

# The Bible and the Environment

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It was over 30 years ago that I visited Israel for the first time, and I remember how it transformed my reading of the Bible. Up to then I had never paid much attention to the place names in the text: I just focused on the characters and their actions. But after visiting many of the sites mentioned in the text my reading of the stories changed: I picture them taking place in the specific places mentioned in the Bible.

Something similar happened to me some fifteen months ago, when I was asked to read a paper to a conference of environmentalists on The Old Testament and the Environment. Though I was quite familiar with many of the texts in the Bible relating to environmental issues, I had not asked myself how the biblical writers regarded the environment. But once ask the question and you will soon realise it has a lot to say on this topic. Mind you I could find little help from modern biblical scholarship. They tend to share the blind spots of modern city dwellers and not address these issues either.

Richard Bauckham has observed:

Ancient literature...simply takes for granted that human life is embedded in the rest of nature and inextricable from it. But modern biblical interpretation has persistently ignored what the texts assume and say about the human relationship to nature.

Modern urban readers of the Bible assume references to nature are just picturesque illustrations of human life. They read into the text an ideology of human emancipation from nature. They set up a Platonic dualism contrasting history with nature, salvation with creation, contrasts that are quite foreign to the Bible.<sup>1</sup> Unwittingly I too was party to some of these errors, and this lecture tonight is an opportunity to confess them and I hope make some amends.

Let me first say it is quite impossible to do justice to this topic in a fifty-minute lecture. I can only hope to sketch a few relevant principles from the Bible, not explore all the texts that bear on the topic in any detail. Nor do I intend to try and apply biblical principles in any detail to the environmental crisis: that is the job of the scientific and political experts who have the detailed knowledge to make wise decisions in this area. I shall be content, if I can persuade you that if you take the Bible seriously you ought also be concerned for the environment. So to our topic: the Bible and the Environment.

The first point to make is that in addressing this issue, we must carefully distinguish between what the Bible describes and what it prescribes. We are well aware of this in other areas of biblical study: just because 2 Samuel describes David's adultery with Bathsheba, it does not mean it is encouraging such behaviour. Similarly when it is describing agricultural practices, as Jesus does in the parable of the sower, we have to be careful not to draw normative principles from such descriptions. I think it is unlikely that Jesus was encouraging us to sow among thorn bushes or on stony ground. Nevertheless it is important to understand the world of the Bible, if we are to appreciate correctly the thrust of its normative statements. So I shall begin by sketching the lifestyle of the typical Israelite in Bible times, before trying to draw out the teaching of Scripture from those passages, such as laws, that do appear to represent the author's message to his readers.

## The Life of an Ancient Israelite

Let us begin with description. I want to sketch the life-style of the typical Israelite farmer in Old or New Testament times. As I have already mentioned it is remarkable how little books on Old Testament theology and ethics say hardly say about environmental issues. Yet it has been

observed that animals are mentioned on nearly every one of the thousand pages of the Old Testament. This is not surprising, for OT man was intimately involved in the environment throughout life. The weather determined whether his crops would flourish or fail. He drew his water from the local well. He depended on animals to plough his fields, transport his goods, for clothing, for food and for sacrifice. Often some of them lived in the courtyard of his house. Yet though much closer to nature than us, nature was also perceived as potentially more hostile. He could be killed by lions or bears. If drought did not cause famine, locusts or disease could be equally fatal.

By contrast modern urban dwellers are largely cocooned from the environment. We live in solid centrally heated houses supplied by well organised utility companies, depend on machines for transport, food and clothing production, and never feel threatened by other kinds of life except perhaps bacteria and viruses. Whereas in ancient times people lived in daily contact with the natural world, Westerners today only encounter it through TV or tourism or in vestigial form such as pets and gardening. But these are mere hobbies, optional extras not vital activities for human survival as they once were for nearly everyone.

Numerous historical, archaeological and geographical studies<sup>2</sup> as well as careful reading of the Old Testament text have given us a clear view of the life-style of ordinary Israelites in the period in which most of the texts were written roughly 1200 - 500 BC. The Israelite heartland, the hills of Judah and Samaria, would still have been heavily wooded when the Israelite tribes first settled there. They built their typical four-roomed houses round a courtyard and farmed the land around them. When the children grew up, the daughters married out but the sons stayed on the family estate, which they tried to enlarge by cutting down more trees. Apart from a few merchants, skilled workers, and those employed in the court, most people depended on their land and animals for survival. Figs, vines, and olives were grown on the terraced hills. Some grain would also have been planted on the terraces, and more in the valleys. Most families would have owned flocks of goats and sheep, which doubtless roamed far and wide looking for pasture. The most valuable animals were cattle which served as tractors as well as producing milk, meat and hides.

By and large the Old Testament paints a rosy picture of life in the land. Canaan is a land 'flowing with milk and honey'. Unlike Egypt which depended on human irrigation with the foot, Canaan is fed by rain from heaven (Deuteronomy 11: 11), and the grapes grow in clusters so huge that they need two men to carry them (Numbers 13:23). The patriarchs' flocks flourished in the land (Genesis 26:14), while the psalmist rejoices that the 'valleys stand so thick with corn that they shall laugh and sing.' (Psalm 65: 14)

But it was a precarious existence. Though the average winter rainfall of Israel is adequate (20"+), it is variable in its timing and quantity. Many a year it is 30% below average, which before modern irrigation would mean failure of many crops. And if that happened in two or three consecutive years, as it may well do, the average Israelite family would go bust or starve, if they did not emigrate or find a wealthy neighbour or relative to bale them out. Even in a year of average rainfall if the rain started late or ended early, crops would be poor. Without deep wells and sprinklers nothing humanly could be done to remedy the situation. Prayer, emigration or death were the only options when stores ran out (Genesis 12: 10; Ruth 1: 1).

Drought was not the only threat to life though. The woods were home in Bible times to numerous wild animals, such as lions and bears, which could kill humans and their livestock (1 Samuel 17:34). Survival could also be threatened by plagues of insects, such as locusts, or crop diseases (Deuteronomy 28: 22,39,42). Although Mesopotamians felt threatened by overpopulation, ancient Israel was concerned that for lack of energetic manpower they would not be able to keep the wild life at bay (Exodus 23:29) or prevent the cultivated vine terraces being overrun by briars and thistles (Proverbs 24: 30-34; Isaiah 7: 23).

The biblical writers were therefore fully involved with the natural environment. They knew at first hand the joys and problems of ancient Israelite agriculture. They recognised the natural fertility of the land given them by God, and saw this as one of his great blessings to them. But on

the other hand they were well aware that their existence in the land could not be taken for granted: God could withhold the rain and that would bring national disaster, or mere sloth could bring personal ruin as the weeds gained the upper hand.

## Man's Relationship to the Environment

### Water and other natural resources

This ambivalent situation is reflected in the texts that discuss the theology of the environment. Little is said about natural resources except water. Canaan is a 'land of brooks of water, of fountains and springs, flowing forth in valleys and hills,.....a land whose stones are iron, and out of whose hills you can dig copper.' 3(Deuteronomy 8: 7-9). Deuteronomy expects these resources to be enjoyed thankfully: 'you shall bless the LORD your God for the good land he has given you.' (8:10)

Deuteronomy's description of Canaan's bounty echoes the description of Eden in Genesis in which a large river flowed dividing into four branches presumably watering the many trees that it featured. Eden also contained gold and precious stones. Ezekiel also draws on this picture of Eden when he describes the new temple as having a river flowing out of it eastwards down the Kedron valley to the Dead Sea. 'When it enters the stagnant waters of the sea, the water will become fresh. And wherever the river goes every living creature which swarms will live, and there will be very many fish...And on the banks, on both sides of the river, there will grow all kinds of trees for food. Their leaves will not wither nor their fruit fail, but they will bear fresh fruit every month, because the water for them flows from the sanctuary. (Ezekiel 47: 8-12). The very last chapter of the Bible pictures the heavenly Jerusalem as a new Garden of Eden.

Then he showed me the river of the water of life, bright as crystal, flowing from the throne of God and of the Lamb through the middle of the street of the city; also, on either side of the river, the tree of life with its twelve kinds of fruit, yielding its fruit each month; and the leaves of the tree were for the healing of the nations. (Revelation 22: 1-2) Within the Bible water is often a symbol for the life-giving power of God, but in the hot dry climate of the Middle East it also inescapably reflects reality. Without water everything quickly dies.

### Plants

Whereas earth's natural resources are largely a topic for wonder and grateful appropriation (e.g. Job 36:27 - 38: 38; Psalm 104), much more is said about plant life, its place in God's plan, and man's relationship to it. The account of creation in Genesis 1 climaxes with the creation of man on the sixth day and in a sense all the work of the previous days prepares for this. Day three with the emergence of the dry land from the universal ocean and the growth of the first plants is a large step in preparing a habitable environment for human life. Two main kinds of vegetation are distinguished, plants and trees. Both are characterised by bearing seed and propagating themselves according to their kind. The repeated references to seed bearing and kinds of vegetation hint at God's concern that life should continue and affirm that the different types of plant life are organised by him.

The relevance of plants to human existence becomes explicit on day six after the creation of land animals and man. Plants and trees bearing seed are assigned to man to eat, whereas other plants are given to the animals to eat. The reason for the distinction is not very clear, but basically man is assigned fruits and grain, whereas the animals are expected to eat grass and leaves. Both animals and man are here portrayed as originally all vegetarians, an idea that was widespread in ancient cultures. It is also striking that whereas in Babylonian thinking mankind was created to provide the gods with food, in Genesis God provides food for man.

The idea that God provides fruit trees to feed man is the starting point of the garden of Eden story. As soon as man has been placed in the garden 'the LORD God made to grow every tree that is pleasant to the sight and good for food'. Adam is then told he may freely eat of every tree save one. In this way Genesis stresses God's bountiful provision for human need: in the beginning human beings enjoyed a more than adequate supply of high-quality food with minimum effort.

However mankind's decision to eat the one forbidden fruit led to a complete change in their situation. Fig leaves are used to cover their nakedness and they hide from God among the trees. A comic situation were its longer-term consequences not so tragic, for Adam and Eve are punished by expulsion from this rich orchard to labour on the land to grow their own food. The curse on the ground describes man's plight ever since:

Cursed is the ground because of you  
in toil you shall eat of it all the days of your life;  
thorns and thistles it shall bring forth to you;  
and you shall eat the plants of the field.  
In the sweat of your face you shall eat bread.  
(Genesis 3: 17-19)

In other words the difficulties faced by Israelite farmers go back to the first man disobeying God's only command to him: 'Do not eat of that tree.' Disobedience to God's command is thus the root cause of human problems in food production.

The law and the prophets continually hammer home the message that obedience to the law will ensure plentiful rains and good harvests, while disobedience will result in drought and other agricultural disasters. 'If you ..observe my commandments...I will give you your rains in their season, and the land shall yield its increase, and the trees of the field shall yield their fruit.' 'If you will not hearken to me... I will make your heavens like iron and your earth like brass; and your strength shall be spent in vain, for your land shall not yield its increase.'(Leviticus 26: 3-4, 18-20)

The fall profoundly affected eating patterns in another way. Genesis 3 is just the beginning of what has been termed an avalanche of sin. Adam and Eve's sin is followed by Cain's murder of his brother, Lamech's seventy-sevenfold vengeance, and universal violence by man and beast ('all flesh') fills the earth, so that God decides to 'make an end of all flesh'. The flood follows, destroying all mankind save Noah's family and pairs of every living creature. Genesis implies that the pre-flood violence does not just affect human beings but animals too, so that they attack each other and man as well. But Noah's sacrifice changes God's attitude to the endemic sinfulness and violence fundamentally, so that he makes a covenant with all flesh never to destroy the earth again in a flood. He also permits meat-eating with safeguards to underline the preciousness of life. Man may eat meat, as long as he avoids consuming the blood, for that is its life.(Genesis 8:20 - 9: 5).

In this way Genesis explains the situation that faced the peasant farmers of ancient Palestine. Good crops are God's gifts to an obedient people whereas crop failure is a mark of God's anger at human sin. It is the primeval sin of Adam that explains the difficulties faced by the ancient Israelite farmer. But this does not exhaust Old Testament thought about the significance of plants. Strong flourishing trees were admired, and often the righteous are compared to them (Ps 1:3; 52:8; 92: 12-14). In particular the vine is often a symbol of Israel (Ps 80: 8-16; Isaiah 5: 1-7). It also appears that wheat may also symbolise Israel or its tribes (Leviticus 24: 5-6). It is striking that these highly valued foodstuffs which are also used in sacrifice may be identified with the chosen people: something similar happens with clean animals, i.e. those which may be eaten and often sacrificed, which also clearly symbolise Israel. The relationship between man and plants is not so intimate as that between animals and man, but these parallels do suggest there is a relationship even if weak between human and plant life, so that Isaiah can say 'All flesh is grass...surely the people is grass.'(40: 6-7)

The law looks forward to a day when the nation will be so obedient that it will fully enjoy God's blessings, that the harvests will be so huge that they will not have finished gathering in one before the next is ready. 'Your threshing shall last to the time of vintage, and the vintage shall last to the time of sowing.'(Leviticus 26: 5) This hope becomes even brighter in the eschatological vision of the prophets. They look for the restoration to the prosperity of Eden

'The days are coming' says the LORD,  
when the ploughman shall overtake the reaper  
and the treader of grapes him who sows the seed;  
the mountains shall drip sweet wine,  
and all the hills shall flow with it.  
(Amos 9: 13)

Isaiah looks forward to a day when

The wilderness and dry land shall be glad,  
the desert shall rejoice and blossom  
like the crocus it shall blossom abundantly.  
(Isaiah 35: 1-2).

We have already looked at Ezekiel's vision of the new Jerusalem from which flows a huge river into the desert and makes the Dead Sea fresh. (47: 1-12). Thus in powerful images the prophets picture the perfecting of the environment so that it returns to the original peace and abundance that characterised creation at the beginning. A similar pattern characterises the prophets' handling of the animal world.

## Animals

It was obvious to the ancients that man is much closer to the animals than any other part of creation, and Genesis while affirming this closeness also defines the differences between humans and animals quite carefully. For example birds, fishes, animals and man are all termed 'living creatures' (nephesh hayyah) Birds and fishes like man are 'created' ( a term used sparingly in Genesis 1 for the more dramatic stages of the creative process), they are all blessed by God, and commanded to be fruitful and multiply.<sup>4</sup> But only man is said to be made in God's image. 'So God created man in his own image, in the image of God he created him; male and female he created them.' It is because man alone is made in the divine image that he is given dominion over the rest of creation, a highly controversial topic in the environmental debate, so we shall pause and try and unpack Genesis' understanding of man's status here.

What constitutes the image of God has perplexed exegetes and theologians for centuries. It is something that distinguishes man from the animals and links him with God and the angels, so all sorts of human characteristics, rationality, speech, moral and spiritual powers, have been identified with the divine image. While there may be truth in many of these suggestions, we cannot be sure.<sup>5</sup> More help comes from ancient Near Eastern sources. In both Egypt and Babylon the king was often regarded as God's image, that is his representative on earth ruling on his behalf. While this does not explain the essence of the image, it certainly clarifies its function. Because man is made in God's image, he represents God on earth and rules for him. Making man in God's image and giving him responsibility for the rest of creation are closely connected in Genesis 1: 26: 'Let us make man in our image, after our likeness; and let them have dominion over the fish...birds...cattle and over all the earth.'

Psalm 8 puts the same ideas more explicitly and poetically:-

What is man that thou are mindful of him...?  
Yet thou hast made him little less than God,  
and dost crown him with glory and honour.

Thou hast given him dominion over the works of thy hands;  
thou hast put all things under his feet,  
all sheep and oxen,  
and also the beasts of the field.  
(Psalm 8: 4-7)

Where the Bible differs from Egypt and Mesopotamia is in affirming that every human being, male and female, not just the king is made in God's image. This means that every human life is sacred and must be protected (Genesis 9: 6). It also means that every human being is given authority over and responsibility for the rest of creation to manage it in the way that God would.

Two terms are used in Genesis to describe man's management function vis-a-vis the rest of creation. He is told to 'have dominion' (Hebrew *radah*) over other living creatures, fish, birds, cattle and creeping things and to 'subdue' (*kabash*) the earth. 'Have dominion' is quite a positive term for ruling. Whereas many people today have an anarchist streak, or at least an antipathy to those in authority, that was not the official outlook of the ancient Near East, who saw kings as essentially benevolent and concerned with their subjects' welfare. Psalm 72 puts this message powerfully:

Give the king thy justice, O God,  
May he judge thy people with righteousness  
and thy poor with justice!  
Let the mountains bear prosperity for the people,  
and the hills, in righteousness!  
May he defend the cause of the poor of the people,  
give deliverance to the needy,  
and crush the oppressor!  
(Psalm 72: 1-3)

To 'have dominion' means to be in charge of something, e.g. workers (1 Kings 4: 24; 9: 23). To be sure some people may abuse their authority and exercise power harshly (Leviticus 25: 43), but that is clearly not the intention here. Man is created in God's image, and so as his representative is expected to act in a Godlike way, and God throughout Genesis 1 and 2 is portrayed as a thoroughly creation-friendly deity. Furthermore as I shall argue below Genesis depicts a solidarity of man with the animals that precludes an exploitation of his power over them to their disadvantage.

But 'fill the earth and subdue it' appears to strike a different note. 'Subdue' is used elsewhere in two main senses. When people are subdued, they are often turned into slaves (Jeremiah 34: 11, 16; Nehemiah 5: 5), which sounds harsh to modern ears though not necessarily to ancient ones (Genesis 47: 19; Exodus 21: 5)<sup>6</sup>. The other sense of 'subdue' means to 'conquer' the promised land (Joshua 18: 1; Numbers 32:22, 29). It may be that we have here the first hint of a very important theme in Genesis, the promise of the land of Canaan. What is clear is that subduing the land is the sequel to and probably the consequence of 'multiplying and filling the earth'. Several times the Old Testament links depopulation of the land with it being overrun by wild beasts and reverting to jungle. For example 'I will not drive them (the Canaanites) out from before you in one year lest the land become desolate and the wild beasts multiply against you.' (Exodus 23: 29; cf. Leviticus 26:21-22; Isaiah 7:23-24; Hosea 2: 12). For ancient Israelites the battle with nature was real, and without sufficient manpower it would be lost. But that human beings must control their environment is not a licence for unrestrained exploitation. Genesis 1 depicts God as controlling and organising chaos, creating light, land, seas and all life, but in no way is he hostile to what he creates. It is all very good. So it follows that his appointed representatives should recognise the goodness of creation and treat it accordingly. That man should not prey on the animals or animals attack man is further suggested by the primeval vegetarianism of all living creatures (1: 29-30)

Genesis 1 thus suggests that man's relationship to the rest of creation should be characterised by solidarity, benevolence and control. The same positive relationship is portrayed in Genesis 2, while chapter 3 portrays its breakdown. Like man animals are made out of the dust of the ground, and become living beings(2: 7, 19). It is not said that animals have had the breath of life breathed into them as man has, but other parallels between verses 7 and 19 imply this, as does Ecclesiastes 3: 19 'they all have the same breath'. Indeed the animals are created as helpers for man; obviously in the pre-machine era humans were much more dependent on animals than they are today. The emphasis in this passage is of course on the fact that no animal exactly meets man's needs, which are only met by the creation of woman. But we must not overlook what is presupposed, that animals are both companions and helpers of man. Finally the authority of man over the animals is again asserted by his naming of them: 'whatever the man called every living creature, that was its name.'(2: 19)

Genesis 2 thus develops the picture of Genesis 1. It suggests that there is more to human-animal relationships than just common origin and nature. Animals are intended to be man's companions and helpers, and to be subject to his authority. This was obviously not the case in Bible lands in Bible times and Genesis 3 shows how this state of affairs developed. The clever snake implies that it knows more than God and thus persuades the human couple to submit to its authority. This begins the eternal struggle between man and the animal focused in the danger posed by snakes:

I will put enmity between you and the woman,  
and between your seed and her seed;  
he shall bruise your head,  
and you shall bruise his heel. (3: 15)

Whereas traditional readers have tended to understand this text theologically as the protevangelium, the first announcement of the gospel, and liberal commentators as etiology, why snakes bite humans, it is best to see it as both. One of the effects of the fall is hostility between man and the animal kingdom, but ultimately the seed of Eve will triumph over the serpent's seed thus restoring man's authority over the animals which here also symbolise the powers of evil<sup>7</sup>.

More hints of the changed relationship between humans and animals are the use of animal skins to clothe Adam and Eve and the offering of animal sacrifice by Abel. Just as man was sentenced to return to the dust as a result of the fall, so animals also experience death for man's benefit. But it is the flood story that portrays most clearly the solidarity between man and beast as well as the conflict. The flood was triggered by an earth filled with violence in which all flesh (that is man and other living creatures) had corrupted itself. Genesis implies that it was not simply intra-human violence such as Cain and Lamech practised, it was violence between man and beast and possibly between different animals that God objected to. This is clear after the flood when animals as well as men who take human life are sentenced to death. 'For your lifeblood I will surely require a reckoning; of every beast I will require it and of man.' (9:5) Furthermore a fear of man is imposed on the animal kingdom and permission is given to eat meat, as long as blood is not consumed (9:2-4).

But despite the intense animosity between man and the animals implied by the flood story, it does at the same time underline the solidarity between them. Noah is of course instructed not simply to save his own family but a pair of every type of animal by embarking them in the ark. The flood starts to abate when 'God remembered Noah and the beasts and all the cattle that were with him in the ark.'(8:1). Much later God said to Jonah, 'Should I not pity Nineveh.. in which there more than 120,000 persons ...and also much cattle?' For his part Noah's kindness towards his animal passengers is beautifully summed up in his handling of the dove. But most striking of all is that the covenant made after the flood is not made simply between God and Noah, but 'with every living creature that is with you, the birds, the cattle, and every beast of the earth.' 'When the bow is in the clouds, I will look upon it and remember the everlasting covenant between God and every living creature.'(9:10, 16).

The solidarity between man and the animals is also demonstrated by the most important institution of sacrifice. It is Noah's offering of animal sacrifice that turned the anger that prompted the flood into the eternal covenant just discussed.(6:5 cf. 8:21). Running through sacrificial thought is the idea of substitution, namely that in some much disputed sense the animal represents the human offerer. This is clearest in the offering of the firstborn.

Originally first-born sons were consecrated to God, but by the offering of a lamb they could be redeemed.(Exodus 13:2, 12-13). The food laws also imply a strong connection between the human and animal worlds. Leviticus 11 (cf Deuteronomy 14) sets out the basic principles of Kosher food. No blood may be consumed out of respect for life. Only certain types of bird, land animals, and fish may be eaten: symbolically this reminded the Israelites that God had chosen only them out of all the peoples on earth. But incidentally it must have discouraged hunting many types of wild life because they could not have been eaten. Whereas for example in Assyria lion-hunting was a royal sport.

The dominant note in the rest of the Old Testament is of the solidarity even intimacy between animals and man<sup>8</sup>. A good number of personal names, Deborah 'bee', Caleb 'dog', Rachel 'ewe', to mention just a few, are names of animals. In Jacob's blessing many of the tribes are compared to animals.(Genesis 49). In several psalms Israel is compared to sheep. Proverbs draws various lessons from animal behaviour, while the Song of Songs likens the lovers variously to mares, doves, gazelle, a young stag, and to fawns.

But the tension between man and beast implied in Genesis 3: 15 surfaces from time to time, most notably in the plagues of Egypt when the land is successively overrun by frogs, gnats, flies, and locusts as well as other disasters. In the desert Israel was punished by fiery serpents (Exodus 8-10; Numbers 21: 5-9). And the covenant curses envisage wild beasts making havoc of disobedient Israel (Leviticus 26: 22). But the long-term vision is positive: once again the vision of a restored Eden with peace and harmony between man and the animals and between the different animals is held up by Isaiah. Even the carnivores will become vegetarians again in the messianic age.

The wolf shall dwell with the lamb,  
and the leopard shall lie down with the kid,  
and the calf and the lion and the fatling together,  
and a little child shall lead them.  
The cow and the bear shall feed;  
their young shall lie down together;  
and the lion shall eat straw like the ox.(Isaiah 11: 6-7)

Debate has raged among commentators as to how literally this passage should be taken. Animals throughout the Bible are used to symbolise people and especially nations, so is Isaiah essentially just predicting peace between Israel and her enemies in this passage? Such an interpretation certainly makes good sense of what follows which predicts all nations submitting to a second David (11: 10-16). It would seem to me that at least such a politico-symbolic meaning is required here, but since violence between the animals is always seen as mirroring violence between humans, a more literal understanding is also probable. It is often thought that Mark sees a fulfilment of this prophecy in Jesus' experience in the wilderness: 1: 15 'he was with the wild beasts' (and was obviously not assaulted by them) indicates the dawn of the messianic age.

Thus in many ways the Old Testament vision for animals matches that of its view of plant life. Originally in God's creation there was peace and plenty, but this harmony was destroyed by sin, so that now life is a hard struggle to survive. Crops fail and animals eat each other. But in the messianic age there will be peace among men, peace between the animals, and food for all. Hosea brings all these together:

I will make for you a covenant on that day with the beasts of the field, the birds of the air, and the creeping things of the ground; and I will abolish the bow, the sword, and war from the land... In that day... I will answer the heavens and they shall answer the earth; and the earth shall answer the grain, the wine, and the oil.' (Hosea 2: 18-21)

# Man's Obligations to the Environment

## Plants

The Old Testament sees man as God's representative on earth, responsible for filling it with human beings and managing the other living creatures. Because he is made in a God's image, man must act in a Godlike way towards his fellow creatures. There is a solidarity between humans and animals both in nature and under the covenant, that implies a mutuality of interest: animals are man's helpers, so man should care for the animals implies Genesis. The Bible looks forward to a restored Eden, where water will be abundant and crops flourish, and man and the animals will live in peace together.

However reality is different. Drought, crop failure, attacks from animals and human beings characterised life from time to time in ancient as well as modern times. How does one live under these circumstances? How should man react to aggression by plants, animals, and other human beings? How do the principles of solidarity with and benevolent rule of the environment affect daily life? How do biblical ideals and hopes modify behaviour? The laws of the Old Testament represent an uneasy compromise between ideals and the facts of daily life. For example the permission to eat meat is a concession introduced after the flood, but God still insists that blood is forbidden, because to consume it would show no respect for life. Many legislative provisions in the Pentateuch must be read this way: they define not the perfect way to live, but a floor for behaviour below which no one dare fall without the threat of punishment.

There are few laws about plant life. Exodus 22: 5-6 insists on compensation to the owner where his crops are damaged by fire or grazing, but this is more a question of property rights than environmental protection. But Deuteronomy's (20: 19-20) ban on the cutting down of fruit trees in war to prosecute a siege does sound more environmentally motivated: 'you may eat of them, but you shall not cut them down. Are the trees in the field men that they should be besieged by you?' When fruit trees are planted, they must be allowed to crop without being picked for three years. The fourth year's produce must be given to God, and then from the fifth year on it may be harvested normally (Leviticus 19: 23-25). This patient waiting until the fifth year will ensure that they 'yield more richly for you.' It seems likely that the enhanced crop is seen as God's reward for giving to him the first fruits, not an automatic result of good horticultural practice. Throughout the law there is a requirement that first fruits of all crops, firstling domestic animals, and an annual tithe should be dedicated to God. As Proverbs 3: 9-10 puts it:

Honour the LORD with your substance  
and with the first fruits of all your produce;  
then your barns will be filled with plenty  
and your vats will be bursting with wine.

There are a number of rules on gleaning and fruit-picking designed to help the poor of society, but they do not shed any light on attitudes to plant life (Leviticus 19: 9-10; Deuteronomy 23: 24-25; 24: 19-22). There is a strong prohibition against mixtures. 'You shall not let your cattle breed with a different kind; you shall not sow your field with two kinds of seed; nor shall there come upon you a garment of cloth made of two kinds of stuff.' (Leviticus 19:19 cf Deuteronomy 22: 9-11). The motivation for the mixture ban is obscure. It may be related to the emphasis in Genesis 1 that God created all plants and living creatures 'according to their kinds'. Is it a case of 'What God has set apart, let no man confuse'? Or has it a more symbolic value related to the stern prohibition of intermarriage between Israel and the Canaanites? The food laws certainly reminded Israel of their election to be the people of God. These mixture laws could be making a similar point: Israel is different and distinct from the nations.

The law that looks most ecological in intent is that dealing with the seventh year: 'For six years you shall sow your land and gather in its yield; but the seventh year you shall let it rest and lie

fallow, that the poor of your people may eat; and what they leave the wild beasts may eat.' (Exodus 23: 10-11 cf. Leviticus 25: 2-7). Here the land is portrayed as needing a sabbath (cf 26: 34-35), though the major thrust is once again on helping the poor. Most strikingly too it helps the wild animals, who more frequently are viewed as a major threat to human survival.

This legislation while not comprehensive does seem to convey a gentle non-exploitative approach to the environment. Resting the land every seventh year, giving first fruits to God, helping the poor and even the wild beasts are the reasons appealed to in order to justify these rules. Maximum yields the texts suggest will be achieved by putting God first and letting the poor share the harvest, not by overworking the land and retaining all its fruits for oneself.

## Animals

The most striking example of human solidarity with the animals comes in the Ten Commandments, the central covenantal text of the Old Testament. The Sabbath rest is for the whole household including 'your cattle' according to Exodus 20: Deuteronomy is even more specific 'you shall not do any work...or your ox, or your ass, or any of your cattle.'(5:14). Genesis and Hosea include animals within the covenant: the Decalogue allows them to rest on the sabbath. Animals are mentioned again in the tenth Commandment against coveting.

The Ten Commandments seem to grant a moral status to animals; the laws on goring oxen appear to presuppose a degree of moral responsibility. As Genesis 9: 5 insists an ox who kills a human must die, but Exodus insists that the ox should be killed by stoning, a method of execution usually reserved for grave offences.

Striking for their humaneness are the laws dealing with the animals of an enemy. 'If you meet your enemy's ox or his ass going astray, you shall bring it back to him. If you see the ass of one who hates you lying under its burden, you shall refrain from leaving him with it, you shall help him to lift it up.'(Exodus 23: 4-5 cf. Deuteronomy 22: 1-4). Why does the law emphasise that the animals belong to an enemy? Presumably because no one should need encouragement to help a friend's beast. The law seems to be suggesting that even if you do not love the owner you should still love his animal.

Concern for animals' feelings seem to underline a law forbidding new-borns to be removed from their mother in the first week of life even for sacrifice, (Leviticus 22: 27-29). And in any case mother and young must not be killed on the same day, a bird and its eggs or chicks must not be taken at the same time (Leviticus 22: 28; Deuteronomy 22: 6-7). Three times the law forbids cooking a kid in its mother's milk (Exodus 23: 19; 34:26; Deuteronomy 14:21). The reason for this ban are never explained, but it could well be a combination of outrage at the apparent heartlessness of such a custom and the subversion of the natural order that it implies: milk should be used for sustaining the kid's life not cooking it. Sustaining the life of man, animals and plants is a recurrent element of biblical thinking and some of these laws may have a similar function: they curb practices that could jeopardise the survival of a species, e.g. killing a bird and its chicks. The ban on castrating animals (Leviticus 22: 24) would seem more likely to reflect the legislator's devotion to maintaining life than concern for animal comfort. On the other hand 'You shall not muzzle an ox when it treads out the grain' is surely motivated by considerations of welfare (Deuteronomy 25: 4)

As I have already said legislation sets a minimum standard of behaviour: it does not specify the ideal. An Israelite finding a bird's nest who took both mother and chicks would be breaking the law, but if he took neither he would not. Indeed he might be coming closer to the lawgiver's ideal. Proverbs 12: 10 probably sums up the underlying philosophy of the Bible when it says:

A righteous man has regard for the life of his beast,  
but the mercy of the wicked is cruel.

It is not simply that the righteous wants his animal to survive, rather he cares for its nephesh . Though 'life' may be a suitable translation of nephesh sometimes, here it has more the sense of 'soul, inner self', so that we could paraphrase it 'a good man cares for the welfare of his animals.'

In examining Genesis we saw that man and the animals shared similar origins and natures and therefore there was a solidarity between them. Before the fall animals and humans lived in harmony together, but this degenerated into a universal reign of violence, which had to be regulated after the flood. The prophets look forward to a restoration of the original harmony, but in the interim the law constitutes the main means of regulating the potential violence and maintaining a semblance of order. Yet these regulations do not lose sight of the original goals of the creator. While man's control of the animals is reasserted through these laws, there is a benevolence towards other living creatures enshrined in them that expresses the solidarity between man and beast that goes back to creation. Man, the image of God on earth, should like his creator be concerned with the living creatures he reigns over: these laws show a concern not simply that animals should survive, but that those who serve man, particularly oxen and donkeys, should be treated with kindness.

## The New Testament and the Messianic Age

We observed that the prophets looked forward to a messianic age when there would be abundant crops and peace would reign among all creatures. We saw that Mark indicates the arrival of this age by the experience of Jesus living peaceably with the wild animals in the desert. But does not the rest of the New Testament suggest that this present earth will be destroyed and there will be a fresh start with a new heaven and a new earth. If this is the case, it perhaps does not matter if we let the present earth go to hell.

There are several difficulties with this position. Firstly, it is so contrary to the Old Testament vision that one would need very compelling texts in the New Testament to embrace it. As we have seen the book of Revelation deliberately describes the new Jerusalem in terms of a garden of Eden and the vision of Ezekiel. Furthermore the doctrine of the resurrection of the body is surely a paradigm of transformation and perfection of the present existence rather its replacement. If God the Father glorified the earthly body of his Son by raising him from the dead and has promised to raise every human being in a similar resurrection, it would be reasonable to suppose that the rest of this earthly creation will be similarly transformed in the last day. Finally there is only one text that may speak of the destruction of the earth at the last day, but this understanding rests on an improbably textual reading. The fire that 2 Peter 3: 8 - 13 should probably be understood as purifying the earth and destroying the elements, that is the heavenly beings opposed to God. The new heavens and new earth results from this cosmic day of judgment will be a purified and glorified heaven and earth, just as we ourselves hope to purified and glorified on that day.<sup>9</sup>

## The Bible and Today's Crisis

It is obvious that we cannot transfer biblical laws straight over into our modern debate. Our society is so different that a literal transfer of the rules, e.g. muzzling oxen is out of the question. We have seen that their society depended on animals much more than we do in our mechanised age, that they felt threatened by drought, famine, and wild animals, whereas we do not. The wonderful yields obtained by modern farmers would surely have seemed like Eden to ancient Israelites. Similarly wild life, apart from insects, bacteria and the like, has been well and truly subdued, and mankind has made great progress in filling the earth. In many respects we seem closer to the golden age looked forward to by the prophets than they were.

On the other hand if the gloomier predictions of the climatologists prove correct, we could be facing problems that will make the occasional biblical drought and famine seem trivial by

comparison. The curses of Deuteronomy 28: 20-24 for breaking the law will start to operate at a global scale instead of nationally. Resistant strains of bugs may wipe out crops or people despite the best efforts of modern science. How far are these threats the result of disregarding biblical principles to the environment?

But I shall leave you to answer these questions yourselves. What I was asked to talk about was the Bible and the environmental crisis. I think it is evident that the biblical writers would indeed be concerned about it. They saw mankind managing the rest of creation on God's behalf who was a benevolent creator who cared for his creatures. Man, his vice-gerent was expected to do the same. But in Bible times this was difficult; drought, famine and wild animals often threatened human existence. But modern technology has transformed the situation. If thanks to technology human beings can now organise water and food supplies so that there is enough for everyone, even if because of political systems everyone does not get enough, technology coupled with human greed, is now destroying the human environment at unparalleled rate. Extinction of species as a result of human activity, e.g. deforestation and urbanisation is now occurring a hundred times faster than it would naturally.<sup>10</sup> Ghilleen Prance, till recently director of Kew Gardens and fellow of this college, is concerned about GM foods for the same reason: he does not think they are likely to harm the eater, but they will destroy the diversity of wildlife in our fields, and what is more, these crops are being developed mostly to bring greater profits to the companies not meet real needs.<sup>11</sup> Activities that lead to the destruction of species are clearly quite incompatible with managing creation benevolently.

But though technology has led to man exploiting and destroying nature at a greater pace than at any time in human history, we should recognise that it is not technology itself that is to blame, but technology in the service of profit and money-making. We see this quite easily when we look at the destruction of tropical rain forests or the depletion of fish stocks around our coasts. And we rich consumers of Europe and North America have a particular responsibility: a leaflet I picked up yesterday told me that whereas an average Indian consumes half his fair share of the world's resources, the average Briton consumes two and a half times his fair share of the world's resources. The USA with 5% of the world's population produces 60% of its Carbon Dioxide. That as we know is responsible for global warming. I think It is rather pleasant that England is a little warmer than when I was young, but climatologists tell us that the effects will be dire in the poor tropical areas of the world. There will be fierce climatic disruption in the tropics, such as hurricanes, rising sea levels, extremes of drought and flooding. 1998 saw Bangladesh, Nicaragua, and Honduras were all devastated by unusual climatic conditions.

More recently Venezuela and Mozambique suffered catastrophic flooding, and just this week another serious Ethiopian famine has been proclaimed. I do not know how far these disasters can be put down to global warming. But if we think the scientific analysis may be right, we do not need a sophisticated theology to tell us what to do. 'Love your neighbour as yourself' surely demands that we are as concerned as much with the effects of our actions on our neighbours in Africa as on our neighbours in Cheltenham. That is why we ought to take the environmental crisis seriously.

## Footnotes

1. R. Bauckham, Transformation 16: 3 (1999) p. 100.
2. These issues are discussed in Bible dictionaries and atlases. Two full and classic treatments are D. Baly, The Geography of the Bible and R. de Vaux, Ancient Israel (London: Darton, Longman and Todd, 1961)
3. For a description of ancient mining Job 28: 1-11. Copper was mined at Timnah in Bible times.

4. Though the land animals are not explicitly said to be created, blessed or told to multiply, I think this is just to avoid too much repetition and give a little variety. Since everything else created on days 5 and 6 is created, blessed and multiplied, the idea carries over to the animals too.

5. For fuller discussion see C. Westermann, Genesis 1-11 (London: SPCK, 1984) pp.142-55, and G. J. Wenham, Genesis 1-15 (Waco: Word, 1987) pp. 29-33.

6. Slavery offered security because basic needs were guaranteed by a rich employer, whereas freedom for a peasant farmer carried all the risks associated in today's society with self-employment.

7. For a fuller justification of this approach see G. J. Wenham, Genesis 1-15 pp.79-81

8. On the OT approach to animals B. Janowski, U Neumann-Gorsolke and U. Glessmer, Gefährten und Feinde des Menschen: Das Tier in der Lebenswelt des alten Israel (Neukirchen-Vluyn: Neukirchener Verlag, 1993) contains a useful collection of essays on the topic. 9. E.C. Lucas, Transformation 16: 3 (1999) p. 97

10. M. Monaghan, Priests and People, 14. 2 (February 2000) p. 66.

11. G. Prance, Priests and People, 14. 2 (February 2000) p. 47-48.

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