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Virtue Ethics, Biodiversity and Environmental Education

Paul Knights

Abstract

In this paper I offer a contribution from the discipline of philosophy to the appeal for an increase in field-based environmental education. I claim that environmental virtue ethics can both ground claims regarding what is of value in such educational opportunities and structure the contribution made by the empirical evidence invoked to support the calls for its increase. I orient these claims around an argument for the preservation of biodiversity known as the transformation argument. The grounding of these claims within virtue ethics has significant implications for environmental education. Firstly, virtue ethics emphasises the importance of moral guidance and training when young. Secondly, if, as psychological evidence indicates, direct rather than vicarious experiences of biodiversity are able to transform moral character into the environmentally virtuous, it is imperative that environmental education has a substantial field-based, in addition to class-based, element. This paper therefore provides philosophical grounding and continued impetus to the Real World Learning campaign of the RSPB, the Field Studies Council and others. I link these implications by way of Aldo Leopold's notion of the faculty of 'perception'. This involves both an awareness and understanding of evolutionary and ecological processes and the place of human beings within them, but also habitual or internal desire for harmony with the natural world. The development of this faculty requires the guidance of instructors who are able to both impart ecological and biological knowledge in the field but also

evoke the appropriate moral attitude to the objects of study. In this way environmental education becomes not abstract learning but the realization of a sustainable society through the training of the good ecological citizens of the future.

Key Words: Virtue ethics, environmental education, biodiversity, philosophy.

1. Introduction

This paper presents a contribution from the discipline of philosophy to the appeal for an increase in field-based environmental education. This appeal – founded upon the ‘combined practical experience, evaluation and research’ of organisations belonging to the Real World Learning partnership¹ – advances the claim that children’s education is impoverished if the opportunities for ‘real world’ or ‘out-of-classroom’ learning are restricted, and that it is enriched – and benefits to children and to society accrue – if such opportunities are afforded. The empirical research used to support these claims consists of studies that purport to demonstrate the positive impact of out-of-classroom learning on children’s cognitive, affective, social and behavioural development. The contribution that philosophy can make to the appeal for an increase in field-based environmental education is to provide an ethical framework within which (i) the claim regarding what is of value in such opportunities may be articulated and (ii) the empirical research invoked to support this claim may be structured. This paper will suggest that environmental virtue ethics can provide that framework. I will firstly introduce this normative ethical theory, before outlining an argument for the preservation of biodiversity – the transformation argument – which will serve to order and illuminate the main claims of this paper.

2. Virtue Ethics

Virtue ethics is a normative ethical theory which takes as its orienting question: ‘What kind of person should I be?’ In contrast, the rival ethical theories of consequentialism and deontology take as their orienting question: ‘What should I do?’ Thus, where for consequentialists and deontologists judgments of *actions* are foundational, for virtue ethicists, judgements of *character* are foundational.² The virtues are those settled character dispositions such as kindness, generosity and honesty that are ‘necessary conditions for, or...constitutive elements of, human flourishing and wellbeing’.³ It is not merely that the exercise of the virtues accords with

moral rules or results in good outcomes for others: their possession and exercise is also good for their possessor. Conversely, the vices are those settled dispositions of character that do not contribute to, or actively threaten, an agent's well-being. *Environmental* virtue ethics is an approach to normative environmental ethics which attempts to specify the norms of character we ought to have regarding our relations with the natural environment.⁴ This approach is emerging as the central framework for the articulation of an environmental ethic after 35 years of the dominance of consequentialism and deontology.

3. The Transformation Argument for Biodiversity Preservation

I turn now to introducing the transformation argument for the preservation of biodiversity, which exhibits the following form:

- P1. If experiences of some entity or phenomenon are apt to engender positive transformations⁵ in individuals then that entity or phenomenon ought to be preserved;
- P2. Experiences of biodiversity⁶ are apt to engender positive transformations in individuals;
- C. Therefore, biodiversity ought to be preserved.

I will leave P1 unargued for in this paper. P2 requires justification for the claim that such transformations as are effected by experiences of biodiversity are appropriately characterised as *positive*. The consequentialist or deontologist might justify this claim in the following way: humans bear moral obligations to the natural environment and its nonhuman inhabitants, therefore insofar as experiences of biodiversity are apt to make individuals' subsequent actions more consistent with these moral obligations, then the transformations effected by those experiences are positive. The virtue ethicist, however, would justify the claim thus: insofar as a life that includes the possession and exercise of the virtues is a good human life, and insofar as experiences of biodiversity are apt to transform individuals' character dispositions away from vice and in the direction of virtue, then the transformations effected by those experiences are positive. It is the second approach to the transformation argument for biodiversity preservation that I will pursue here.

The first claim in this justification – that a life that includes the possession and exercise of the virtues is a good human life – is a central element of virtue ethics. As noted above, for the virtue ethicist, the virtues are not merely instrumentally good, but are an essential part of well-being. The second claim – that experiences of biodiversity are apt to transform individuals' character dispositions away from vice and in the direction of

virtue – is an empirical proposition. The substantiation of this empirical claim would require: (i) the enumeration of those character dispositions that are virtues and those which are vices; (ii) a method by which we could determine whether and to what degree an individual possessed such dispositions; and (iii) observations that established that individuals who had undergone experiences of biodiversity were transformed such that their vices were weakened or eliminated and their virtues developed or strengthened. It is in this way that the framework of virtue ethics structures the contribution of the empirical evidence (to which I will return below) invoked in support of the appeal for an increase in field-based environmental education.

4. The Form of the Experience and Leopoldian Perception

The general claim made by P2 of the transformation argument for biodiversity preservation is, of course, relevant to this appeal. If experiences of biodiversity are apt to engender positive transformations of individuals in terms of the weakening of the vices and the development of the virtues, then such experiences should surely comprise a component of any good educational programme. But what form should those experiences take?

Firstly, the phrase ‘experiences of biodiversity’ is ambiguous between direct and vicarious, and therefore field-based and class-based, experiences. If vicarious experiences of biodiversity – films, photographs, textual representations – bear equal potential for the positive transformation of individuals, then those transformations may be achieved in the classroom, thereby avoiding the health and safety, budgetary and curriculum concerns that appear to be motivating the restriction of out-of-classroom learning. But the empirical evidence indicates that direct, rather than vicarious, experiences of biodiversity engender more significant and lasting impacts upon attitudes to the natural environment. For example, Kellert and Derr⁷ assessed the impact of participation in courses run by Outward Bound, the National Outdoor Leadership School and the Student Conservation Association in the United States. Most of the 700 respondents to the study reported ‘greater respect and appreciation for nature...and support for nature conservation’.⁸ Kals et. al.⁹ also find a strong (though limited) data set in the research literature for the importance of direct encounters with nature in the development of emotional affinity towards, and subsequent behaviour protective of, the natural world.

Secondly, we might ask if, to realise the transformative potential of experiences of biodiversity in terms of the fostering of the environmental virtues, it is necessary to:

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- a) inform those experiences with natural scientific knowledge;
and
b) guide the affective and evaluative responses to those experiences.

I will frame an answer to these two questions by outlining Aldo Leopold's notion of 'perception'.¹⁰ Perception of the natural environment and its nonhuman inhabitants, for Leopold, involves both an intellectual element, consisting in an awareness and understanding of evolutionary and ecological processes and the place of human beings within them, and an appropriate response to this understanding, consisting in a habitual or internal desire for harmony with the natural world.¹¹ To develop the faculty of perception thus requires that a broad range of evolutionary, ecological and biological knowledge inform direct experiences of biodiversity. But Leopold cautions us that instruction in the intellectual element of perception will not be sufficient for the development of the appropriate response, and it is the response – manifested in attitudes, values and behaviour – that is partly constitutive of virtuous character dispositions. The development of this faculty therefore requires the guidance of instructors who are able to both impart ecological and biological knowledge in the field but also evoke the appropriate affective and evaluative response to the objects of study.

5. An Example Virtue: Proper Humility

I turn now to enumerate some of the virtues that, through such scientifically informed and affectively guided field-based environmental education, practitioners could aim at developing. Virtues are distinguished from one another according to their bases and forms of responsiveness.¹² The *environmental* virtues are those virtues which either take as their base environmental entities (i.e. nonhuman organisms, biological collectives such as species, or ecosystems) or involve environmental entities in their forms of responsiveness (e.g. the restoration of a clear-felled forest). The kinds of environmental virtues I suggest field-based environmental education is apt for fostering are:

- proper humility
- wonder
- care
- aesthetic sensibility
- compassion
- respect
- attentiveness

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- appreciation
 - ecological sensitivity

I will illustrate how we may begin to support the claim that direct, scientifically informed experiences of biodiversity afforded by field-based environmental education can be positively transformative in terms of the weakening of environmental vices and the fostering of environmental virtues by briefly indicating how transformation might occur with regard to one of the above traits, namely, proper humility.

Let us take the example of a child who is on the path to developing the environmental vice of arrogance. This arrogance, if it becomes embedded as a settled character trait in adulthood, will manifest itself in narrow-mindedness towards natural entities such that they are only considered as resources for, and valuable only insofar as they contribute to, the satisfaction of human preferences. The arrogant person who is not open to appreciating biodiversity as anything other than instrumental to their own ends is both deprived of richer experiences of the natural world and is likely to be less sensitive to the harmful consequences of their actions on the environment.¹³ This indifference to the natural world, argue Thomas Hill, Jr. and Geoffrey Frasz, signal the absence of certain traits, such as self-understanding, self-acceptance and other-acceptance, which serve as a natural basis for, or an important psychological preliminary to, divesting oneself of environmental arrogance.¹⁴ To the extent that direct, scientifically informed experiences of biodiversity promote these traits, they can be said to effect a transformation consisting in the divestment of environmentally arrogant dispositions. Moreover, in weakening such dispositions, the environmental virtue of proper humility is in turn fostered.

Firstly, self-understanding comes from an appreciation of one's place in the natural world. This appreciation consists of both an intellectual element and an evaluative element. The intellectual element is an understanding of, and an appropriate perspective on, one's place in geological, evolutionary and human history, and on one's place among the millions of species in the present moment of this history. The evaluative element consists in the adoption of a certain attitude towards one's own importance and value among this measure of time and life. As Hill argues,¹⁵ a fitting response to a full appreciation of one's temporal, biological and evolutionary location in the natural world is a proper humility.¹⁶ The development of proper humility requires overcoming an arrogant self-importance. Hill suggests that learning to value things beyond their

contribution to our own interests is essential in this overcoming, and that one of the ways in which this is learnt is experiencing nature. By coming to learn about, and directly encounter, living organisms and ecosystems, the child can come to appreciate, understand and – through guidance – cultivate a fitting response to his location, and that of human beings in general, within the natural world.

Secondly, self-acceptance comes from an acknowledgment of one's status as a natural being. Again, this acknowledgment involves both an intellectual understanding of one's biological nature and similarity – in terms of our capacities, needs and vulnerabilities – to many other forms of life, and also the adoption of an attitude of equanimous acceptance of this biological nature.¹⁷ Hill argues that indifference and, worse, hostility to nature both reflects and encourages a denial of our status as natural beings. In providing the child with opportunities to directly experience nonhuman organisms and thereby discover and perceive their affinity with other forms of life, this kind of self-acceptance is promoted.

Thirdly, Frasz suggests that in addition to a lack of self-acceptance, a lack of 'other-acceptance' also needs to be overcome in order to develop a proper humility. Other-acceptance is an acceptance of the nature of natural entities without anthropomorphisation, sentimental distortion and denial of the facts of death, predation and disease.¹⁸ Frasz criticises popular wildlife documentaries and films for fostering this kind of sentimentalization of nature. Direct experiences of wild, nonhuman organisms avoid the possibility that, through the use of editing techniques, music or commentary, natural entities will be anthropomorphised or distorted.¹⁹ Further, if those direct experiences are informed by a reasonable degree of biological knowledge then this will ensure that the behaviour of the natural entity is not misinterpreted or sentimentalised.

6. Conclusion

This paper has attempted to show the way in which a virtue ethics framework can help advance the claim that field-based environmental education is a desirable component of a child's education, and structure the contribution that empirical evidence makes to this claim. Virtue ethics provides a framework within which to articulate what is of value about field-based environmental education experiences and activities that result in the development of certain character traits, namely, the virtues. What is of value is their relationship to well-being; individuals who possess and exercise the virtues enjoy, all other things being equal, greater well-being than those who do not. The empirical evidence indicating that such educational opportunities result in the weakening of the vices and the development of the virtues can

then be invoked to support the maintenance and, given the recent decline, increase in such opportunities. Moreover, this argument functions as a constituent in the transformation argument for biodiversity preservation. Not only, therefore, does it contribute to the appeal for an increase in field-based environmental education, but also the justification for the preservation of the very biodiversity that is the object of such education.

Notes

¹ Real World Learning Campaign, 'Memorandum from the Real World Learning Campaign', in Appendix 36 to the UK Parliament Environmental Audit Committee's Fifth Report of session 2004-05, 'Environmental Education: Follow-up to Learning the Sustainable Lesson', 2005, viewed on 27 July 2009,

<<http://www.publications.parliament.uk/pa/cm200405/cmselect/cmenvaud/84/84we37.htm>>. The central organisations belonging to the Real World Learning partnership are the Field Studies Council, the Royal Geographical Society and the Royal Society for the Protection of Birds.

² Some have objected that the virtuous character dispositions cannot be foundational – that is, the only primitives of ethics – in the way virtue ethicists characterise them. See for example J. O'Neill, 'Cantona and Aquinas on Good and Evil'. *Journal of Applied Philosophy*, vol. 14, 1997, pp. 97-105.

³ D. Statman, 'Introduction to Virtue Ethics', in *Virtue Ethics: A Critical Reader*. D. Statman (ed), Edinburgh University Press, Edinburgh, 1997, p. 8.

⁴ R. Sandler, 'Introduction: Environmental Virtue Ethics', in *Environmental Virtue Ethics*. R. D. Sandler and P. Cafaro (eds), Rowman and Littlefield Publishers, Lanham, Md, 2005, p. 1.

⁵ The terminology of 'transformation' and 'transformative' is, I concede, suggestive of experiences of a revelatory or epiphanic nature. While some individuals may undergo such immediate conversion in response to a single experience of biodiversity, what I have in mind – and what is certainly much more common – is a gradual process of change in an individual's attitudes, values and behaviour, during which they continually seek out experiences of biodiversity. And indeed, the notion that an individual's character dispositions could undergo a sudden change is antithetical to the long virtue ethics tradition of insisting that the virtues are acquired and formed through a slow, even life-long process of education and habituation. The transformation argument for biodiversity preservation, developed by Bryan Norton in B. G. Norton 'Environmental Ethics and Weak Anthropocentrism'. *Environmental Ethics*, vol. 6, 1984, pp. 131-148 and B. G. Norton *Why Preserve Natural*

Variety?. Princeton University Press, Princeton, 1987, and also Sahotra Sarkar in S. Sarkar, *Biodiversity and Environmental Philosophy: An Introduction*. Cambridge University Press, Cambridge, 2005 takes adults with currently consumptive and materialistic dispositions as the subjects of transformation. While, therefore, the terminology of character ‘formation’ and ‘formative’ experiences would be more appropriate when talking of the effects of experiences of biodiversity on children, I will retain the original terminology with the above caveats in place.

⁶ By ‘experience of biodiversity’ I do not mean an experience of numerous different kinds of organisms at once. Rather, I intend to refer to experiences of particular natural entities which are *components of biodiversity*, i.e. individual living organisms and collectives of natural entities such as habitats and ecosystems. It is therefore sufficient to undergo an experience of biodiversity to encounter a grass snake on a plot of urban wasteland.

⁷ S. R. Kellert and V. Derr, *National Study of Outdoor Wilderness Experience*. Yale University School of Forestry and Environmental Studies, New Haven, 1998.

⁸ S. R. Kellert, ‘Experiencing Nature: Affective, Cognitive, and Evaluative Development in Children’, in *Children and Nature: Psychological, Sociocultural, and Evolutionary Investigations*. P. H. Kahn, Jr and S. R. Kellert (eds), MIT Press, London, p. 137.

⁹ E. Kals, D. Schumacher and L. Montada, ‘Emotional Affinity toward Nature as a Motivational Basis to Protect Nature’. *Environment and Behavior*, vol. 31, 1999, pp. 178-202.

¹⁰ The subsequent account of Leopoldian perception – developed by C. J. List (see endnote 11) – is drawn from A. Leopold, *A Sand County Almanac, With Essays on Conservation from Round River*. Oxford University Press, Oxford, 1966.

¹¹ C. J. List, ‘The Virtues of Wild Leisure’. *Environmental Ethics*, vol. 27, 2005, pp. 362-363.

¹² R. Sandler, *Character and Environment: A Virtue-Oriented Approach to Environmental Virtue*. Columbia University Press, New York, 2007, pp. 40-41.

¹³ G. B. Frasz, ‘Environmental Virtue Ethics: A New Direction for Environmental Ethics’. *Environmental Ethics*, vol. 15, 1993, p. 273.

¹⁴ T. E. Hill Jr., ‘Ideals of Human Excellence and Preserving Natural Environments’. *Environmental Ethics*, vol. 5, 1983, p. 216.

¹⁵ Hill Jr., p. 219.

¹⁶ By a *proper* humility Hill wishes to avoid the implication of obsequiousness, meekness and false modesty.

¹⁷ Hill Jr., p. 222.

¹⁸ Frasz, p. 271.

¹⁹ It might be objected that science is capable of distortion with its own 'commentary' on our experience. Further, my heavy and uncritical reliance on the natural sciences to provide the conditions for positive transformative experiences is open to criticism. Unfortunately, anything beyond an acknowledgment of this reliance is beyond the scope of this paper.

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