

they were created, and their identification with the person of Christ. This in turn meant that, against all prevailing custom, they were called to write, proclaim and preach their discoveries to any who would listen. She finally states that it is a tragedy and almost irreparable loss to our Christian tradition that this wisdom was not at the time allowed to modify the mainstream development of Christian teaching. She goes on to argue for medieval women's voices to become meaningfully present in today's Church.

This book is a clear and interesting exposition of many of the issues and of the voices of medieval women. It will appeal particularly to anyone who is looking for a sound and well-written introduction to the subject.

ANTONIA LACEY

THE CONCEPT OF NATURE by John Hapgood, *Darton, Longman and Todd, London, 2002, £10.95 pbk.*

This book, based on the Gifford Lectures for 2000, aims to do a job of what Mary Midgley calls 'philosophical plumbing': to check that the concept of nature, which we use so often without reflection, is in good order and able to do its job. The first chapter identifies what Hapgood sees as the three main senses of the word: 'the essential characteristics of a thing'; 'a force which makes things what they are'; and 'the entire physical world'. He then discusses five areas of study or practice in which 'nature' is an important concept: the natural sciences, conservation, ethics, technological development and theology.

The second chapter argues that we need to study nature as a whole at a range of levels. It is not enough to 'explain' the whole by reference to fundamental mathematical formulae. The third chapter explores the way in which the countryside and wilderness that many of us wish to conserve is both given and socially constructed. Hapgood goes on to argue for a 'sensible middle ground' between anthropocentric exploitation and treating all species, including ourselves, as equal. The chapter on ethics outlines and defends a natural law ethics interpreted along the lines of John Finnis', but with an emphasis on its potential for development over time. The penultimate chapter focuses on questions of the genetic manipulation of human beings and food crops. Finally, Hapgood sets the physical and human worlds in their theological context, and explores their 'potentiality' for 'ever-increasing complexity in response to the open-endedness of their environment' as a witness to 'God's continuing creativeness'.

The project is a worthwhile one, but I was disappointed by its execution. The comparison may be unfair, but Hapgood's analysis of the uses of the word 'nature' does not approach the subtlety or precision of C.S.Lewis' in *Studies in Words*. Moreover, he often fails to show clearly or rigorously how his analysis of 'the concept' applies to his later arguments. His underlying problem may be one that Lewis revealed: there is no one concept of nature, but a loosely connected bunch of concepts, which

requires tremendous sensitivity and caution to disentangle.

I found the chapter on genetic manipulation, entitled 'Improving Nature', the most interesting. Hapgood points out that to describe the genetic code as a 'blueprint' is dangerously misleading. The code is more like a set of instructions, in which to omit one word might give an opposite meaning. Therefore enormous caution is required in attempts to 'improve' our genes. Hapgood goes on to distinguish between the following: the use of genetic material to replace proteins or tissues; the introduction of genes to specific parts of someone's body to treat problems such as cystic fibrosis that are caused by a single defective gene; the replacing of specific defective genes in embryos that will be allowed to grow into adult human beings; and, finally, the 'design' of the genetic material of an embryo to produce an 'ideal' baby. He rejects all except the first for a range of scientific and ethical reasons. In particular he defends the importance of recognising babies as gifts rather than as something that we design and make.

At the same time, however, he relies on a morally curious distinction between those embryos that are 'destined to develop into human beings' and those that are not. This allows him a pragmatic defence of the use of embryos that will be destroyed to provide stem cells; at the same time it makes him rule out the replacing of single defective genes in embryos that would be allowed to be born. The principle (which current law appears to exploit) is neither explained nor defended. It seems to me that it might be difficult to defend without resorting to the sort of manipulative assumptions that Hapgood rightly rejects.

Hapgood's discussion of the genetic modification of food makes two valuable points. First, it is important to distinguish between GM foods, which can be thoroughly tested for safety, and GM crops. It is not possible fully to test, or to control in the long term, the ecological risks of GM crops. Here, Hapgood does make use of a careful analysis of the way in which such genetic modification may or may not be described as 'unnatural'. Almost all food crops have changed enormously through centuries of deliberate breeding. However, the changes caused by genetic modification are much faster and more drastic. Traditional breeding programmes have been more cautious, more subject to checks and balances and more local.

Hapgood quite rightly defends the human creativity that seeks to develop as well as accept what is given. Indeed, his discussion would benefit from a clearer account of 'potentiality', which he tends to associate with a Darwinian rather than an Aristotelian use of 'potential'. The normal use of this word, however, suggests an Aristotelian idea of fulfilment rather than a Darwinian one of random and unconstrained change. Underlying both Aristotle's and the traditional Christian views of the natures of things was a belief in their intrinsic goodness. An exploration of the way in which Hapgood's ideas of 'givenness' and 'potentiality' relate to goodness might provide his arguments with a more robust basis.

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