

IS GOD GREEN?

CHRISTIAN CONTRIBUTIONS TO THE ENVIRONMENTAL DEBATE

Contents:

1. Introduction
- 1.1 Agricultural Research
- 1.2 The wider Scene
2. The Accusation
3. Some Solutions: Planetary Engineering: James Lovelock's Gaia
- 3.1 The genesis of Gaia
- 3.2 Scientific critique of the Gaia hypothesis
- 3.3. Gaia as a religious object.
4. The Ecofeminist Critique
- 4.1 Nature
- 4.2 Language
- 4.3 Hierarchical and Holistic modes of thought
- 4.4 Eco-justice.
5. Animal Rights - the theology of Andrew Linzey
6. The Christian response to the Environmental Crisis

1. Introduction

In the film *Nuns on the run*, two crooks take refuge in a nunnery dressed as nuns. In one escapade they have to take an RE class on the subject of the Trinity. One of them, being a good Catholic, explains it to the other, using the traditional imagery of the Shamrock. The other catches on quite quickly - as he goes in to the class he summarises the doctrine of the Trinity: God is small, green, and divided into three. It is the second of these propositions that I want examine here.

1.1 Agricultural research

First, however, I want to illustrate some of the themes by relating my experience in agricultural research. For the last 19 years, my employer has been the Ministry of Agriculture, Fisheries, and Food (MAFF). Since the war until relatively recently MAFF pursued a program of advice, research and grant aid, to increase agricultural productivity (MAFF, 1975). As a consequence, the output of British agriculture has roughly doubled, which is a major achievement.

In the 1980s this policy was questioned. In the European Community the boundaries were drawn not round Britain, but around Europe. From being a country in food deficit, we became a member of a community with a food surplus. So we heard talk about food mountains, the wine lake, and so on. There was also a muck mountain, but we didn't talk so much about that!

At the around the same time, the environmental movement gathered momentum. As concern for the environment grew, the public standing of the farming community fell. Once farmers were the guardians of the countryside, the residue of all that is good about England. Now they are seen as rapacious business men, running not farms but agri-businesses, despoiling the countryside and its wildlife in the endless pursuit of profit, the "Barley Barons". MAFF was also identified with the big business farming lobby, and became environmental enemy, well not number one, but number three, after the Ministry of Defence and the Department of Transport. A major shift in public perception over quite a short period!

Because of environmental pressures, the major policy aim of most European governments, is now to roll back the tide of intensive agriculture while maintaining the economic viability of farming enterprises. No one wants the alternative which is an unsupported agriculture which would immediately usher in an era of agricultural abandonment, with its attendant collapse of the rural economy.

In the middle to late 80s these two threads were put together, and measures to reduce agricultural surpluses were channelled into schemes that also had an environmental benefit. So schemes such as the Environmentally Sensitive Areas were introduced. These allowed the government to pay farmers to adopt farming practices that were not optimum in financial terms, but which had an environmental benefit. Locally, The Norfolk Broads form one such area. In the early 1980s, improved drainage threatened to turn traditional pasture areas into arable production. The ESA scheme now pays farmers to maintain grassland, to increase water levels, and to maintain landscape elements. Unfortunately, other programs, like set aside have not had the same degree of success, and have been an environmental disaster.

And that brings us to my own work. When I joined the MAFF Field Drainage Experimental Unit in 1975, the aim of the organisation was to support the farming industry with scientific backup to an activity, drainage, which was totally aimed to increase production. That has now changed. Since about 1991, all government research money has been channelled to what is known as "public good", which in this context means research into the management of agriculture so as to minimise the impact on the surrounding environment. So, the focus of our work on Nitrates has turned from the optimum use of a resource, to the control of leaching into water supplies, and the attention on water quality has spread to other chemicals, notably pesticides.

One major thread in my research work has been to identify the means to achieve environmental aims as they relate to water levels in wetlands. The Broads provide a good example. To the untutored, the answers are simple, to preserve wetlands, simply turn off the drainage, the wetter the better. Unfortunately, life is not that simple. For a start, turning off the drainage is not technically easy, unless we also want to make whole areas inaccessible, and flood not just the target wetland, but other areas as well, including roads and houses - which is generally not acceptable! Secondly, we have to decide just how wet a wetland should be. Since historical times, the wetlands of the Broads have been open water, peat fen, grazing marsh, and now potentially arable agricultural land. Which of those conditions, if any, are meant when we say we want to revert to a "natural" state?

This then leads to the philosophical and ethical question: which is what are we trying to achieve through environmental action? The policy makers of MAFF now state that they are not interested in reverting a specific historical state, but are concerned to create a condition of the land that is in sympathy with modern aims and needs - and our aims are no longer to maximise production, but to achieve a compromise between the environment and the maintenance of the agricultural economy.

1.2 The wider scene

That has put my particular concerns in place. However, the environmental movement is concerned with much more than the fate of agricultural land. Indeed I once heard it described as being concerned with "everything from the ultimate destiny of humankind to what gets flushed down the loo".

We are conditioned to thinking that we are now at a crisis point. Perhaps that is so, but I suspect this is a combination of journalistic hyperbole and political necessity. In a crisis we have no excuse for inaction. Nevertheless, it is clear that significant degradation of the environment has taken place,

and that it will continue to degrade unless action is taken soon. The environmental movement has reached a point where it has the public ear, and politicians are all trying to be green - and as a result things may even get done.

But human beings have always been a dirty species! Not long ago, I was walking in the headwaters of the Yarty river in the Blackdown Hills, on the Somerset Dorset border, and now an Environmentally Sensitive Area. Yet even there are vast areas of land, in fact nearly all the steep valley side slopes, which are full of hummocks and mounds, that are the discarded spoil heaps of iron mining. These are not the result of the industrial revolution, but date back to the Iron Age. Industrial despoliation is nothing new.

So the question that as a non-stipendiary minister working within this environmental field, I have to ask, and which I want to explore a bit with you, is: does Christianity have anything to offer the current debates? And the answer I shall come to is, perhaps not surprisingly, quite a lot. First, because Christianity has been accused of being instrumental in the current crisis, and Secondly because most of the unanswered issues in the environmental movement are not technical, but moral and religious issues.

2. The Accusation

In the first place, it is necessary for Christianity to say something about environmental issues, in its own defence. In a famous address to the American Society for the Advancement of Science, in December 1966, Lynn White, who at the time was Professor of Medieval History in Los Angeles, delivered a diagnosis of what he called the "Historical Roots our Ecological Crisis", in which he quite clearly placed the blame on Christianity. The roots, he claimed, of our crisis, are the consequence of Christian theology. "modern science is at least partly to be explained as an Occidental, voluntarist realisation of the Christian dogma of man's transcendence of, and rightful mastery over, nature."

White identifies those components of Christian doctrine that have lead to the problem:

{SYMBOL 183 /f "Symbol" /s 10 /h} First that Christianity "desacralises" nature. It separates the creation from its creator, so its possible to investigate the natural world without offending its gods. "By destroying pagan animism, Christianity made it possible to exploit nature in a mood of indifference to the feeling of natural objects"

{SYMBOL 183 /f "Symbol" /s 10 /h} Second, White argues that Christians derived from Genesis in particular a view of the world in which the human race was seen as the culmination of creation, a different kind of being. In Genesis 1:28 we read: "And God blessed them and God said to them, "be fruitful and multiply, and fill the earth and subdue it; and have dominion over the fish of the sea and over the birds of the air...". White argues we have taken the notion of dominion to the point where we considers creation a resource to be plundered at will, by a master race whose home is in heaven and not really here on earth.

There is of course an element if truth in the argument. But, then, Christianity has been blamed for every ill of modern Western society. In fact Lynn White's views were not new, and when science was still considered to be a "Good Thing", it had been argued that the liberating attitude of Christianity was responsible for the growth of science. But in fact, the link between religion and society is much more complex, and the easy identification of the link between technology and the religion of the culture in which it developed, has been challenged.

Nevertheless the argument that Lynn White started has continued. Even the pages of the scientific journal, *Nature*, that bastion of the scientific establishment, and with a positively anti-Christian bias in the editing, still contain a lively correspondence on the issues of the links between science and religion. One recent correspondent even suggested they need to appoint a theological referee!

In one sense, Lynn White was right, in recognising that our present crisis, whether it be real or imagined, whether it be the latest of many, or the unique final apocalypse, has a religious dimension. The will to deal with our environmental problems cannot be generated from anything except a religious understanding. The roots of our ecological crisis rest in the way we look at our environment, how we see our place in the scheme of this world. Lynn White may have got it wrong by setting up a simplistic caricature of Christianity, but he touched a real raw nerve when he made the link between our current state and our spiritual viewpoint.

In another way Lynn White has been vindicated, by the way his analysis has been taken over by the Green movement. Despite the fact that a series of articles by any number of scientists, historians, and theologians, have shown that every single one of his arguments are either far too simplistic, or capable of alternative explanations, the basic accusation has been repeated many times, that Christianity is to blame for our troubles. So books on the environmental crisis tend to quote it with approbation, without even mentioning the articles that cast doubt on its case. I suspect that the Environmental movement was happy to find a reason to reject the cultural norms of its time - and so were glad to reject Christianity, without being too concerned with the niceties of the argument. Our task as Christians is not to counter Lynn White's detailed arguments, but rather to show that Christianity has something real and positive to offer the environmental movement.

3. Some Solutions: Planetary Engineering: James Lovelock's Gaia

3.1 The Genesis of Gaia

I want to move now to the important ideas of James Lovelock. James Lovelock himself is a maverick - a scientist of international reputation, whose work in the sphere of biology earned him an FRS, and whose success in building instruments has given him the financial independence to pursue his own ideas. Because he has been largely ostracised by the scientific establishment, he becomes an ideal guru for those seeking an alternative vision and life style. He is the nearest thing to a martyr that the environmental movement has.

The reason for Lovelock's fame, or notoriety, goes back to the early 1970s, when he was working with NASA, trying to design probes that would detect life, if it existed at all, on Mars. To do this, he started by looking at the earth. The best way, he argued, to design a life-detector for Mars would be to design a detector that would identify life on earth. If whatever he devised wouldn't work here, it was unlikely to find life on Mars.

So Lovelock looked at the earth's atmosphere. He found that the observation that the earth's atmosphere is some 20% oxygen, is in chemical terms, most remarkable, depending on the continued and continuous photosynthetic activity of plants to renew the supply. Oxygen in the atmosphere is itself a prime indicator of the presence of life on earth. The evidence is that oxygen rich composition of the atmosphere has remained a feature of the earth for a remarkably long period, from the Archean period to the present, at least 2,300 million years.

A second, parallel, and equally remarkable, observation could be made about the temperature of the earth, which has remained constant over the same time span, despite a 25% increase in the input of solar energy. The mean temperature has stayed within a narrow range, around 280 to 300°K, and in that fraction alone life as we know it exists.

Now, the regulation of bodily temperature and chemical composition is a major characteristic of living organisms, and so Lovelock conjectured, the earth could be seen as in some sense alive. This self-regulatory ability leads Lovelock to adopt the "Gaia hypothesis", in which he suggests that the

surface of the earth, its atmosphere, and the biological activity within it, can be considered a super-organism to which has given the name of the Greek earth goddess, Gaia, mother of Jove.

3.2 Scientific critique of the Gaia hypothesis

Most controversy has followed the last stage of Lovelock's analysis, that the earth can be called a pseudo-organism called Gaia. Biologists see in his ideas the spectre of teleology, which argued that organisms and organic systems, grew to achieve specific aims, and that the end was itself the explanation. Earth scientists are generally happy with his description of the earth/biosphere/atmosphere as an enormously complex interacting system, dominated by feedbacks which together keep the system stable. They accept that such a system is capable of maintaining an equilibrium, and offers a context within which the evolution of species is possible. But what is gained by giving this system a name, and then giving it the properties that we describe as "life"? The "Gaia hypothesis" is useful as a scientific tool only if it either adds additional information, or presents data in a new way that generates new insights.

However, it is only by restricting the definition of what constitutes life, that Lovelock is able to defend the pseudo-life hypothesis. In addition, the Gaia hypothesis is strictly unscientific in that it is unverifiable because it makes no testable predictions. It thus fails the rather strict criterion of falsifiability set by Popper.

Perhaps the most scientifically useful part of the Gaia hypothesis is to reinforce our notion of how inherently unlikely is life on earth. The more science studies the universe, the more it becomes obvious that the conditions for our existence are, on the cosmic scale, remarkably rare. Of course, because we are here now to observe that same universe, it, and our planetary system must, have taken that delicate course. This is the so-called weak anthropic principle.

3.3. Gaia as a religious object

As science, the Gaia hypothesis fails to be fruitful, because it does not give us any new information, nor any significantly new ways of ordering our data. It is thus probably outside the realms of science that the Gaia hypothesis has received the greatest attention, and the greatest acceptance. The environmental movement which has found in Gaia a framework in which to place their concern. Gaia has ceased to be the property of the scientific world from which it originated, and has become a slogan for a whole new movement. What started off as a scientific hypothesis has taken on a religious dimension, becoming a pseudo-religious symbol, a Goddess even. It is perhaps as the name for a new pantheism that Gaia is most likely to be dangerous to traditional Christian sensibilities.

4. The Ecofeminist Critique

Talk of the Goddess Gaia can act as a link to the next group of ideas that need to be considered, those generally called ecofeminist. These are however, a very wide group of views, and cover everything from main stream Christian views to some very strange ideas indeed. One author even tells us that "Talk about the weather therefore becomes ecofeminist discourse", so just remember that next time you watch the forecast!

The central concept behind the ecofeminist movement is that the two basic things wrong with the world at present: the domination of women by men, and the domination of nature by mankind, are aspects of the same basic phenomenon, male dominance. Ecofeminism .. explores how male domination of women and domination of nature are interconnected, both in cultural ideology and in social structures.

Radford Ruether, 1992, p2

The ecofeminists nevertheless raise many important issues, and it is my intention to focus on four of them, that seem to be particularly important: the concept of Nature, the use of language, the use of hierarchical modes of thought, and the interconnection between ecological issues and social issues.

4.1 Nature

One critical point in any discussion that considers relations between human beings and their natural environment, is the meaning given to the very word "Nature". What we mean by nature, and what we derive from it, is socially defined. We cannot learn directly from nature, because we can never approach it without the cultural baggage that defines what we will see (e.g. Evernden, 1992).

The point is particularly relevant to the ecofeminists who see many of the evils of the current age as due to the scientific "domination" of a female natural world. In doing so they quote the works of Francis Bacon who described the scientific method in terms which are full of references to the domination of a feminine nature by rational scientific men. "For Bacon, scientific knowledge is fundamentally a tool of power, the capacity to subjugate and rule over "nature" (Radford Ruether, 1992, p.195). And because nature is identified with Eve, the scientific domination of man over nature is one with the social domination of men over women.

This argument has its difficulties. It appears that feminists have identified one good source text, and re-quoted it without asking whether that source is typical or much regarded. Modern scientists do not as a whole read Bacon. (Many don't read either the philosophy or the history of their particular branch of science at all). If you read a modern text book about the philosophy of science, such language is totally absent. The scientific method is seen as a search after truth, or an investigation into, an exploration, of a rich universe.

However for much of the Christian era, Nature has been seen as something wild, untamed, a source both of fecundity and of evil, and this has been identified with Eve, the archetypal woman; and the rationality of man has been seen as the answer to fallen-ness of woman. Like most of the feminists I would want to reject much of that picture, as I do not accept that fallen-ness is associated with the feminine. However, I would want to retain the insight that the natural state is in some way a jungle of unfettered emotion and sexual symbol. What I reject is the simplistic notion that the root of all the problems lies with femininity. I would argue that the dark side of humanity, which we identify with the irrational, with the "natural" is common to both sexes.

What we need to develop is a modern statement of Nature - what it is and how we as contemporary human beings should relate to it. I suspect that such a statement would exclude all gendered references, and all the language of domination. This then brings us to the language issue.

4.2 Language

We can appreciate that much of our language does make the connection between nature and the feminine. We talk of "Mother Nature" and God as "Father". These can very quickly become sexual stereotypes in which both the feminine and the natural world is disparaged and reduced to being second rate.

This touches a very raw nerve for the Christian church. Christian theologians have been aware that God is not sexed, that God is above the concepts of gender, indeed above any anthropomorphic representation. However the reality of Christian piety is so coloured by the Lord's prayer that calls God "Father", that the characterisation of God as an old man in the sky with a long white flowing

beard is not a caricature, but a real representation of how the majority of Christians have seen their God. Michaelangelo's frescos in the Cistine chapel, and Blake's engravings, to take just two examples, are the realisation of the common view of God. I suggest that Christianity has a lot of work ahead of it to de-sex its view of God, but that the task is essential if we are to take Christianity into the next century.

The point at which we have to be careful is that we need to replace our sexed language for God and Nature with sexually neutral language, not replace the male with female. God is above sex, and what is wrong is the cultural baggage that has portrayed him as male. Equally, nature is sexless, and again what is wrong is the imagery that identifies it as Her. To do replace the explicitly masculine with the explicitly feminine is, to my mind, to replace one error with another. What we need is a sexless god and an impersonal nature.

4.3 Hierarchical and holistic modes of thought

The more extreme of the feminists identify the modern scientific thought pattern as hierarchical, dominating, and as part of the mechanism for the subjugation of both women and nature. They argue that there is an alternative, distinctively feminine way of thought, which is Holistic as opposed to Hierarchical, All-embracing as opposed to Dualist.

There is no doubt that Christianity has been (and probably still is) hierarchical in its thinking on most subjects. The question that must be answered is whether the Christian Religion is capable of expression in any other way. I believe it is, and some contemporary theologians adopt the egalitarian modes of today's democratic world. But this doesn't stop feminists sniping at Aquinas as if they are sniping at today's church. Nor does it hide the fact that pro-male and anti-female attitudes are hidden in so much of the church's traditional material, that it is difficult to avoid using it without a great conscious effort.

By contrast, the holistic approach wants to empathise with all there is in any situation. Faced with an ecological problem it would empathetically absorb the information about all there is. But frankly, when faced with any real problem, it just goes into information overload. The human brain cannot handle the amount of information that a truly holistic understanding of any situation would require.

I do not accept that there is an essentially feminine way of thought that is good for ecology, and opposed to normal rational thought. I accept that for many ecological problems, a holistic examination of the problem is necessary: we have all seen the situations where a problem is split between many experts each of whom examine a small component of a problem, with no-one to take an overview. But this is not the same as denying the value of rational analytical thought.

I would argue is that one of the great advances we have made in our social thinking over the last hundred or so years, is that men and women are equal. In the west, we now have a society in which the sexes are at least theoretically equal. The response must be to take away gender attribution to all attitudes and thought patterns - and not to identify them with gender in a war of the sexes. So I would argue, we need to identify dominant and passive roles, not male and female roles; good and bad thought, not male and female thought. In the same way as we need to abandon gendered language when we speak of God, we must also abandon it when we talk of social relations and society.

4.4 Eco-justice

Yet the ecofeminists are not alone in identifying the issues of ecological consciousness with justice. Earth healing requires a healing of the divisions not only between human groups and the environment, but between men and women, and between rich and poor, and most particularly between the rich and poor nations that comprise the first and third worlds. And in this identification, the eco-feminists are by no means unique. Thus the WCC adopted the title Justice, Peace and the Integrity of Creation (Gosling, 1992). I could, but won't say much more on this issue.

5. Animal rights - a review of Andrew Linzey's "Animal Theology"

As an example of some of the alternative ways that Christians have treated the ecological issue, I will review one major contribution - the recent "Animal Theology" of Andrew Linzey. The ideas of Matthew Fox's "creation theology" and Tim Cooper's "Green Christianity" are equally important, but space and time prevent me from dealing with them.

Andrew Linzey is an advocate of animal rights, a topic much in the public interest right now. The nub of all thought about how we treat animals rests on the question of how we view ourselves, the human race in relation to the rest of the created order. Traditional Christian values appear to stem from an essentially hierarchical viewpoint.

"What are mortals, that you should be mindful of them
mere human beings that you should seek them out.

You have made them a little lower than the angels
you adorn them with glory and honour.

You give them mastery over the works of your hands,
and put all things under their feet.

All sheep and oxen, even the wild beasts of the field.

the birds of the air, the fish of the sea

and whatsoever walks in the paths of the sea.

Psalm 8: 1-4

The mental architecture is that of a hierarchical scheme - with God at the top, just below him the angels, and just below them mankind (and in some accounts women below them), and at the bottom the rest of the created order. Within such a scheme, Thomas Aquinas asked the question: what use are animals; and came up with the reply, that as they had no soul, no rationality, they had no function except to be of use to humankind. The medieval mind was so concerned with achieving salvation that it did not matter what it did with the rest of creation. So cruelty to animals was a matter of complete moral indifference unless it lead the perpetrator into habits of cruelty, and affection to animals had virtue only of teaching us to love. Such a heaven-oriented viewpoint has the same attitude to the environment as it has to animals. Species, habitats, even the beauty of creation, are of no intrinsic worth unless they contribute towards salvation.

Although most Christians would reject this argument, it is still present in the many of society's attitudes. We are all horrified by maltreatment of a dog, but eat our food without any thought of the conditions under which it was produced. Whatever we think about the animal rights campaigners, they do at least make us think fairly hard. Whereas I suspect that much of the concern for animals, and indeed for the whole environment is fuelled more by sentiment than by rational argument, we do need to recognise that there is a case for considering animal rights.

Linzey bases his arguments for a concern for animals on three criteria:

- First, animals are part of creation, and we are obliged to respect them as part of the creation, because of their relation to their creator who is also our creator.

- Secondly, Linzey argues we have distorted the central Biblical notion of domination. The ultimate example of Lordship is Christ, who although God, humbled himself and served others, thereby completely inverting the notion of domination. To use the imagery of Genesis, we must rediscover our role as the Gardeners of Eden.
- Third, Linzey sees a critical argument in the fact of the incarnation. As Christians, we proclaim that Jesus Christ, the Son of God, became a human being, and by his atoning death on the cross paid the sacrificial price for our sin. We also say that this new relationship with God will be made manifest in a new, re-order, remade, redeemed creation, and that redemption will be extended to the whole of the created order.

From these principles, Linzey derives a duty to protect animals at all costs. To him, all eating of meat (or predation as he insists on calling it), all animal experimentation, are morally repugnant. The problem, as I see it, is that Linzey singles out one part of creation, the animals, for special treatment, as needing special protection.

One of the great insights that has been given us by modern science, is the essential unity and continuity of all creation, in which it seems both perverse and unnecessary to make rigid subdivisions. However, that is what Linzey does when he insists that animals have a special place in creation. The inanimate world below that, is still apparently morally inert in Linzey's view. He argues that eating animals is not acceptable, but eating plants is acceptable. But surely plants are part of creation, and are part of the great cycles of life. Perhaps another writer will come along and start proclaiming Plant Rights!

Of course, failure to accept Linzey's separation of animals into a separate category does NOT automatically necessarily entail a refusal take the arguments for animal welfare and animal well-being seriously. Indeed, rather the reverse, we extend the care that Linzey would wish to show to animals to the whole of creation. What is fundamentally wrong with Linzey's argument is that he appears to be setting up animal welfare as a moral absolute. No eating of animals is ever justified, no experimenting on animals is ever right, he claims.

I believe that we have to eat to live, and that can include the consumption of animal products. Every time I eat, something dies, whether it be an animal or a plant. What I must do is make sure that the deaths are not pointless or wasted, and that they involve no unnecessary suffering. It is the issue of suffering that makes the killing of animals more difficult. Certainly I support all moves to make the death of domestic animals as painless as possible, to make sure that no killing is unnecessary. But in the end, we all must both live and die, and we kill to survive, and so participate in that cycle of consumption and death which is life itself. What we must do is participate in that way knowingly and responsibly, not wantonly or frivolously.

6.0 The Christian Response to the Environmental Crisis

I want now to return to the starting point, that the origins of our current crisis are essentially religious. One reason for the current crisis is that we cannot see any way out of the problem apart from the application of yet more science and technology - and we are wary of that route, because that's the way we got into this mess in the first place. But that's all we can do - we must succumb to the modern clamour.

Adrian Armstrong, St Wilfrid's, North Muskham, Newark, Notts.