Cultural ecosystem services: a critical assessment

This paper is about the practice of evaluating ecosystems on the basis of the cultural services they provide. My first aim is to assess the various objections that have been made to this practice. My second is to argue that when particular places are integral to people's lives, their value cannot be adequately conceived in terms of the provision of cultural ecosystem services. It follows, I conclude, that the ecosystem services framework can provide only a very limited account of the value of places.

Some ecosystem services involve the provision of firewood, flood defences and other relatively tangible benefits. In many cases, however, ecosystems are believed to supply *cultural* services as well. A wetland, for instance, might be thought to provide such a service when it inspires landscape photographers and water-colour artists. When a desert serves as an emblem of God's power and ontological simplicity, this, too, might be conceived as a cultural service it supplies. The value of a woodland burial site might be held partly to derive from the cultural services it provides to those whose friends and relatives have been interred there. More generally, ecosystems are thought to supply human beings with a range of cultural ecosystem services, pertaining to cultural diversity, spirituality, knowledge systems, education, inspiration, aesthetics, social relations, sense of place, cultural heritage, recreation and ecotourism (MA, 2005, pp. 58-9).¹

Over the last decade or so, more and more studies have involved the assessment of cultural ecosystem services (Milcu, Hanspach, Abson and Fischer, 2013). Furthermore, the very notion that ecosystems can provide such services has attracted a great deal of attention from conservation biologists, geographers, anthropologists and sociologists. As things stand, however, academic philosophers have had very little to say about it.² This is regretable, since, as I hope to show in this paper, the practice of evaluating ecosystems on the basis of the cultural services they provide raises some fundamental questions about the values we find in the world around us.

¹ It would be a mistake to suppose that the provision of such services depends on nature rather than culture. On the contrary, cultural services can only be provided because of the presence of cultural factors. For example, landscape photographers are able to derive inspiration from wetlands only because they are able to situate their work in relation to a specific aesthetic tradition – one in which wetlands are regarded as aesthetically valuable (cf. Kirchoff 2012). I will consider the tricky question of what exactly provides cultural services in Section 2.

² Debra Satz and Brian Norten are transacted.

² Debra Satz and Bryan Norton are two notable exceptions (see Satz et al., 2013, Luck et al., 2012 and Chan, Guerry et al., 2012). Furthermore, several philosophers are involved in the BIOMOT project (see Knights et al., 2013).

In the following, I address some of those questions.³ In sections 1 and 2, I clarify how the terms 'culture' and 'ecosystem' are used in discussions of cultural ecosystem services. In sections 3 to 5, I consider charges that the practice of identifying and evaluating cultural ecosystem services is (a) perniciously anthropocentric, (b) unable to account for non-monetary values, and/or (c) incapable of accommodating the values people find in *particular* things, processes, places and events. In sections 6 and 7, I argue that when particular places are (in a sense I explain) integral to people's lives, their value cannot be adequately conceived in terms of service provision. In such cases, I contend, the value of the relevant places is *constitutive* in nature, not, as talk of services implies, *instrumental*. In section 8, I ask whether, in view of the criticisms mooted in the previous sections, the practice of assessing cultural ecosystem services should simply be abandoned. Although nothing so drastic is required, I suggest that the growing dominance of that practice is a cause for concern.

1.

If something provides a service to a person, then it supplies her with some sort of benefit. A cultural service involves the provision of a cultural benefit. But what exactly is 'cultural' supposed to mean in this context? Those who use the ecosystem services framework rarely consider the matter (but see Satz et al., 2013, pp. 676-677). Instead, they typically assume that a cultural ecosystem service provides a benefit that is not the product of any other kind of ecosystem service (Chan, Satterfield and Goldstein, 2012, p. 14). So, if a particular benefit does not appear to be the product of a supporting, provisioning or regulating ecosystem service, then it is assumed to be 'cultural'. In this respect, the category of cultural ecosystem services functions as something like a 'miscellaneous' box in the context of the ecosystem services framework.

³ I do not address them all. I do not consider the difficulties of comparing cultural ecosystem services with other sorts of ecosystem service, for example. Nor do I discuss the charge that cultural ecosystem services are 'luxury goods'. On these issues, see Satz et al., 2013.

⁴ Supporting services are those on which all other ecosystem services depend, while provisioning services involve the supply of material goods, such as food, fuel and minerals. To provide a regulating service is to help to keep certain ecological cycles and processes in check (as vegetation regulates the water cycle, for example).

Nonetheless, although researchers who think in terms of cultural ecosystem services are seldom explicit about what they take 'cultural' to mean in their research, they tend implicitly to subscribe to a certain interpretation of the term. They typically suppose that a service only counts as cultural if the benefit it provides is 'intangible', 'nonmaterial' or 'subjective', where each of these adjectives is meant to indicate that the relevant benefit can only be understood by using the explicitly qualitative approaches employed in disciplines such as history, theology and cultural geography (see, e.g., MA, 2005, pp. 56, 58; Church et al., 2011, p. 639). Since ecosystems frequently give rise to benefits which fall into this category, cultural ecosystem services are often thought to be extremely common. As an example, consider the ecosystem services a river might provide for a fishing community. Since the river provides the community with fish, it is clear that it counts as the supplier of a provisioning ecosystem service. Yet it provides more than this. For fishing is more than just a means to obtain fish, and fish themselves are more than just food for the table. Indeed, in supplying fish, the river is likely to serve as the focal point for a range of spiritual and aesthetic practices – even for an entire way of life. And, in so doing, it is likely to provide various cultural benefits (Chan, Guerry et al., 2012, p. 745).

2.

What provides cultural services? In many cases, 'ecosystems' is not the best answer. Consider, for instance, the following passage from J. A. Baker's *The Peregrine*:

In the flat fens near the coast I lost my way. Rain drifted softly through the watery green haze of fields. Everywhere there was the sound and smell of water, the feeling of a land withdrawn, remote, deep sunk in silence. To be lost in such a place, however briefly, was a true release from the shackles of the known roads and the blinding walls of towns. (1967, pp. 145-6)

Although it seems almost sacrilegious to interpret his prose in such terms, Baker could be thought of as the beneficiary of certain cultural services. Amongst other things, the fen provided him with solace

and a sense of place. Perhaps it also supplied him with what the authors of the Millennium Ecosystem Assessment call an aesthetic experience.⁵ But if it sounds strange to talk of services in this context, it sounds even stranger to refer to the provider of the relevant services as an ecosystem. When Baker looks through the watery green haze, when he hears and smells the water, he is not seeing, hearing or smelling an ecosystem. He is responding to the fen-as-experienced.

It might be objected, at this point, that the fen could only be experienced as Baker experienced it because of the presence of certain unexperienced ecological conditions. For example, it could be argued that if fenland ecosystems did not involve the circulation of sufficient quantities of nutrients, fens would not be able to support so many plants and would not, therefore, be experienced by aesthetically sensitive individuals as attractively green. But once one starts thinking about such chains of dependencies, it is hard to know when to stop. While the properties of the fen-as-experienced depend on the existence of fenland ecosystems, so those ecosystems depend for their existence on certain wider conditions (such as the Gulf Stream). And those conditions, in turn, may well depend on certain extra-planetary factors (such as the energy output of the sun). And maybe, as theists believe, everything depends on God (who, on this conception, is the ultimate service provider). However, to arrive at that conclusion is to have had several thoughts too many. If the concept of a cultural service is to retain any sense, it is better to stop with the fen-as-experienced – to suppose, in other words, that it is *this* that provides the relevant cultural service.

The same may be said of other sorts of cultural service. When a woman obtains a sense of history from her visit to the valley of the Somme in northern France, where in 1916 one million people were either killed or wounded, insensitive individuals might say that she is the beneficiary of a cultural service. But the service provider is clearly not an ecosystem. Nor is it ecosystems to which we are responding when we find spiritual inspiration on the summits of mountains or solace in secluded

-

⁵ One problem with references to the provision of aesthetic experiences is that they encourage the notion that aesthetic appreciation is a process in which one derives certain psychological states, notably pleasure, from perceiving aesthetic objects. That, however, is an impoverished account of aesthetic appreciation. As David E. Cooper (1998, p. 104) points out, 'In appreciating a piece of music, say, for its ingenious structure, the way it expresses an emotion, or its challenge to a tradition gone stale, I am not pointing to any "experiences", let alone pleasures, the music produces in me.' As Cooper notes, something similar holds true of the aesthetic appreciation of environments.

woodland glades. Ecosystems tend to be too remote from experience to qualify as the providers of cultural services (Kirchoff, 2012).

How, then, should we refer to the providers of cultural services? 'Landscapes' would be one option, 'environments' another: but neither is ideal. 'Landscape' calls to mind a scene spread out before a detached observer. Yet when people derive aesthetic inspiration and other cultural benefits from woods, wetlands and the like they often do so not as detached observers but as involved participants (on aesthetic appreciation, see Berleant, 1992). 'Environment' has its own shortcomings. As we will see below, when people derive cultural services from, say, a forest, they are often responding to it, not as an example of some type of forest, but as the *particular* forest it is. By contrast, 'environment' is typically used to denote types rather than tokens, in the sense that references to a particular environment encourage one to think of a particular *type* of environment (such as forests in general, rather than any particular forest). So while it may (*may*) make sense to refer to a particular forest as the provider of cultural services, it sounds rather odd to refer to it as an environment.

The authors of the 'Cultural Services' section of the UK National Ecosystem Assessment manage to avoid that last problem by referring to 'settings' – a term which can readily be used to convey either tokens (this particular setting) or types (a certain type of setting). But they then confuse matters by claiming that 'Ecosystem cultural services *are* the environmental settings that give rise to the cultural goods and benefits that people obtain from ecosystems.' (Church et al., 2011, p. 634; my emphasis) That claim involves a category error. Services can be provided by settings; however, they cannot *be* settings, any more than they can be ecosystems, landscapes or environments.

In the following, I refer to the providers of cultural benefits and services as *places*. Granted, that is not an ideal term. Still, in the context of discussing these sorts of benefits and services, 'place' is, I believe, less misleading than 'ecosystem', 'landscape', 'environment' or 'setting'. Furthermore, like those who use the ecosystem services framework, I focus on places the current states of which are

for the most part not the intended products of human actions. I concentrate, that is, on the kinds of places that it is customary to call natural rather than artificial.⁶

3

According to His Royal Highness, the Prince of Wales, the 'shift towards seeing Nature as the provider as a set of economically vital services, rather than resources that can be used to fuel economic growth' is 'one of the most important conceptual shifts in history' (Juniper, 2013, pp. x-xi). Marion Potschin and Roy Haines-Young are similarly impressed. For them, the ecosystem services framework is not merely a challenge to 'conventional wisdoms about conservation and the value of nature'; it has 'taken on many of the features of a Kuhnian paradigm'. (2011, p. 575) These assessments are, however, overblown. The ecosystem services framework has, it is true, helped people to see that environmental concerns are often in line with economic ones. What is more, in the context of that framework, places are not conceived as mere repositories of passive matter: so much potential timber, coal, uranium, oil and gas. As Jozef Keulartz notes, to conceive of a place as a service provider is to attribute 'some degree of agency to it', if only 'that degree of agency which facilitates such obedient and expedient performance as is permitted servants or slaves.' So the ecosystem services framework amounts to a form of 'enlightened' anthropocentrism (2013, p. 305). Nonetheless, anthropocentric it remains. It is true that one could both endorse the framework and insist that evergreen forests, blanket bogs and other such places are valuable for their own sakes and not merely for the benefits they provide to human beings (see, e.g., Juniper, 2012). Yet such nonanthropocentric commitments have no place in the framework itself. By the lights of the ecosystem services framework, a place only has value if it benefits (or presumably, could benefit) human beings.

⁶ My argument does not presuppose any particular metaphysical conception of what a place is. Nor does endorsing it require one to accept my decision to refer to particular woods, wetlands, heaths, mangroves, prairies and the like as places rather than as ecosystems, landscapes, environments or settings. Readers who prefer some alternative term should feel free to substitute it for 'place' throughout. Moreover, the argument I develop below does not presuppose any particular metaphysical distinction between the natural and the artificial. Nor does endorsing it require one to accept that woods, wetlands, heaths and the like are in any sense of the term natural rather than artificial. (In many cases, of course, they are to some extent the intended products of human actions.) I use the term 'natural' merely to indicate, in a rough and ready way, the sorts of places on which I shall focus.

Hence the basic presuppositions of the framework are entirely anthropocentric and, given our overwhelmingly anthropocentric heritage, entirely unrevolutionary.

It is, however, another question whether the ecosystem services framework deserves to be *condemned* as anthropocentric. Maybe it would deserve such condemnation if it were held up as providing a *comprehensive* account of the value of places. Yet those who have adopted the framework need not endorse that bold claim. All they need to accept is that (a) whether or not places have value for other reasons too, they have value on account of the benefits they provide to human beings, and (b) all of those anthropocentric values can be satisfactorily conceived in terms of the provision of ecosystem services.

4.

There are, however, reasons to think that the ecosystem services framework cannot provide a satisfactory account of all the various cultural benefits we derive from places. There are reasons, therefore, to think that (b) is false.

One set of objections concerns *pricing*. It is easy to see why environmental economists make such efforts to price cultural services, for to do so is to provide an economic reason for valuing places, and such reasons often carry more weight with fiscally-minded policymakers than direct appeals to historical, spiritual or other 'cultural' considerations. Moreover, cultural services *can* often be priced. Although many such services are not directly associated with actual markets, one can price them by appealing to revealed preferences, say, or by using contingent valuation methods. So, for instance, one could price the cultural services provided by a lush and beautiful river valley by assessing the distribution of house prices in the vicinity. Alternatively, one could appeal to a hypothetical market, asking those nearby how much compensation they would require, if, against their wishes, the valley were to be dammed.

It is, however, another question whether the prices obtained through such methods will be accurate. And even in those cases when accurate prices *could* be obtained, it is yet another question whether the services in question *should* be priced. In those instances when the full value of a cultural service cannot be captured in monetary terms, pricing it may lead some people to underestimate its value. And even when this is not the case, there may still be reasons not to price the service. For example, there is some evidence to suggest that providing economic incentives for acting 'altruistically or in other public-spirited ways' can, in some circumstances, erode noneconomic reasons for doing so (Bowles, 2008, p. 1605; cf. Luck et al., 2012, p. 1021). If that is indeed the case, then stressing the economic reasons in favour of protecting a place of cultural value may result in people ceasing to value it for other reasons. Less materialistic sources of motivation may be 'crowded out' – and this may be a regrettable result, one that there are moral or other reasons to try to avoid (see further, Luck et al., 2012, p. 1024).

There may also be non-consequentialist reasons not to express the value of a cultural service in monetary terms. In this connection, John O'Neill, Alan Holland and Andrew Light argue that to price something is not simply to express the value one attaches to it in quantitative terms. For the action of putting a price on something expresses one's attitude to the thing in question, and, in some instances, the attitude expressed can be criticised on moral or other grounds, even if an extremely high price is named. In developing their argument, O'Neill et al. appeal to the example of parental love. A mother who loves her son cannot express her love by putting a price on him, for to do that would, they suggest, be to indicate, albeit implicitly, how much money she would need to receive in order to give him up. Even if she were to say that her son is worth a truly vast sum of money, the claim would nevertheless amount to 'an expression of potential betrayal' (O'Neill, Holland and Light, 2008, p. 84; cf. Chee, 2002, p. 552).

People often have similar reservations about pricing the places they love and (if they have been persuaded to think in such terms) the cultural services they derive from them. That is one reason why some participants in contingent valuation studies say that they would need to be paid an infinite

⁷ For an introduction to some of the problems involved in pricing cultural services, see Kenter, Hyde, Christie and Fazey, 2011, p. 506.

amount to be compensated for the loss of a particular beloved place. Their naming of that unfathomable sum is an act of defiance: it signals their refusal to play the pricing game.

Yet even those who concede that there are good reasons not to price cultural services might think that pricing is, all things considered, the way to go. Take Christopher Belshaw, for instance. He maintains that although 'we may well be justifiably suspicious of someone who is in the habit of viewing everything in monetary terms', circumstances sometimes demand that a price be attached to something that it seems inappropriate, even sacrilegious, to price (2001, p. 59). After all, we sometimes need to price human lives; so why not spiritual, aesthetic and other sorts of cultural services? If naming a price is the only way to stop the bulldozers, then, surely, one should get naming. But even if Belshaw is wrong and some cultural services really shouldn't be priced, this would not provide a decisive reason against the practice of identifying and evaluating cultural ecosystem services. For the more thoughtful advocates of the ecosystem services framework do not insist that all such services be priced. Thus Walter V. Reid maintains that 'although it is possible to calculate the economic values of some ecosystem services, this can't be done for others, including many of the cultural services provided by ecosystems' (2006; cf. Chan, Satterfield and Goldstein, 2012, p. 14; TEEB, 2010, p. 11). In fact, of the eighty-four sources considered in one review of the literature on the topic, twenty-seven 'specifically argued against monetary valuation' of cultural ecosystem services (Milcu et al., 2013).

5.

To think in terms of cultural ecosystem services is not, therefore, to commit oneself to the view that all the cultural benefits we derive from places should be priced. But it is of course to commit oneself to thinking of places as the providers of cultural *services*. And there are reasons to think that any service-based approach to the evaluation of places will be, if not inherently flawed, severely limited in its application.

Begin by considering what it means for something to provide a service. Kai M. A. Chan and his colleagues rightly note that there is, amongst those who use the ecosystem services framework,

some disagreement on this issue. In their seminal 1997 study, Robert Costanza and his colleagues conceive of services as *values*, while the authors of the Millennium Ecosystem Assessment define them as *benefits* (see Chan, Satterfield and Goldstein, 2012, p. 9). As we saw above, the authors of the UK National Ecosystem Assessment claim that cultural services *are* certain kinds of settings (Church et al., 2011, p. 634)

Chan and his colleagues propose that 'services are the production of benefits... which are of value to people' (Chan, Satterfield and Goldstein, 2012, p. 9, emphasis removed). That is a more promising suggestion; however, it does not provide enough detail on the kind of value that is implicated in references to service provision. So, to be more precise: the claim that x provides a service to A entails that x is instrumental in bringing about some end, y, that is of value to A. 8 And the claim that x is *instrumental* in bringing about that end entails that y could in principle be specified without referring to x, which, in turn, strongly implies that y could, at least in principle, be secured by means of an alternative service provider. Consider, as an example, the claim that Mr Green provides a service to Matilda by mowing her lawn. One can describe the end that is of value to Matilda (the mowing of her lawn) without referring to Mr Green. Furthermore, the implication is that although Mr Green happens to have done the mowing, it could just as well have been carried out by some alternative service provider, such as Mrs Red, say, or Mr Blue.

Some cultural benefits can be adequately conceived in these instrumentalist terms. Take the stress-relieving effects of engagement with apparently natural places, for example (see Juniper, 2013, Chapter 10). Jack might find it calming to walk through Crooksbury Wood; yet he might also have

Two points. First, in any particular case, it will be a further question whether the fact that x provides a service to A gives decision makers a reason to protect, restore or in any other way look after x. Suppose that a certain ancient wood is held to be sacred by the members of a racist cult. And suppose, further, that the wood provides a cultural service to the cultists. There may well be reasons to look after the wood. But it is an open question whether the wood should be looked after *because* it provides a cultural service to the cultists. Second, it could be objected that since it can accommodate non-use values (as at MA 2005: Chapter 6), the ecosystem services framework cannot be entirely instrumentalist. This would, however, be a mistake. To be sure, non-use values do not depend on the actual use of a good or service. Nonetheless, they are thought to qualify as values because they are means to the end of human well-being (typically conceived in terms of preference satisfaction). Suppose, for example, that the Great Barrier Reef has existence value for Ruth. She has never fished or snorkeled in it; in fact, she has never used the reef at all. Still, to say that the place has existence value for Ruth is to say that it supplies her with the satisfaction of knowing that it is there. That is, as it were, a service the reef is thought to provide.

been calmed by a walk through Ashington Wood or, indeed, some entirely different place. In this instance, it is not inappropriate to think of Crooksbury Wood as the provider of a cultural service.

In other cases, however, it is not clear that the cultural benefits people derive from places can be adequately conceived in terms of service provision. As Paul Knights et al. (2013, §6.1) note, when people derive cultural benefits from a place they are often responding to it as a *particular* place (*this* beechwood, for example), rather than as merely an example of a type of place (beechwoods in general, say). It is difficult to see how the ecosystem services framework could accommodate such cases. For to say that a place is of value because it provides certain services is to say that it is of value, not because it is the particular place it is, but simply because it provides whatever services it provides. So, for instance, if Cindy values Crooksbury Wood because it was where she used to play as a child, then she is not valuing the place because it provides a service. She is valuing it because it embodies a particular history; because, in short, it is the particular place it is (see further, Knights et al., 2013, §6.2).

6.

One way to reveal the limits of the practice of assessing cultural ecosystem services is therefore to draw attention to the distinction between those places we value *de re* (as the particular places they are) and those we value *de dicto* (as examples of certain types of place) (Knights et al., 2013, §6.1). Another, related strategy is to appeal to the distinction between instrumental value and constitutive value.

That distinction, and its relevance to the topic of cultural ecosystem services, can be introduced by means of an example. So, setting the topic of cultural ecosystem services to one side for the moment, consider the example of John Clare, the nineteenth-century poet. Many of Clare's poems, and most of his best-known ones, express his affection for and knowledge of what he called his

⁹ The claim that something is a service provider does not *entail* that the service in question could be provided by something else, even if it *strongly implies* that this is so. One could therefore dig in one's heels and insist that Crooksbury Wood is the *only* place that provides that particular service for Cindy. Nevertheless, in such cases, talk of service provision seems, to say the least, strained.

'Native Place': the agricultural land around the village of Helpston in what was then Northamptonshire (now Cambridgeshire). But neither 'affection' nor 'knowledge' quite conveys the nature of Clare's relations to the woods, heaths and fields brought to life in his poems. In fact, the poet's attachment to those places was such that he sometimes wrote not *about* them but, in a striking imaginative leap, from their perspective. Thus in poems such as 'The Lament of Swordy Well', where it is the eponymous 'piece of land' that does the narrating, one finds what Seamus Heaney called 'the removal of every screen between the identity of the person and the identity of the place' (quoted in Bate, 2003, pp. 556-7).

The intimacy of Clare's connection with the land around Helpston was thrown into sharp relief when in 1832 he was persuaded by well-meaning friends and patrons to move to Northborough, a village which, though only four miles distant, was considered by the people of Helpston to be 'a place on the margins' (Bate, 2003, p. 43). Jonathan Bate, Clare's biographer, describes the result:

The change in physical environment was a serious concern for a man who had derived his profoundest sense of personal identity from his physical surroundings. He was leaving the woods and heaths and favourite spots that had known him for so long. This was how he put it: not that he had known the environs of Helpston, but that the place *had known him*. 'The very molehills on the heath and the old trees in the hedges' seemed to bid him farewell. By contrast to Helpston, with its woods and lanes and secure nooks, Northborough was out on the fen. His first impressions had been of a place of bleakness and exposure: 'there is neither wood nor heath, furzebush, molehill or oak tree about it, and a nightingale never reaches so far in her summer excursions.' (Bate, 2003, p. 363)

Clare's poem 'On Leaving the Cottage of my Birth' says it all: 'The Summer, like a stranger comes,' he writes. 'I pause – and hardly know her face.' 'Far, far from spots my heart esteems... I feel as ill as becomes a man'.¹⁰

 $^{^{10}\} http://www.johnclare.info/sanada/4Rm3.htm\#ONLEAVING\ (accessed\ 2\ May\ 2014).$

The woods, fields and heaths around Helpston certainly provided Clare with the sort of benefit those who use the ecosystem services framework describe as 'cultural'. And the place really did supply him with more than just food, water, firewood and shelter. It allowed him to live the life he loved. But it was not simply a means to the end of Clare continuing to live that life, as if one could provide anything even approaching a satisfactory description of the life without referring to the particular place in which it was lived. No, Clare's 'Native Place' was *integral to* or partly *constitutive* of his life. Its value to him was therefore not merely instrumental. It was of constitutive value to him: it had value to Clare, that is, because it was part of a whole that was of value to him. And that sort of value cannot be conceived in terms of service-provision.

What holds true of Clare and Helpston holds true of all those cases when places have value on account of the integral roles they play in people's lives. It is true that such cases *are* often conceived in terms of the provision of cultural services. It is, for instance, customary to regard the provision of a 'sense of place' as such a service (see, e.g., MA, 2005, p. 59; UK NEA, 2011, p. 17; CICES, 2010). Yet any such approach is flawed. When a particular place has value because it is integral to someone's life, because, say, it furnishes him or her with a sense of place, the cultural benefit provided cannot be satisfactorily conceived in terms of means and ends – in terms, that is, of the instrumentalist conceptual scheme indicated by talk of cultural services.¹³

7.

Much more work would be needed to prove the point; but suppose that the argument sketched in section 6 works. Suppose, in other words, that the ecosystem services framework really is unable to

¹¹ Alternatively, it gave him a sense of who he was. But whichever way the point is put – either in terms of the place allowing Clare to live the life he loved or in terms of it giving him a sense of identity - the value of the Helpston area cannot be adequately conceived in terms of cultural services (or so I shall argue).

¹² On constitutive versus instrumental values, see Shafer-Landau, 2007, p. 281.

¹³ Although I won't pursue the point here, the project of conceiving all cultural benefits in instrumentalist terms might seem to be symptomatic of certain wider historical trends. It might seem, for instance, to evince what Anthony Weston (1992, p. 239) calls the modern 'impulse to replace values-as-parts-of-patterns with simplified and reduced means-end relations.' It also reminds one of the dystopia envisioned in Heidegger's later writings: a world in which the idea of 'dwelling' in a particular place makes little sense and in which particular things, places and persons are typically 'enframed' as mere service providers (see further, Heidegger, 1996; Foltz, 1995).

provide a satisfactory account of those cases in which places are of constitutive value to people.¹⁴ Some will think that we shouldn't be too perturbed by that result. 'To be sure', the critic might admit, 'Clare's rootedness in the Helpston area cannot be satisfactorily conceived in terms of cultural services. But who nowadays enjoys that degree and kind of intimacy with the places they inhabit? So if the ecosystem services framework is limited in this respect, then it is only very slightly limited.'

That response is not convincing, however. To begin with, it is not clear that rootedness is nowadays so rare. In fact, the literature of anthropology abounds with example of modern-day people whose lives have been shaped by the particular environments in which they dwell. As Clifford Geertz notes: 'For all the uprooting, the homelessness, the migrations, forced and voluntary, the dislocations of traditional relationships, the struggles over homelands, borders, and rights of recognition, for all the destructions of familiar landscapes and the manufacturings of new ones, and for all the loss of local stabilities and local originalities, the sense of place, and of the specificities of places, seems, however tense and darkened, barely diminished in the modern world.' (1996, p. 261) Even in these increasingly rootless times, he writes, one can still speak of the 'inseparability of the lives the various peoples live and the settings in which they live them.' (Geertz, 1996, p. 260)

But even if Geertz is wrong and rootedness really is as uncommon as the critic maintains, those people who *do* happen to be rooted in particular places deserve to have their interests represented in discussions about how those places should be treated. It would certainly be unjust to argue that the cultural benefits they derive from the places in which they live and work may permissibly be ignored or downplayed since they cannot be adequately conceived in terms of the service-orientated frameworks which currently hold sway in environmental circles. Indeed, this would be particularly unjust, since when places are integral to people's lives, they are likely to be of very great value to those people (as Helpston was to Clare).

8.

¹⁴ Would the best response simply be to drop the mention of cultural *services* and refer instead to *benefits*? This would, I think, be one change too many. As we saw in section 2, references to cultural *ecosystem* services are problematic. If the concept of a cultural *service* is also jettisoned, it is not clear how much of the notion of a cultural ecosystem service remains.

In 2007, Bryan Norton and Douglas Noonan noted that the ecosystem services framework was already beginning to 'crowd-out' other evaluative frameworks (2007, p. 666). Nowadays, it is even more dominant. As Richard B. Norgaard puts it: 'an eye-opening metaphor intended to awaken society to think more deeply about the importance of nature and its destruction through excessive energy and material consumption [has] transformed into a dominant model for environmental policy and management in developing countries and for the globe as a whole.' (2010, p. 1219) Correspondingly, when the *cultural* dimensions of environmental issues are addressed by decision makers, they are coming increasingly to be framed in terms of cultural ecosystem services. More and more often, it is assumed that reflecting on the historical, mythic, moral, religious, political or aesthetic significance of places is simply a matter of identifying and evaluating the cultural ecosystem services they provide.

Those who advocate the ecosystem services framework seek to give an impression of openness, of course. For example, they frequently call for contributions from those who work in the arts and humanities (see, e.g., Church et al., 2011, p. 639). But what kind of contribution do they hope that historians, theologians, artists, philosophers and critical theorists will make? The organisers of a 2012 workshop at the University of Sheffield suggested that 'the task of the arts and humanities, both in their creative and educative aspects, is to contest, to challenge, to question, to undermine, to satirise, to offend, to violate, to deconstruct, to degenerate, to critique, to undo, or to suspend dominant and dominating assumptions of value' (quoted in Miller, 2013). Yet those who favour the ecosystem services framework do not want those in the arts and humanities to do anything so disruptive. They want them to play the ecosystem services game: to contribute to the identification and evaluation of cultural ecosystem services. They want artists, amongst others, to identify and evaluate services related to the provision of 'aesthetic experiences', moral philosophers to attend to services related to the supply of 'moral satisfaction'; historians to catalogue services related to the provision of a sense of history.¹⁵

¹⁵ On 'aesthetic experiences', see MA, 2005, p. 8. Berta Martin-López et al. (2012, p. 6) treat the provision of 'the moral satisfaction obtained through conserving biodiversity' as a cultural ecosystem service. Natural England, which advises the UK government on environmental issues, typically treats 'sense of history' (or as they should say, the provision of a sense of history) as a cultural ecosystem service. See, e.g., their descriptions

The ecosystem services framework is therefore *totalising*. All manner of different approaches to the cultural value of places, from phenomenology to textual analysis, find themselves reinterpreted in terms of service-provision. And all manner of places get framed as service providers. Beautiful places become suppliers of aesthetic services; sacred places providers of spiritual services. If a place is part of who we are, then that, too, is conceived as a cultural service which it supplies. As Heidegger (1996) might have said, all places become 'enframed' in terms of the all-engulfing framework.

This would not present a problem if the ecosystem services framework were able to provide an adequate account of all the many and various ways that places benefit us. But since it cannot, the growing dominance of that framework is a cause for concern. For sure, we should welcome the fact that the ecosystem services framework can be used to frame cultural issues which environmental decision makers might otherwise have ignored. And, despite its limitations, the concept of a cultural ecosystem service has been put to good use in a number of well conceived and smartly executed studies (see, e.g., Kenter et al., 2011). But suppose, for a moment, that the ecosystem services framework were to come to be accepted by decision makers as the *only* way to consider the cultural value of places. Were that to happen, environmental decision makers would end up missing a great deal. Amongst other things, they would be unable to provide a satisfactory account of those cases when places are of value to us because they are integral to our lives. As Louis MacNeice (1979, p. 30) once wrote, 'World is crazier and more of it than we think / Incorrigibly plural'. The same holds true of the historical, political, mythic and spiritual values we find in woods, wetlands, heaths, meadows and other such places. Many of those values cannot be adequately conceived in terms of the provision of cultural ecosystem services.

References

Baker, J. A. (1967). The peregrine. New York, NY: New York Review Books.

Bate, J. (2003). John Clare: A biography. London: Picador.

of the Durham Coalfield Pennine Fringe and other National Character Areas (http://www.naturalengland.org.uk/publications/nca/durham_coalfield_pennine_fringe.aspx - accessed 2 May 2014).

Belshaw, C. (2001). *Environmental philosophy: reason, nature and human concern*. Teddington: Acumen.

Berleant, A. (1992). The aesthetics of environment. Philadelphia: Temple University Press.

Chan, K. M. A., Guerry, A. D., Balvanera, P., Klain, S., Satterfield, T., Basurto, X., Bostrom, A. [...] and Woodside, U. (2012). Where are *cultural* and *social* in ecosystem services? A framework for constructive engagement. *Bioscience*, 62, 744-756.

Chan, K. M. A., Satterfield, T. and Goldstein, J. (2012). Rethinking ecosystem services to better address and navigate cultural values. *Ecological Economics*, 74, 8-18.

Chee, Y. E. (2004). An ecological perspective on the valuation of ecosystem services. *Biological Conservation*, 120, 549-565.

Church, A., Burgess, J., Ravenscroft, N., Bird, W., Blackstock, K., Brady, E., Crang, M. [...] and Winter, M. (2011). Chapter 16: Cultural services. In the *Technical Report* of the UK national ecosystem assessment (see http://uknea.unep-wcmc.org/Resources/tabid/82/Default.aspx).

CICES (2010). The common international classification of ecosystem services (www.cices.eu).

Cooper, D. E. (1998). Aestheticism and environmentalism. In D. E. Cooper and J. A. Palmer (Eds.), Spirit of the environment: Religion, value and environmental concern (pp. 100-112). London: Routledge.

Costanza, R. (1997). The value of the world's ecosystem services and natural capital. *Nature*, 387 (15 May), 253-260.

Feld, S. and Basso, K. H. (Eds.) (1996). *Senses of place*. Santa Fe, NM: School of American Research Press.

Foltz, B. (1995). *Inhabiting the earth: Heidegger, environmental ethics, and the metaphysics of nature*. New Jersey: Humanities Press.

Geertz, C. (1996). Afterword. In S. Feld and K. H. Basso (Eds.), *Senses of place* (259-262). Santa Fe, NM: School of American Research Press.

Heidegger, M. (1996). The question concerning technology. In D. F. Krell (Ed.), *Basic writings*. London: Routledge.

HRH, The Prince of Wales (2013). Foreword. In T. Juniper, *What has nature ever done for us?* (pp. iv-xi). London: Profile Books.

Juniper, T. (2013). What has nature ever done for us? London: Profile Books.

Juniper, T. (2012). We must put a price on nature if we are going to save it. *The Guardian*, Friday 10 August, 2012 (http://www.guardian.co.uk/environment/2012/aug/10/nature-economic-value-campaign - accessed 2 May 2014).

Kenter, J. O., Hyde, T., Christie, M., and Fazey, I. (2011). The importance of deliberation in valuing ecosystem services in developing countries—evidence from the Solomon Islands. *Global Environmental Change*, 21, 505-521.

Keulartz, J. (2013). Conservation through commodification? *Ethics, Policy & Environment*, 16, 297-307.

Kirchoff, T. (2012). Pivotal cultural values of nature cannot be integrated into the ecosystems services framework. *Proceedings of the National Academy of Sciences of the United States of America*, 109 (46): E3146.

Knights, P., Admiraal, J., Wossink, A., Banerjee, P., O'Neill, J. and Scott, M. (2013). *Economic environmental evaluation: An analysis of limitations and alternatives. BIOMOT Project Deliverable 1.1* (http://www.biomotivation.eu/docs/BIOMOT_WP1_Deliverable_1.1-FINAL-16.08.13.pdf - accessed 2 May 2014).

Luck, G. W., Chan, K. M. A., Eser, U., Gómez-Baggethun, E., Matzdorf, B., Norton, B. and Potschin,M. (2012). Ethical considerations in on-ground applications of the ecosystem services concept.Bioscience, 62, 1020-1029.

MacNeice, L. (1979). Collected poems. London: Faber & Faber.

Martin-López, B., Iniesta-Arandia, I., García-Llorente, M., Palomo, I., Casado-Arzuaga, I., García, D., Del Amo, E. [...] and Montes, C. (2012). Uncovering ecosystem service bundles through social preferences. *PLoS ONE*, 7(6), 1-11.

Milcu, A. I., Hanspach, J., Abson, D., and Fischer, J. (2013). Cultural ecosystem services: A literature review and prospects for future research. *Ecology and Society*, 18 (3). [no page numbers]

Millennium Ecosystem Assessment (2005). *Ecosystems and well-being: A framework for assessment*. Washington, DC: Island Press.

Miller, J. (2013). 'Natural capital' and the humanities. *The Earthlines Review*, 28 March 2013 (https://earthlinesmagazine.wordpress.com/2013/03/28/natural-capital-and-the-humanities/ - accessed on 2 May 2014).

Norgaard, R. B. (2010). Ecosystem services: From eye-opening metaphor to complexity blinder. *Ecological Economics*, 69, 1219-1227.

Norton, B. G. and Noonan, D. (2007). Ecology and valuation: big changes needed. *Ecological Economics*, 63, 664-675.

O'Neill, J., Holland, A. and Light, A. (2008). Environmental Values. Abingdon: Routledge.

Potschin, M.B. and Haines-Young, R. (2011). Ecosystem services: Exploring a geographical perspective. *Progress in Physical Geography*, 35, 575-594.

Reid, W. (2006). Nature: the many benefits of ecosystem services. *Nature*, 443 (19 October): 749.

Satz, D., Gould, R. K., Chan, K. M. A., Guerry, A., Norton, B., Satterfield, T., Halpern, B. S. [...] and Klain, S. (2013). The challenges of incorporating cultural ecosystem services into environmental assessment. *Ambio*, 42, 675-684.

Shafer-Landau, R. (ed.) (2007). Ethical theory: An anthology. Oxford: Blackwell.

TEEB (2010). The economics of ecosystems and biodiversity: Mainstreaming the economics of nature: A synthesis of the approach, conclusions and recommendations of TEEB (available at http://www.teebweb.org/our-publications/ - accessed 2 May 2014).

UK NEA (2011). The UK national ecosystem assessment: synthesis of the key findings. Cambridge: UNEP-WCMC.

Weston, A. (1992). Between means and ends. The Monist, 75, 236-49.