instead, there is a strong sense that all nature, all creation, has an intrinsic value just in being and becoming and all is permeated by the divine.

Nature as providential sustenance

The first chapter of Genesis, and so of the bible, is a favourite passage in Christian thinking. It has been used to justify the exploitation of the natural world, but most today think this a perverse reading of the text. To be preferred is a more natural reading that affirms what might be called the intrinsic value of creation, i.e. a value it holds independently of any human valuation (though theologically the value is extrinsic in that it is assigned by God who deems it ‘very good’). Ecosystem services would share this evaluation in that they are aspects of this ‘very good’ creation.

But ecosystem services are also assigned an instrumental value in addition to the intrinsic, in that the whole of creation is to be a place of sustenance and life for all its members. The earth and the seas are to be a home for a myriad of creatures and the sun is to give them light, while plants are to provide food for the animals (carnivory is explicitly introduced later in the story of Noah, Genesis 9). Even humans are to

perform an ecosystem service, that of keeping all in order (this is an interpretation of 'dominion').

Ecosystem services provide benefits of value to humans, but they cannot be the freehold property of humans as all things belong to God; "The Earth is the Lord's" (Deuteronomy 10.14). Humans experience creation as gift rather than as property or right, and even when making offerings to God it is realised this is merely to return them to their rightful owner: "For all things come from you, and of your own have we given you" (I Chronicles 29 v14). Of course property was bought and sold, but in theory at least purchasers could only obtain leasehold; in the Jubilee laws (Leviticus 25) land could not be permanently sold to others, only temporarily exchanged for money until the next 49th year when it reverted to the family to whom God had originally assigned it. Land is not for humans to asset-strip. Deuteronomy 8 warns against thinking when there is plenty of food and possessions that humans have achieved this themselves. They are to remember that all these providential benefits are gifts from God, just as God fed the Israelites with manna in the desert (Exodus 16). And in the Lord's Prayer Jesus teaches his disciples to pray for 'daily bread' (Luke 11.2), while a rich man who trusted in his stores of food is called a fool as that night his soul is required of him (Luke 12.20). There is a sense in which all ecosystem services are both material and spiritual; the sustaining services are part of the divine providence towards all.

Nature as educator for service

There is a certain nervousness in Christian theology of asserting that certain things are spiritual and others not; it is more a matter of appreciating the material world aright. However, a particular spiritual value of the non-human creation for us might be said to be in person-formation; one ecosystem service is that of being a means for learning how to be human. The rest of creation has so much wisdom to teach us: "But ask the animals, and they will teach you; the birds of the air, and they will tell you; ask the plants of the earth, and they will teach you; and the fish of the sea will declare to you. Who among all these does not know that the hand of the LORD has done this? In his hand is the life of every living thing and the breath of every human being" (Job 12.7-10). 'Consider the lilies of the field...' advised Jesus (Matthew 6.28) as he went on to teach that God does provide. The wisdom we see exemplified in nature might include this trust in providence and also a living in the present moment, or a patience or a determination in adversity, as our personal judgement makes its discernment among nature's lessons.

Most importantly, the rest of creation provides the opportunity for humans to care for it (Gen 2.15, 'till and care' could also be translated 'serve and care' for it (Marlow, 2008)). This is a reciprocal ecosystem service: the non-human creation providentially supplies our needs, humans are to take care of the rest of creation, remembering the great power they have for good or ill. God's commands are not to some spiritualised abstraction of human life, but to a caring life in the concrete here and now.

When humans fail to live out this mandate of care to both humans and others, the rest of creation becomes a place of consequences, even punishment, as its sustaining provisions start to fail and it returns to desert and chaos. "How long will the land mourn, and the grass of every field wither? For the wickedness of those who live in it the animals and birds are swept away, and because people said, 'He is blind to our ways.'" (Jeremiah 12.4) Punishment is an appropriate word because the consequences are not merely through chains of physical cause and effect, they are also moral

consequences. Humans are to behave well not primarily because it is in their self-interest, as if they had undertaken a CBA and worked out that caring was economically effective, but because it is the morally right thing to do. They should do it even at a personal cost. This is an important aspect of the concept of sacrifice. Jesus both teaches and demonstrates the principle, ‘If anyone wants to be a follower of mine, let them renounce themselves, take up their cross and follow me’ (Mark 8.34). It must be admitted with much regret, of course, that Christians have frequently failed to follow in this manner.

The meaning of enchantment

The reading of the bible offered so far is in contrast to the general effort to put economic values on ecosystem services and is inimical to placing an economic value on the spiritual services of ecosystems. One of the spiritual values of ecosystem services could be said to be a resistance to economic evaluation. The spiritual value stubbornly resists attempts to price it and thereby makes a stand on behalf of other values that also cannot be priced economically. It undermines any notions that a cost-benefit analysis, or any other solely economic account, can provide a sufficient evaluation to enable decisions to be made. Alongside any CBA, non-economic values have also to be considered. Maybe the most important contribution a spiritual evaluation of ecosystem services makes is to act as a perpetual reminder that there are many values that cannot be reduced to figures. It is a bulwark against the ‘disenchantment of the world’, which is the necessary first step towards turning it into a commodity and exploiting it. Max Weber characterised the modern belief that “there are no mysterious incalculable forces that come into play, but rather that one can, in principle, master all things by calculation. This means that the world is disenchanted” (quoted in Willis and Curry 2004). (Re-)Sacralisation of nature, recognising its intrinsic value, is a necessary condition for the solution of our environmental problems in the opinion of many environmental philosophers (Curry, 2005).

Humans not primarily economic beings

This provides a significant contrast with attempts to put a monetary value on natural things and processes. The root of the contrast is not just a different view of the non-human but also a different view of humanity. The model of the ‘economic human’ (the analysis of this is partially derived from O’Neil and Spash, 2000) contrasts with a Christian anthropology summarised in the title of *Imago Dei* [= image of God](Gen 1 ‘in the image of God he created them’). Humans are material creatures, but they potentially share many characters with God and it is God’s desire that they do. Some of the aspects of what it is to be truly human in Christian theology are set out below and contrasted with the model of humanity in standard economics.

Economic human	Christian concept of the human
Separate individuals: economic valuations attend to the aggregation of many individual people’s values	Living in community: people’s values both are and should be communal affairs and they are not simply aggregated but collectively debated and corporate decisions made
Seeking to satisfy preferences: each individual person is assumed to be trying to satisfy their personal preferences to maximise their own welfare	Seeking to fulfil the will of God: people both should and can fulfil the will of God. And this will is earthed in love for the ‘neighbour’ and stewardship of the rest of

	creation
Preferences are exogenous (i.e. fixed outwith the economic analysis), stable, context independent, and ethically unchallengeable. This is despite the obvious evidence from marketing that preferences are constantly changing and can be influenced by advertising, among other things	The conscience must be educated: people are responsible for their own preferences, and they have a duty to educate their preferences (including seeking out their implications). Others in society can appropriately comment and try to influence ethical judgements
There is a duty to insist on full payments by all parties to a contract: debt forgiveness is a moral hazard	Lending without expecting any return is sometimes appropriate, this is in addition to charitable giving. Sacrifice is seen as the source of life
Incentivised by money: individuals are highly influenced in their decisions by monetary benefits, while other quality of life issues play only a secondary role	What is it to gain the whole world but to lose one's own soul? Quality of life for others and intangible values should be the most important factors in motivating people
Values of welfare and utility: economic evaluations aim to maximise these, understood as the satisfaction of aggregated personal preferences, in the most efficient way possible	Values of justice, generosity and love: these may not maximise the welfare outcomes and are more concerned with the moral quality of the actions themselves and of the human actors
Short time-frame: usually decisions are made on the basis of a payback period of a few years. At most decisions are made in the context of the next century	An eschatological perspective: a long word to express something like the end of all things, but it is not primarily a chronological term. Another way of putting it is that decisions should be made in the light of eternity. In practice, the long view of human life on earth and the moral quality of a decision both need addressing
Accountable to providers of capital: shareholders in the case of companies, taxpayers for countries	All face the final judgement of God: with the benefit of full disclosure and hindsight!
Abstract money treated as most real: the 'bottom line' is talked of as the real world and 'credible' arguments are those that affect it	Concrete reality is derived from the ultimate reality of God, while money is merely a human abstraction: the lives of people and the health of the environment are the real world
The economist is an objective evaluator (i.e. with no value judgements of their own) who uses other people's values in a neutral algorithm; the economist can often avoid a moral assessment of the process	Every person has a moral responsibility for their values, as one subject standing before others necessitating value choices to be made about them: the ethical foundations of algorithms, the acceptability of participants values, and the implications of the outcomes are amongst the responsibilities of the

	economist as a moral agent
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The table emphasises the differences in outlook. One might argue that this economic conception of human being, as surveyed here, could be the most sacrilegious thing of all – even more than the attempt to value ecosystem services! At the very least economic valuations of ecosystem services are limited, partial and inadequate.

Reintroducing money

Yet, to leave the matter there would be to fail to offer any constructive contribution to two pressing questions. The first is how can decisions be made when there are limited economic resources and bills have to be paid? How is the Church to avoid being so heavenly minded that it is of no earthly good? Money will somehow have to change hands. The second question is how to make decisions in a ‘mixed economy’ of both monetary and intangible values and this will be addressed later.

Perhaps surprisingly a comparison of ecosystems with church buildings may generate helpful parallels. In many church circles the word ‘conservation’ does not relate primarily to animals and habitats but to wall paintings, stained glass and ‘historic fabric’ (e.g. walls rather than textiles). The ‘historic heritage’ or the ‘built environment’ is what is being conserved. Conserving both the natural and the built environments involve costs, both direct and opportunity costs, and they both have elements about them that people might call invaluable. Although not common parlance, one might talk of the spiritual value of the built environment as well as other values such as cultural value or the utility of keeping dry and warm. In its approach to church buildings with their spiritual and other values, how does the Church of England engage with the money side of conservation? What can nature conservationists learn from this?

British Christians are often ambivalent over whether church buildings are sacred. There is a lot of talk about *church* being the people and not the buildings, but old parish churches are consecrated, i.e. set apart as sacred through a special ritual, and they inspire much devoted care. They have hosted countless celebrations of the Eucharist and the sacramental presence of Christ, which might be described as the most intense form of the presence of God in the material world according to Christian theology. They are places, in T S Eliot’s famous phrase, ‘where prayer has been valid’ (in “The Four Quartets; Little Gidding”, 1969). In addition to this orthodox sacrality, they often have a folk spirituality, being the focus for a village’s sense of its identity, surrounded by buried ancestors. In recent decades many English villages have had a village sign erected to mark the distinctive identity of each place; perhaps over 80% of these include the parish church in the iconography. Complete non-believers share at least an appreciation of the buildings’ cultural history and aesthetic value. Some 45% of Grade I listed buildings in England are Anglican churches, and 20% of Grade II* (Church Heritage Forum, 2004). Old churches also cost millions to repair; the same report estimates £93 million was spent in 2002.

Contrary to popular opinion, the Church of England can by no means be considered rich given the extent of its commitments. Its national investments, donated by previous generations, largely pay the clergy pension bill, plus assisting in paying serving clergy. The current church members have to pay the majority of the stipend (salary) bill plus most other expenses (there is some fee income as well), including caring for the buildings. Fortunately there is some state assistance in the care of the most notable buildings through English Heritage and Lottery grants.

Ranking projects on non-economic criteria

The total portfolio of sacred buildings held by the Church of England is of inestimable value, but, as often mentioned in the ecosystem services literature, the interest is in the margin: that is the cost of the next repair. However, no cost-benefit appraisal is undertaken; rather the repair needs are ordered by a set of priorities such as first keep the water out, or, for prioritising between buildings, which is the oldest or most unique. These priorities are potentially debatable, but in practice are often easily achieved by consensus, led by the expert views of architects and art historians. Usually repairs are identified by an architect or surveyor at the statutory Quinquennial Inspection (a thorough examination of the building every five years). The quinquennial report categorises the necessary repairs under about three headings of urgency: immediate, within the quinquennium, and those that will need doing eventually. Estimated costs are provided in the report, but the actual cost of the work is determined relatively late in the process when a job goes to tender. Thus the selection of projects is led not by a comparison of economic benefits and costs but by a prioritising in which projects are ranked by importance and urgency. It would be hard to conceive what the economic benefits of restoring some stained glass, for example, might be. It would be unlikely to attract significantly more church attenders or tourist visitors who might donate to the church coffers. It is relatively easier to rank the importance of the stained glass in a church or between churches; factors involved would be the age and extent of the glass, plus the artistic quality of the work and the quantity of similar work nearby.

The parochial church council is the corporate body charged with caring for its parish church. It is not concerned about the relative priority of its own church compared to others, but those who administer the grants (government bodies and heritage charities) have to choose between churches and projects in their allocations. Factors such as the importance of the church, the urgency of the work, the soundness of the specification, and the wealth of the congregation will be used to allocate the total budget between projects and to determine the proportion of the likely cost to be met by the grant. Almost perversely, the more people there are who are likely to benefit from a repair project the less likely it is to attract grants as those with deserving cases but with weak potential for local fundraising will receive preferential treatment.

The parochial church council (PCC), which is the client in the process, may adjust the priorities taking two further factors into account. The PCC will have its own view of how the church building can be used, e.g. it might prefer to install toilet facilities rather than repair a window. The availability of funds for investment will also constrain the PCC's choices, for even supposing a CBA had been undertaken and it had indicated the greatest net benefit came from investing in a particular project, if there were insufficient funds it could not go ahead.

Costs should not unduly constrain decisions

Although available funds do constrain choices, a non-economic judgement that a project is very valuable is likely to sway a decision in its favour even without the funds being to hand. The funds follow the decision not vice versa. So, once the next project has been decided, the main effort of a local church then goes into fundraising.

When it comes to raising money from the public, or congregation members, there are two key factors that experience suggests make for success. The first is that an appeal needs a good 'story' that speaks to people. This story need not be novel, it just has to catch the right mood so that people want to identify with it – saving their local church,

handing on our inheritance to the next generation, beautifying the house of God as one would one's own home would all be good examples. This story is not an advertising invention, but a distillation of the real reason why the project is being undertaken. It is more likely to appeal to the intrinsic worth of the project than to the benefits donating individuals can expect to recoup in due course. The second thing is that only part of the money arrives as straight donations, many events will also need to be held, e.g. concerts, sales-of-work, lotteries, flower festivals and the like. And the key thing here is an essential spirit of fun, and not duty or guilt. The fundraising events carry their own intrinsic worth, such as building a sense of community or promoting the arts, as well as the instrumental value of bringing in the money.

The story must also be a hopeful one; everyone must believe that it is possible to raise the necessary money and to get the job done. This is where religious faith may need to come in, particularly where the project seems a bold one from a human perspective. If God is behind the project the resources will be available, a divine providential supply of resources sufficient for, but not in excess of, requirements. It is all rather hand-to-mouth, but that is how it should be if a parish is to learn its dependency on God; a large legacy unrelated to a need can prove more of a curse than a blessing.

So decisions are made on the basis of realities such as leaking roofs and a spirit of generosity, the abstraction of money then falls into place subsequently. Discerning whether the focus of a parish should be the roof to be repaired or some other project not related to the building is a spiritual task, assisted by prayer.

In appealing for funds in these ways, churches do not argue along CBA lines – give us the money as we shall make more in the end. Instead the non-economic values held by the project are the appeal in themselves and thereby generate the generosity that enables the costs of a project to be found. The spiritual value can potentially outweigh any negative CBA that might be conceived.

A comparison with environmental projects

All this is not so dissimilar to the methods of conservation charities or NGOs. These often select projects on the basis of long-term visions or serendipitous opportunities. They then appeal to their members and the general public with a consistent story that is also hopeful. Money comes in, reserves are purchased, the work goes on. Hardly a CBA in sight! A species saved, a landscape preserved, and the costs will be felt to have been worthwhile.

The situation for governments is much more complex than either of these two examples as they have to select between a bewildering array of projects in allocating resources – from education, health, defence and the environment. It is not surprising if the attempt is made to reduce all these decisions to a common metric (a CBA as directed by H. M. Treasury's *Green Book*, n.d.) in deciding where to spend public money. And yet, in persuading the Treasury to fund a project, at least one that is large enough to generate public debate, the final arguments will be political rather than purely economic ones, and to that degree will share the non-financial character of the prioritising of a local church or conservation NGO. They may be more hotly contested, though, and the church can offer a further model for navigating such debates in its faculty system.

Casuistry

The process of selecting a project and gathering the money together to make it possible is a relatively informal one. At some point, often relatively late in the

process, a formal review of the project is made in the public domain. This provides an opportunity for everyone to consider the arguments in favour and against the project, with most attention paid to the immeasurable values such as aesthetics. This process of Faculty Jurisdiction offers a model for balancing all sorts of values in decision making that might illuminate the decision-making process in the field of ecosystem services. The label 'casuistry' has a bad press and is little used, but its methods are widespread in Christian moral decision-making, including in the faculty process, and elsewhere in society (Cooper, 1996). Its features could be adapted for evaluating environmental decisions as it allows consideration of many types of value, not just economic ones.

The faculty process

If a PCC wishes to undertake work on its church building (anything from minor repairs to reorderings and extensions) it first has to obtain a Faculty (a permit) from the diocesan Consistory Court. This is partly the Church of England equivalent to secular Listed Building Consent, but it is wider as it covers all churches, not just listed ones, and it covers many more types of projects than are covered by the Consent process. Faculty Jurisdiction of a Consistory Court is a development from mediaeval predecessors, but the details of the current system were enacted through the Care of Churches and Ecclesiastical Jurisdiction Measure 1991. Unlike secular planning, which has a quasi-judicial appeal process, the ecclesiastical system is fully integrated into the English judicial system. This means that any debate if it reaches court will be held in the usual legal way, rather than through a bureaucratic assessment that uses cost-benefit analysis. As in English law generally, this is a case-centred system, in other words, casuistical.

The first principle is to give everyone a voice. It is very important that the parish proposing some works to a church have come to that decision democratically; the number of votes cast in the PCC's decision has to be reported. Notices have to be displayed inviting objections from the public. The principal, or judge, of the consistory court, called the Chancellor, will invite comments over contentious cases from NGOs such as the Society for the Protection of Ancient Buildings and from the statutory English Heritage. But before this stage is even reached, the parish will have been in negotiation with the Diocesan Advisory Committee for the Care of Churches (DAC). The DAC is a statutory body composed mainly of experts in various conservation fields, architecture, archaeology, stained glass, bells, furniture etc., even arboriculture and ecology. The DAC itself will consult English Heritage and others, and, in tricky cases, the national equivalent to the DAC called the Church Building Council. Successful negotiations, as in the vast majority of cases, mean that a wide consensus has been reached and the Consistory Court can issue a Faculty without sitting.

The second feature of the system is that although there are top-down principles to be applied, e.g. "Any person or body carrying out functions of care and conservation under this Measure or under any other enactment or rule of law relating to churches shall have due regard to the role of a church as a local centre of worship and mission" (the 1991 Measure's first paragraph, headed 'General Principle'), most points of law and conservation dogma are made by appeal to other cases by analogy. Decisions of the appellate courts, such as the Court of Arches carry the greatest weight. For example, it set out the so-called Bishopsgate questions (Adam 2003) in a judgement on a case of that name. The general run of precedence will be applied (with all its

inherited experience), but new thinking can also gain ground if well argued. This might be an expert opinion tested in court or a new policy published by English Heritage. However, the special features of each case may lead to an apparently contradictory judgement – with the right of appeal in each case, to the provincial court, the Court of Arches for the Province of Canterbury, and ultimately to the Judicial Committee of the Privy Council.

The third feature is a willingness to live with messy situations where there is no clear right answer and there is something to be said for and against each position. There will need to be compromises where there are conflicts of interest. There will be perplexities when a conflict of duties cannot be resolved. There will be moral doubt where new situations throw up challenges that have not been met before. The human element, such as motives and emotions, are recognised and allowed for. The final judgement may openly acknowledge the anguish of a decision, grief at what is lost by the decision, and perhaps even guilt at permitting the lesser of two evils. The process also lives with risk and uncertainty, not by quantifying the probabilities of outcomes, but by appeal to wisdom and intention. Hopefully one outcome is a decision that allows those involved to move forwards creatively. In these several ways the system is an exemplar of much Christian moral thinking of how to live in a compromised world.

Secular analogues

This hasty summary of a casuistical system illustrates the potential for something analogous in the ecosystem services field. In addition to providing a model, however imperfect, of decision making involving diverse values it exemplifies a concern as much with the process of coming to a decision as with the likely outcomes of the decision. CBA aims to maximise economic 'efficiency', that is to maximise the total of consequential 'welfare' that can be purchased from a limited investment pot. Implied in casuistry is a belief in the values of the process itself. This is similar to a virtue ethics approach to decision making. It might be spoken of as a belief in procedural rationality, whereby a decision made according to a sound procedure is preferred over one that is based on the speculations as to the outcomes of the alternative choices. In other words, the spiritual value lies as much in the process of decision making (these might be inclusiveness, openness, and fairness) as in the decision made.

This is not novel, as the planning system is not so dissimilar. It is case-focussed, and it makes many public decisions about potential damage to ecosystems. Economic arguments feature in the development of local plans and in appeals, but economics has to fit into a wider, more humane, picture rather than dominating decision making. Other environmental decisions could be taken in a rather similar manner to planning ones, as a parliamentary system working properly has the potential to manage. A departmental minister, e.g. in Defra, in coming to an environmental decision could observe the same principles of hearing all relevant opinions, learning from earlier precedents and openly acknowledging that morality has been compromised in specified ways.

Conclusions

So is the spiritual valuation of ecosystem services a distraction? It is conceivable that some element of the spiritual value people attribute to wild places might be priced by travel-cost methods and aggregated with other monetary values in a Total Economic Value. In other cases people are likely to respond by a protest response if asked in a

contingent valuation survey for the spiritual value they would give to an ecosystem service. They might either refuse to take part or propose extraordinary values for the price of their willingness to accept the loss of the spiritual value. The many authors in the field who have felt baffled by this problem or have stated outright that putting a price on the spiritual value is just inappropriate have a valid point.

The danger is that the spiritual will just be ignored as too difficult. This would miss its valuable role of alerting us to the inadequacy of just relying on an economic model of decision making; there has to be something more. This paper has illustrated how this might involve money and how well-made and tested arguments can take their place in decisions involving sacred places. Nature is sacred and so too is human livelihood.

When they come into conflict the process of decision making also needs to be spiritual in the broad sense of the term, earthed in real life rather than financial abstractions and alert to the wonders of the human condition and of the rest of nature. Analogous to procedural rationality, it is a procedural spirituality that is called for when considering the spiritual value of ecosystem services.

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