

Being a Christian in Science

Rich Milne covers an excellent book by Walter Hearn, both a Christian and a scientist, giving perspective and advice on how to be a Christian in the science field.

Being a Christian in Science

“Carl Sagan is a friend of mine. He said that if Jesus ascended literally and traveled at the speed of light, he hasn’t yet gotten out of our galaxy.”{1}

So said Episcopal Bishop John Spong, when asked if he believed that Jesus had ascended into heaven. This is an example of the worst kind of mixing of science and Christianity.

In this essay we are considering how to live with integrity as both a Christian and a scientist. Books about science and Christianity are published every month, but they are usually difficult to read and seldom easy to apply. Walter Hearn dynamites those stereotypes in his new book, *Being a Christian in Science*.

Hearn’s book is the result of having been a Christian from childhood, and a scientist for much of his working life. His desire is for Christians to enter into science and make a career of it. But he also wants anyone who enters this road to know what joys and obstacles lie ahead around the many bends. His book is by turns intensely practical and deeply devotional.

Ever since Darwin, many Christians have been uncomfortable around science. Many of us have the feeling that science is trying to do away with the need for God. Most of us have heard scientists like Carl Sagan, speaking far from their field of expertise, make grand pronouncements like “The universe is all that is, or was, or ever will be.” Is it possible for Bible-believing Christians to also be committed scientists?

Hearn’s book, *Being a Christian in Science*, does not try to deal with creation/evolution issues, or chance vs. design arguments, or even science vs. God questions. Instead, his clear and heartfelt focus is on questions such as, How do you work as a scientist if you are also a Christian? What is science like as a profession? Can I really pray in the laboratory?

At the outset it is important to distinguish between a “Christian Scientist,” with a capital S, and a “Christian scientist.” In the first pages of the book, Hearn, a life-long chemist and editor, separates what science can and cannot do. Science can in no way establish the claim that nothing supernatural or eternal is real. When such a claim is made, it is not scientific but scientific.{2} While this is not the book’s emphasis, Hearn is very clear about what the limits of science are, and as Christians we must think clearly about what science can and cannot do.

Using *Being a Christian in Science* as a basis, we will look at what scientists really do, why Christians might spend their lives in science, and what resources there are for believers who make science their chosen career. My hope is that you will see, not only the value of science, but, if you are a Christian young person who already loves science, you will see that this is a vocation to which God may be calling you. Science is changing the shape of our world and we need Christian scientists just as much as we need Christian teachers, or carpenters, or missionaries.

What Do Scientists Do, Anyway?

Many Christians are not too sure what scientists do, and fairly sure they don't want to know. As Walter Hearn pointedly observes in his book, "Evangelical churches that send missionaries around the world seldom see the 'World of Science,' or scholarship in general, as a mission field."^{3} Too many Christians seem to see scientists as "the enemy" with little thought of what they do or how they might be reached with the Gospel.

What is a Christian? Someone who believes in Jesus. Yes and no. What is a scientist? Someone who believes in science. Again, yes and no. A Christian believes that Jesus is the answer to certain questions about how we can be forgiven and stand before a holy God, questions about how we can know what will happen to us when we die. As a Christian, have you ever thought about being a scientist? Just what is a scientist, anyway?

A scientist believes that science is a "group of methods for solving a particular kind of problem."^{4} Science is not just a list of facts or theories, it is a way to understand the natural world by observing, experimenting, and then attempting to find cause and effect relationships. Scientists are fascinated by the world around them. They long to understand more than what we already know about this complex and intricately connected world we live in. A scientist knows we have few of the answers, and he or she sets out to at least try to ask the right questions so that we can learn more about how things work, and how this wildly diverse world fits together.

What does it take to be a scientist? Walter Hearn, himself a lab chemist for twenty years, gives a disarmingly simple answer to this question. A scientist needs "curiosity about nature, intelligence, perseverance, common sense, and better-than-average conceptual ability. . . . Flexibility is another important characteristic."^{5} This is a little like saying "Just have faith" to someone about to enter a long spiritual trial. What he does not say is how hard it can be to maintain these admirable traits on a day-to-day basis in the face of what much of science really is.

Mathematicians can look at the same set of equations for months before they see the relationship between them. Biologists can do the same or nearly the same experiment dozens of times over weeks and months, before they see the result they hoped might happen. Geologists may spend months in the field gathering data, unsure of how they will ever make sense of the big picture. Much of science is daily hard work, often without knowing whether you are succeeding or failing, and then, occasionally, the "aha" moment when things suddenly fall into place and you have one more small stepping stone across the wide expanses we know little or nothing about. Would you still like to be a scientist?

Next we will consider why God might call people to be full time scientists and how a Christian might live out such a calling. There are no easy answers, but if you enjoy science, God might well call you to be one of the bridges in the twenty-first century that allows Christians and scientists to understand one another. It is a critically important calling.

How Can a Believer Live as a Christian in Science?

"Avoiding profane and vain babblings, and oppositions of science falsely so called, which some professing have erred concerning the faith." (1 Tim. 6:20-21, KJV)

Misunderstanding Paul's admonition to Timothy has left many Christians skeptical of science. After all, don't most scientists believe Darwin, and didn't Darwin disprove the need for God? Why should Christians waste their time on science?

In his wonderfully gentle-tempered book *Being a Christian in Science*, Walter Hearn offers a quotation from a Christian physics professor that capsulizes this feeling as it applies to a broad range of academic pursuits:

One hears Christians speak proudly of their sons or daughters who have married seminary students or missionaries. . . [But] I have yet to hear a Christian father speak proudly of his son or daughter marrying a graduate student. No wonder our young people are discourage from entering the rigorous life of learning and research. {6}

Christians could once justly claim to be leaders in most intellectual arenas. Modern science is widely acknowledged to have its roots in a Christian perspective on nature. If we believe that God created the world we live in, then shouldn't we be involved with the scientists who are exploring it?

We have already spoken briefly of some of the personal characteristics that many scientists share. If God is calling you to a life as a scientist it is likely that He has also given you the gifts or talents that it takes to work as a scientist. Have math and science classes gone well for you in school? Do you feel some drive to find out more than what you already know about outer space or inner space? What would life be like as a scientist?

Being a Christian in Science spends several chapters on questions like "What to Expect" and "Science as a Christian Calling." Perhaps the most difficult situation is being misunderstood by both scientific colleagues and other Christians. Christians in science live between two cultures. As Hearn warns: "Christians in science are people with two strong allegiances, holding citizenship in two distinct communities." {7}

The scientific community sets a very high premium on good work. Hearn writes of the importance for Christians who are also scientists not only to make clear their faith in Jesus Christ, but also to be committed to doing really good science. One author found that many Christian graduate students felt guilty about how much time they spent in the laboratory or the library, because it took time away from other Christian activities. They seemed to feel that "their professional work clearly did not have the same value in God's sight as their Christian 'witness.'" {8}

If God is calling you into scientific work, you must not only love scientific work, you must have an assurance that your work will be a way to serve God with your life. And this is where you may feel under attack from your Christian friends.

Most of us are used to the idea that the world needs Christian salespeople and Christian mechanics and Christian lawyers. If scientists are to be reached with the good news of Jesus Christ, the church must see that scientists too are a mission field, and, like most mission fields, they are best reached by the "natives," other scientists.

In the next section we will consider some of the controversies that await a Christian entering science, and how a believer might respond to them.

Caution, Controversies Ahead

"Scientists may not believe in God, but they should be taught why they ought to behave as if they did." {9}

Max Perutz, with a Nobel prize in chemistry, made this statement several years ago in response to critical remarks about Cambridge University establishing a Lectureship in Theology and Natural

Science. Richard Dawkins, outspoken biologist and atheist, could barely contain himself in an editorial letter about the same lectureship: “The achievements of theologians don’t do anything, don’t affect anything, don’t achieve anything. What makes you think that ‘theology’ is a subject at all?” {10}

Being a Christian in our culture is often not politically correct. Christians often see scientists as not being biblically correct. So, if you intend on being a Christian scientist, controversy likely awaits you. How can you respond?

Walter Hearn has a chapter entitled “What to Expect.” It has much hard-won advice, and he skillfully raises a number of issues while carefully avoiding taking sides. Hearn seems preeminently the peacemaker in both this chapter and the whole book.

One of Hearn’s suggestions is to learn to live cross-culturally. A missionary to Africa may learn another language, and must understand a new culture well enough to explain the Bible in ways that make sense to those people. So, too, a Christian scientist must learn to explain the beliefs of Christians to unbelieving scientists. But at the same time, he or she must also learn how to explain the workings of science to Christians suspicious of the pronouncements of scientists. And the two different funds of knowledge make fundamentally different requirements on those who hear. Hearn summarizes: “Scientific conclusions generally take the form of statistical generalities making no demands on the knower. In contrast, the moral aspect of religious knowledge puts doing the truth on a par with knowing the truth.” {11}

A second simple statement of great insight is, “It may be wise to step back from some issues even when people whom we admire are passionate about them.” {12} Hearn follows his own advice as he discusses Phil Johnson and his critiques of Christian scientists who accept the whole of evolutionary theory and then have God direct evolution. Hearn does a masterful job of stepping back from this issue and presenting mostly the views in favor of Johnson’s position. At the very least he is demonstrating another characteristic of a peacemaker: being willing to listen to and understand the criticism of those who disagree.

One area Hearn discusses at some length is the growing crisis in ethics among scientists. This is exactly the point of the quotation at the beginning of this section. As science has disowned God, it has also lost any rock on which to anchor a sense of right and wrong conduct. This is where Christians have much to contribute to the discussion. The Bible gives us a basis for deciding right and wrong that science is sorely missing. But it will be primarily in our daily work as scientists that we will show what a biblical framework for ethics looks like.

Hearn makes the wonderfully sensible suggestion of keeping our Bible among the reference works at our desks. All of us, whether scientists or not, need to live more clearly by the book we claim as our authority.

Christians in Science Have a Godly Heritage to Follow

Being a Christian in Science may frustrate some people. Some will find themselves wondering why he doesn’t take a more clear-cut stand on certain issues. Others will want Hearn to be more specific. But the often inconclusive stance of the book is also what allows Hearn to be so conciliatory in tone. On almost every issue he touches he allows as much diversity as he feels he possibly can. He is never strident, almost never critical, always positive or at most questioning. He models the role of a peacemaker in the midst of controversies that are dividing both the church and the scientific community.

Some of the best material in the book Hearn saves for last. In his chapter “Good Company” he gives us his personal Hall of Fame and Encouragement. Much like Hebrews 11, Hearn considers the lives of other Christians who have gone before him and lived the Christian life in the midst of the scientific community. Some are dead, some are newly arriving on the scene. All he considers friends. What unites them is their commitment to the work of science and their service for the God they love. It is both an encouraging and challenging chapter. There are men and women, a Nobel laureate, and the head of the government’s Human Genome Project. There are mathematicians and biochemists, teachers and astronomers. Some are members of the National Academy of Sciences, the most prestigious group of scientists in America. But all of them, Hearn tells us, “Have contributed to science . . . while clearly identifying themselves as Christian believers.” {13}

Another feature of the book is its short but intensely practical suggestions for living out what we believe. Stuck in a meeting that is starting late? Don’t waste the time, says Hearn—pray for each person around the room or table, bringing each before the Lord. Don’t know how to pray for someone? Perhaps this is a sign you need to spend more time listening to that person.

Possibly the most valuable part of the book are the resources mentioned throughout the text and then richly documented in the notes at the end of the book. Hearn describes how to develop a web of friends who can be a support when experimental work is going badly or when spiritual encouragement is needed. He also shows how the ubiquitous World Wide Web is opening up a whole new frontier of both information and possible friendships.

The twenty-three pages of notes at the end must be read to be appreciated. It is amazing how much diverse information Hearn packs into his comments on each chapter. If you are considering a career in science, or if you are already a working scientist, you need to read this section.

In summary, *Being a Christian in Science* is a compelling expression of just what Paul exhorts us to do: “Whatever you do, do your work heartily, as for the Lord rather than for men.” {14} Hearn shows the potential young scientist what it will take to do his or her work heartily, and at the same time makes clear where many of the potential pitfalls lie, and what vast resources are available for the Christian who is serious about living as both a Christian and a scientist in this complex and confusing world. If you are a scientist, keep this book on your desk along with your Bible.

Notes

1. Quoted in Phillip Johnson, *Defeating Darwinism* (Grand Rapids, Mich.: InterVarsity Press, 1997), p. 110, Note 1.
2. Walter Hearn, *Being a Christian in Science* (Grand Rapids, Mich.: InterVarsity Press, 1997), p. 12.
3. Hearn, p. 90
4. Hearn, p. 46.
5. Hearn, p. 51-52.
6. Hearn, p. 11
7. Hearn, p. 59.
8. Hearn, p. 112-113.
9. Hearn, frontispiece.
10. Ibid.
11. Hearn, p. 61.
12. Hearn, p. 74.
13. Hearn, p. 138.
14. Col. 3:23, NASV.

Christian Psychology: Is Something Missing?

The Church as a Healing Community

Worldviews shape the way we think. Psychology, once an outsider both to the sciences and most people's experience, has become a worldview for many people today. Evolutionary psychology, the view that our long evolution from animal to human has deeply imprinted all our behavior, is gaining acceptance on a rapidly widening scale. Psychology is often used to provide an explanation for everything from our "religious aspirations" to our behavior as consumers. How should a Christian view psychology, and what does psychology offer the believer? This essay will consider only one small part of the answer to those questions.

While specifically Christian counseling was once rare in the church, today it is a recognized part of many churches. As Christian counseling has become more widespread, some see it as the answer for the struggles that seem to plague most of us. The therapeutic worldview sees many of our problems and struggles in life as stemming from unresolved problems arising in childhood. The cataloging and diagnosis of psychological disorders has become widespread, both within the church and in the culture at large. Professional counselors are seen as the primary way of dealing with these disorders. How many of us, when faced with someone enduring an ugly divorce, or hounded by problems of self-guilt, or struggling with their self-image, don't think, "This person needs to see a counselor"?

Larry Crabb has done much to bring counseling into the American church. Having written books for more than 23 years, Crabb has always seen the church as being central in the counseling process. He has trained many of the counselors working in churches today. He has written books, taught, founded schools, and lectured around the country on Christian psychology. He has successfully questioned the church's distrust of psychology.

Now Larry Crabb is asking a new question: Is the common, therapeutic model of Christian psychology really right? Should the church depend on mental health professionals to do all but minor, pat-on-the-back, words-of-cheer kinds of counseling? Is counseling really a matter of education and degrees and specialized training?

While being very clear that professional Christian counselors have an important role to play in the Christian community, Crabb is asking, Could we be depending on counselors too much? Could it be that God has given all believers more resources than we think to help one another deal with many of the troubles and struggles we face in daily life?

Going even deeper, Crabb asks the heretical question, Are psychological disorders really at the bottom of most of our struggles? "I conclude," says Crabb, "that we have made a terrible mistake. For most of the twentieth century, we have wrongly defined soul wounds as psychological disorders and delegated their treatment to trained specialists."⁽¹⁾ What he proposes in his book, *Connecting*, is both revolutionary and profound. In giving us new life in Christ, God has put in each of us the power to connect with other believers and to find the good God has put in them. We have the opportunity to heal most wounded souls. This is Larry Crabb's proposal. While he is still solidly behind professional counseling, he has come to see a broader place for healing within the context of Christian relationships. In this essay we will talk about what it means for two people to connect, and how God can use this connection to heal the deepest wounds of life and expose a beautiful vision of

God's work in us.

What Is Connecting?

Some people seem to write a new book as often as most of us buy new shoes. And, like shoes, most of those books don't attract too much attention. But when well-known author Larry Crabb questions the very discipline that he helped establish, his book *Connecting* may cause more of a stir.

Christian psychology views human problems as primarily the result of underlying psychological disorders. We may be angry at a teenager's disobedience, but anger is only the symptom of problems buried within us. Stubborn problems may require deeper exploration of our thinking. Counselors are those people who have special training, enabling them to understand the various disorders we struggle with, and how to fix what's wrong.

In this book, Larry Crabb calls this whole picture into question. He describes the most common ways we react to people who are hurting and puts those reactions into two categories: moralistic and psychological. The moralist looks for what scriptures have been disobeyed, rebukes our disobedience, calls us to admit our sin and repent, and sees that we have some sort of accountability in the future. The psychologist listens to us, tries to find out what is wrong internally, and then helps us learn healthier ways of living. This process often takes months of self-exploration to find the roots of our problem, and to chart a course towards self-awareness and better ways of coping with the world.

Could there be another way for people to relate to each other when problems arise? Crabb's suggestion is a powerful one. Could it be, Crabb asks, that God has put within each of us His power, which, when we connect with another person, allows us to find the good that God has already put in them, and to release that good so that they can respond to the good urges God has placed there?

This is the main premise of the book *Connecting*. Coming straight to the point, Crabb says, "The center of a forgiven person is not sin. Neither is it psychological complexity. The center of a person is the capacity to connect."⁽²⁾ The gift of salvation gives us the Holy Spirit, Who allows us first to connect with God the Father, and then, on a new and deeper level, with each other. But what is connecting?

Crabb uses an analogy to the Trinity to make his point clear. The Trinity, Crabb writes, is "an Eternal Community of three fully connected persons."⁽³⁾ They have delighted in each other for eternity, there is no shadow of envy or minute bit of jealousy between them, and they love to do what is best for each other. Since God made us in His image, we too can enjoy one another, but we must rely on the power of God in us to show us what is good in the other person.

Connecting is so powerful, Crabb says, because it requires that we look past the surface of people and see the new creation God has already begun. Connecting with someone else requires us to look at what a person could be, not just what he is right now. With God's insight, we look beyond the small amount God may already have done and ask God for a vision of what this person could be like. Connecting finds the spark in someone else and is excited about what it could flame into.

Is professional counseling unnecessary? Of course not, says Crabb. But connecting is a powerful way God uses us to bring out His good in others. What keeps us from doing this more?

What Keeps Us From Connecting?

If connecting is what God has made us for, and if this is what the Holy Spirit equips us to do, then

why don't more of us connect with one another? Larry Crabb's answer is developed around four analogies. We tend to be either city builders, fire lighters, wall whitewashers, or well diggers.

City builders are those who know what resources they have and how to use them. They know their strengths, and they have a solid sense of their adequacy to meet whatever lies ahead. City builders want to be in control, and fear that they might be found inadequate. City builders have a hard time connecting with someone else because they are looking for affirmation of themselves, not what is good in another. They can work together with other people towards a common goal, but only if it increases their sense of adequacy.

Martha Stewart, for example, has built an empire on feeding people's desire to be adequate, able to handle any situation. She is in control of her kitchen, her house, her yard, her life. And she is the one who will show us how to bring our lives under control.

God has created us with a desire for good. We want to please others, we want to live in peace, we want to have everything work out right. And in heaven it will. But we are not in heaven, and too often we try to insulate ourselves from the messiness of the world around us. City builders depend on their own resources to bring a sense of control into their lives. Their adequacy comes from themselves and what they can accomplish. But this blocks them from depending on God. God encourages us to seek peace with all men (Rom. 12:18), but at the same time we must realize that following Christ is a path of difficulty, not ease (2 Tim. 3:12). We are being prepared for perfection, but we are not to expect it here on earth. God has prepared a perfect city for us, but we are not to try to create it on our own now (Heb. 11:13-16).

Fire lighters are like those people described in Isaiah 50:10-11. They walk in darkness, but rather than trust in God to guide them by His light, they light their own torches, and set their own fires to see by. Fire lighters, Crabb says, are those people who must have a plan they know will work. Their demand of God is the pragmatist's "Tell me what will work!" Fire lighters trust and hold closely to their plans, so connecting is hard for them because it would require them to trust God and not know what might happen next. Connecting requires us to give up our plans and expectations so that we can recognize and enjoy God's plans. We can either trust God or trust our own plans, but we cannot do both. It is not wrong to plan, but we must be willing to give up our plans when Jesus does not fit into them in the way that we want. As C.S. Lewis describes Aslan, the great lion who represents Jesus in *The Chronicles of Narnia*: "It's not as if he were a tame Lion."(4)

Have you ever known people whose primary efforts in life were directed towards protecting themselves and their children from any difficulties? When safety is your top priority, then you have become a *wall whitewasher*, Crabb says. Wall whitewashers build flimsy walls of protection around themselves and their worlds, and then whitewash them to make them appear stronger than they really are. These people want protection from whatever they fear. They are sure that their lives of dedication to the Lord are a protection from major problems. "Wall whitewashers cannot welcome tribulations as friends. . . Character isn't the goal of a wall whitewasher. Safety is."(5)

Many people who feel God's calling in their lives, also assume that God will take care of them and of their families. And He will, but not always in the way that we imagine. As we raise our children and watch the terrible struggles that seem to overcome so many other young people, we may feel that at least God will protect our own children from such affliction. But if our trust is that our serving the Lord is protecting our family, then we have built up a false sense of security. We are trying to cover our own uncertainty about the future with the whitewash of our own good deeds. God builds us up and shows us our need to depend on Him alone in our tribulations, but we often want to hide ourselves and protect our families from the very misfortunes that God wants to use to strengthen us. We are whitewashing a failing wall when we try to put up a hedge around ourselves and our

families, sure that God will protect us from trouble. Everything that happens in our lives has come through God first, has been “Father-filtered,” as someone once said. But we must depend on the Lord in all circumstances, not just when we feel protected. God loves us perfectly, but His desire is to give us His character, not to protect us from any difficulty. That is why, as James says, we are to greet tribulations as friends, and not with fear.

Crabb’s fourth class of people who thwart God’s purpose in connecting are those he calls *well diggers*. The image comes from Jeremiah 2, where God marvels at the broken, pitiful wells that the Israelites make instead of coming to Him for real, unlimited water. Well diggers are looking for satisfaction on their terms, and they want to escape pain at any cost. The well digger asks, “Do I feel fulfilled?” If the answer is no, then he renews his quest for something that will give even a moment’s pleasure. We judge drug addicts harshly, but what about needing to have a certain position to feel good, or driving a certain kind of car to prove we’re reaching our goals?

Well diggers also are characterized by something that marks our whole first-world culture: the desire for satisfaction now. Well diggers dig their own wells because it often seems faster than the way God is providing water. We want to be filled, and we want it immediately. We live in a fast-everything world. We stand around the microwave oven, wondering why it takes so long to heat a cup of water. Or, more seriously, we wonder why God is taking so long to bring along the right woman or man, so we find our own ways to satisfy our desires, whether in pornography, or cheap sex, or relationships we know can’t last. We want to be satisfied, and if God seems slow, we find our own satisfaction any way we can.

God plans for eternity, and builds to last forever. But it takes time, and patience. If we fulfill our own desires, we will be like the Samaritan woman at the well: we will soon thirst again. But if we allow God to provide for our thirst, He fills us with living water, and we are filled in ways we could never have known otherwise.

Whether we are city builders, fire lighters, wall washers, or well diggers, we will never be able to deeply connect with another person until we kill these urges of the flesh, and allow God to strengthen our spirit. What will help us connect with other people?

Finding What God is Doing in Others

To connect with another believer, we “discover what God is up to and join Him in nourishing the life He has already given.”(6) This is why Larry Crabb sees connecting as central to the Gospel. To connect with another Christian is to let the power of the Holy Spirit in you, find the good that God has planted in the spirit of another believer. It requires us to get past our flesh, which Paul instructs us to crucify (Gal. 5:24), so that we can be alive to the Spirit, the one Who makes connection possible. Connecting with someone else is a triumph of the Spirit over my own fleshly desires to control my own life (being a city builder), to create a plan I know will work (fire lighter), to protect myself against the uncertainties of life (wall whitewasher), and to find my own ways to feel good when I want to (well digger). To connect with a fellow believer I must see what God sees in him or her, not just what I can see.

So how do we see as God sees? God’s forgiveness of us provides a clue. Does God forgive me because I am such a nice fellow? No. Does God forgive me because I have such a good heart? No. Am I forgiven because I will always do the right thing in the future? No. God forgives me because He sees Jesus’ death in my place. It must be the same when I look at a fellow Christian. I must see him or her as someone whom God cared enough to die for, and as someone worth the incredible price that Christ paid on the cross.

Just as God looks past what is bad in my flesh to what He is creating in my spirit, so I must learn to look at other people and find the good that God is working on in them.

Have you ever heard a child learning to play a musical instrument? We don't just listen to the noises coming from the violin or piano or drums. We listen to what is behind the music—the effort, the intensity, the desire to do better, the willingness to work. We listen for the spark that might indicate that this child really connects to music. That is just what we need to look for in one another: the sparks of eternity God has placed in each one of us. We need to look for what God is doing in our friends that can delight us, and make us “jump up and down with excitement” at how wonderfully God is remaking them.

If we would truly connect with someone else, we must also be putting to death the flesh and feeding the spirit. Larry Crabb goes back to an old Puritan phrase, “mortifying the flesh,” to describe what we are to do as we discover urges of the flesh rising up in us. As Crabb emphatically writes: “The disguise [of the flesh] must be ripped away, the horror of the enemy’s ugliness and the pain he creates must be seen, not to understand the ugliness, not to endlessly study the pain, but to shoot the enemy.”(7) This is an ongoing war, one we will fight until we are home with Jesus, but alongside this battle to “crucify the flesh” (Gal. 5:24) we must also feed the Spirit. By this Crabb means that we are, as a community of believers, to “stimulate one another to love and good deeds” (Heb. 10:24). As we put to death the flesh, we are indeed made alive in the Spirit (Rom. 8:10-14).

Discerning a Vision for Others

Larry Crabb's book *Connecting* has two subtitles. The first subtitle is “Healing for Ourselves and Our Relationships.” Earlier, we saw how we are healed as we allow Christ to sweep away all of our own methods of dealing with life. Whether we are city builders, fire lighters, wall whitewashers, or well diggers, these are all ways that we try to manage life. Jesus does not ask us to manage our lives. Instead, as a father might take his son through a crowded mall, God asks us to take His hand, and let Him guide us to where He chooses. The urges we need to kill are the very urges that whisper in our ears that we must take care of ourselves.

Remarkably, as we abandon our own techniques for survival, and let God use our lives in His own way, we also find that we can approach others much more openly and honestly. We are free to love people for who they are, not what they can do for us. And this opens up what is one of Larry Crabb's most important ideas. When we look at others the way God does, we begin to see what He is doing to make them new and incredible creations, just as He is doing for us.

The second subtitle for *Connecting* is “A Radical New Vision.” It is certainly radical when one of the leading voices for Christian psychology suggests that lay Christians themselves can deal with many of the personal problems they often refer to counselors. But the radical view he has most in mind is a new way we can relate to and view one another.

Crabb's challenge is for us to kill the bad urges in ourselves so that we are able to begin seeing and hearing what God is doing in other people. This will not be just a warm feeling. We discern visions for a person's life; we do not create them.

When a doctor announces “It's a girl!” he is not making her a girl, he is announcing what is already the case. In the same way, Crabb writes, we are, by prayer, listening, and reading God's Word, to discern what God is doing in someone's life and then announce it. And the process of seeing what God is doing in someone's life may not be easy.

Larry Crabb's vision for the church is that we will become communities of people who care

desperately about one another, so much that we will let down our guard. People can truly know us, and we can see into them. In this process of connecting with a few other people, we will see God take the power of His Holy Spirit, and use that power to see what another person could be. As we walk with the Lord, and grow in godly wisdom, He enables us to see the good in other believers, and to encourage that good in a way that gives that person a vision of why she is here. It is this vision of who we could be in Christ which can transform each of us. But we must be willing to die daily to who we are on our own, and arise daily to do and say the things that God desires us to do and say. Are you ready for a radical new vision? It will fill your whole world with the power God has put in you to release the good He has put in others. What a calling of hope!

Notes

1. Larry Crabb, *Connecting* (Nashville: Word Publishing, 1997), p. 200.
2. Crabb, 38.
3. Crabb, 53.
4. C.S. Lewis, *The Voyage of the Dawn Treader* (New York: Collier Books, 1970), p. 138.
5. Crabb, 121.
6. Crabb, 49.
7. Crabb, 91.

©1998 Probe Ministries.

The Bible Code

Written by Richard Milne

How should thinking Christians respond to purported information embedded in the Bible's original language? There is more to "The Bible Code" than meets the eye.

What Is a Bible Code?

There is no way to ignore the clear fact that a computerized code in the Bible . . . accurately predicted the Gulf War, the collision of a comet with Jupiter, and the assassination of [Israeli Prime Minister] Rabin, also seems to state that the Apocalypse starts now, that within a decade, we may face the real Armageddon, a nuclear World War.(1)

So ends Michael Drosnin's best-seller *The Bible Code*. On the *New York Times* bestseller list for months, the book has created a small industry of people selling books about secret codes, and a huge audience of people reading about and discussing codes. And what are these "codes" that are so fascinating and how does the Bible fit into all of this? Those are just a few of the questions we will address in this essay as we try to reach some balanced conclusions about a very controversial topic.

People have written codes since at least 400 B.C., and Jewish scholars have looked for codes in the text of the Old Testament for approximately a thousand years. *Gematria*, the discipline of changing portions of text into numbers to look for a deeper meaning, has been part of Jewish Cabalistic tradition since at least the 13th century. But it is only in the last twenty years that computers have extended the range of text searches to almost unimaginable lengths.

At the heart of the current controversy is a scientific paper by three Israeli mathematicians with the helpful title of: "Equidistant Letter Sequences in the Book of Genesis." A quite technical paper, it was published in *Statistical Science* in 1994.(2) As is typical in scientific publications, it was peer reviewed. In fact, three other qualified statisticians read the paper, and while confounded by the results, each agreed that the mathematics and data used seemed legitimate. So what did Doron Witztum, Eliyahu Rips, and Yoav Rosenberg write that has caused so much excitement?

In the 1980s Eliyahu Rips, an Orthodox Jew and well-known Israeli mathematician, came across the writings of Rabbi Michael Weismandel. The book is so rare that Rips found only one copy, at the National Library in Israel. Rabbi Weismandel discovered that by starting with the first Hebrew letter "T" in the book of Genesis and counting forward 49 letters to find an "O" as the 50th letter, and then another 49 letters to an "R," another 49 letters to an "A," and finally another 49 letters to an "H," the word TORAH was spelled out. "Torah" is the Hebrew name for the books Moses wrote. This same pattern happens in the book of Exodus. But in Numbers and Deuteronomy one must count backwards beginning at either the first or fifth verse. But why 50?(3)

In Jewish rabbinic tradition, most numbers are symbolic. For example, 50 is the year of Jubilee, the year that all land goes back to its original owner, when all debts are canceled, when the land rests for the whole year. It is also said that there are fifty gates of wisdom in the Torah.

Rabbi Weismandel is reputed to have found many patterns like this in the Torah as he laboriously counted by hand again and again in the most holy of all Jewish books. Rips was fascinated by these patterns and wondered what a computer could do to find more patterns.

Now, let's see what Eli Rips discovered as he looked at the text with a computer.

Bible Codes Are Demonstrated by Mathematics and Computers

Michael Drosnin's book, *The Bible Code*, describes the discovery by Eli Rips and others, of messages they claim are coded into the text of the Hebrew Old Testament, and only discoverable in our own time by using computers. These codes warn of dire events in the near future that could affect the whole world. But how are these messages hidden in a book that has been read for more than 2,000 years?

What Rips uncovered was that if he used Rabbi Weismandel's idea of counting off equal intervals between letters, he could find many words in the Hebrew text. The technical name for this method is quite a mouthful: Equidistant Letter Sequences, or ELS. A computer program finds the first letter of a word, and then begins counting until it finds the next letter of the word. This becomes the "skip code." Then, using that skip code, it counts to see if the third letter of the word is found at that same interval. So it would start by skipping every other letter, then every two letters, then every three letters until it finds a "skip" that spells out the word. Thus, as mentioned earlier, the Hebrew word for the first five books of the Bible, "Torah," is spelled out with an ELS of 50 in the book of Genesis.

This might be the answer to an interesting trivia question, but why is *The Bible Code* selling thousands of copies? That's because Michael Drosnin has made some astounding claims about the ELS codes: that one code anticipated, weeks in advance, the exact day the Gulf War would start; that another code predicted Yitzhak Rabin's assassination by a man named Amir; that a code anticipated, within two years of the actual events, earthquakes in Japan; and that in the year 2000 or 2006 an atomic holocaust, beginning in Israel, is likely. This is great millennial material!

Drosnin's book is based on a paper published in *Statistical Science* in 1994 by Witztum, Rips, and Rosenberg. With great statistical rigor, the authors show that the 78,064 Hebrew letters of the Book

of Genesis, when set out with no spaces or punctuation, can be searched by a computer for specific words spelled out by ELS codes. Specifically, they set out to see if they could find the names of 32 famous rabbis in Genesis. Not only did they find ELS codes that spelled out all 32 rabbis, but near their names were coded their birth dates or death dates, or sometimes both. How could any author have known these details 2000 years before these men lived?

This is amazing enough. The odds are said to be one in ten million! But in his book, Drosnin claims the same kind of codes revealed that Prime Minister Rabin would be assassinated a year before it happened. Drosnin even got a letter delivered through a friend to Rabin, but it was ignored. He also shows dozens of other historic events and how details about them are encoded all around where an ELS code finds the main name or event.

As you might guess, the response to the book has been mixed—to say the least. Most people say, “How could a three-thousand-year-old book possibly say anything about the future?” Others see this as proof that the Bible is the divinely inspired word of God. And some are just interested but very skeptical.

Next, we’ll look at the reaction to *The Bible Code* and why some are so critical.

Critical Reactions to the Bible Codes

A book making claims to “foretell” the future is almost certain to become a target for both eager followers and cynical scholars. In particular, a rift has developed between the original writers of the mathematical paper, and how Drosnin has used their work.

Witztum, Rips, and Rosenberg, while maintaining the accuracy of their original paper, say that Drosnin’s attempts to state what may happen in the future are “futile,” and that Drosnin’s book “employs no scientific methodology.”(4) Witztum categorically states “predicting the future is impossible.” Seems like a strange statement from a man who claims in his own paper that the ELS codes found the names, birth dates, death dates, and cities of residence of 32 rabbis thousands of years before any of them had been born. What the original authors of the *Statistical Science* paper claim is that the ELS codes they have discovered can only give information about what one has a place or name for already. In this view, codes can tell us about death camps in Germany because we know what to look for. Witztum uses this to demonstrate ELS codes at work.

What can we find out about Auschwitz? First, we must have mathematical tools to measure whether a specific ELS and the words found near it are statistically significant. This is provided by the calculations laid out in the 1994 paper, *Statistical Science*. Then one must have a prepared list of words one is looking for.

So, Witztum begins with the words “of Auschwitz” and a list of all of the subcamps of this World War II death camp. Once an ELS for Auschwitz is found, Witztum claims, “We find something very unexpected that [the names of all the subcamps] consistently appear in the area of the words ‘of Auschwitz.’” This, he says, is all that Bible codes can do. Codes cannot predict the future.(5)

But when Genesis was written, all 32 rabbis found in Genesis were still far in the future. The earliest rabbi found lived in the eighth century A.D. This is nearly 2,000 years after Moses. Isn’t that predicting the future, at least from the author’s point of view?

Michael Drosnin himself has been ambivalent about what the codes tell us. His book says, “I found the Bible code’s *prediction* of [Rabin’s] assassination myself. . . . When he was killed, as *predicted*, where *predicted*, my first thought was, ‘Oh my God, it’s real!’”(6) (emphasis mine). But in a CNN

interview he said, "I don't think the code makes predictions. I think it might tell us about possible futures."(7) Either Drosnin has changed his mind, or he is disingenuous in his book.

Harold Gans, a retired senior mathematician for the U.S. Department of Defense, and an expert at making and breaking codes, was one of the first mathematicians to look at the Bible codes. Highly skeptical at first, he duplicated their experiment, finding the same information. Still suspicious, Gans made up his own test: find the rabbis' cities of birth and death. Again the information appeared in close connection with their ELS codes. His conclusion: "The information was deliberately placed in the Bible by its author. . . . Logic would dictate that the author could not be human, could not be bound by the limits of time. It would be natural to conclude that the author is a divine being."(8)

Is there finally "proof" that the Bible was written by a divine being? That is our next subject.

Do the Bible Codes Prove Divine Inspiration?

Have codes hidden in the Bible finally proved it to be written by God? As we stated earlier, mathematician and code expert Harold Gans thinks so. What about *The Bible Code's*, Michael Drosnin? His own response is quite remarkable: "Everyone I met with seemed to assume that if the code was real, it must be from God. I did not. I could easily believe that it was from someone good, who wanted to save us, but was not our Creator. Clearly it was not someone omnipotent, or he would simply prevent the danger, instead of encoding a warning."(9)

On the other hand, a Jewish group called Aish HeTorah has developed a Discovery Seminar that has been given to nearly 70,000 people in the last ten years. To help attendees develop an "appreciation of the relevance and value of Torah and Judaism in their lives," roughly 20% of the Discovery Seminar features the work of Witztum, Rips, and Rosenberg. Harold Gans, the Defense Department code specialist mentioned earlier, is an advisor for this group, so compelling has this evidence become for him.(10)

Christians, too, have started looking for ELS codes, claiming to find the Hebrew for Jesus in all sorts of interesting passages about the coming Messiah. Two books by Christians are already out, and surely more will follow. So is this finally "the most important evidence that proves to this generation that the Bible is truly inspired by God"(11) as one Christian writer says?

Brendan McKay is a man with a sense of humor. He also has a mission: to show that even the mathematical uses of ELS codes prove nothing. McKay is an Australian mathematician who has published the first statistical critique of the WRR paper. But at his Web site he has accumulated a most interesting series of what he calls "pictures," much like the diagrams Drosnin published in *The Bible Code*. In these "pictures" he does exactly what Drosnin does: he looks for a word by ELS codes, and then sees what other words occur nearby. He has also taken up Drosnin's challenge in *Newsweek* magazine: "When my critics find a message about the assassination of a prime minister encrypted in *Moby Dick*, I'll believe them."(12)

Undoubtedly Drosnin felt he had nothing to fear: hadn't Rips and his colleagues tried to find information in the Hebrew version of *War and Peace* and found nothing? But published on McKay's web page are the diagrams from *Moby Dick* of predictions of the death of Prime Minister Indira Gandhi of India, Lebanese President Moawad, Marxist Leon Trotsky, Abraham Lincoln, Martin Luther King, John Kennedy, and even Princess Diana. For Lady Diana, not only is her boyfriend Dodi spelled out across her name, but even the name of their chauffeur, Henri Paul is there! And more are added regularly. But by far the most ironic "discovery" concerns the death of Drosnin himself. The place, method, and motive for his death are all spelled out.(13)

McKay's technical paper claims to duplicate the WRR paper but finds the 32 rabbis encoded in the Hebrew of Tolstoy's *War and Peace*.⁽¹⁴⁾ McKay and his co-author use the same statistical methods, and have Jewish authorities to back their spellings for the rabbis names, just as WRR had. So what does this tell us? At this point, no one knows for certain.

Finally, let's consider how Christians might want to think about this whole controversy.

How Should Christians Respond to the Bible Codes?

How should thinking Christians respond to these seemingly incredible findings of future events foretold in the Bible, but hidden in codes only a computer can find? Undoubtedly, it is too early to say very much, as even the specific methods and mathematical checks have yet to be agreed upon. But certain things appear to be clear.

We know very little about how sequences of letters behave when not written by an author, but rather put together by a program within a computer. Witztum, Rips, and Rosenberg make certain assumptions about what would and would not be a significantly close connection between two sets of words to rule out random placement. But these are, in the end, arbitrary. What McKay and Dror Bar-Natan have done in their own paper, "Equidistant Letter Sequences in Tolstoy's *War and Peace*," is demonstrate to their satisfaction that whatever phenomena occurs in the Hebrew text of Genesis can also be found in the Hebrew text of *War and Peace*.⁽¹⁵⁾

The scholarly arguing about method and mathematics is still going on, but what seems to be emerging is the fact that almost any "message" can be found if a sufficiently long text is used. If this is true, then we have learned something new about how humans who can program computers can find non-random messages in random texts, but we have not shown that a divine intelligence wrote the Bible.

An important question to ask ourselves is, "Why are we so fascinated by codes and mysterious messages in a book as clear as the Bible?" Do we not trust that God has given us all we need to know, both for ourselves and to evangelize the world, in the text that all of us can read? Perhaps for His own pleasure, God has indeed hidden certain things in the text of the Bible, but surely they are not the main message. God has given us the Bible so that we might know Him and make Him known. ELS codes in the Bible do not seem to do much more than pique curiosity.

Our responsibility is to read the text for what it says, not for what may be hidden under the surface. We know from the Book of Revelation that some great cataclysm is coming, and as it draws nearer, we are warned not to be misled. Jesus vividly portrayed how obvious His return would be: "Just as the lightning comes from the east and flashes even to the west, so shall the coming of the Son of Man be."⁽¹⁶⁾ So as you watch the news and the millennium approaches, keep your "baloney detectors" alert!

Will Bible codes become an important tool in the apologetic toolkit of evangelical Christians? We should be very cautious when we do not use God's Word as He wrote it. Merely studying the Bible codes will not necessarily result in Christian faith. For example, Michael Drosnin, after years of research for his book, *The Bible Code*, was still an atheist: "I had proof there was a code, but not proof there was a God. . . . I don't believe in God. . . . The message of the Bible code is that we can save ourselves."⁽¹⁷⁾ If that is all that Drosnin came to believe after working with these codes for five years, we are probably better off having people read the Bible and encountering the real God through His own words. One needs no codes to read and understand John 3:16.

Notes

1. Michael Drosnin, *The Bible Code* (New York: Simon & Schuster, 1997), 179.
2. Doron Witztum, Eliyahu Rips, and Yoav Rosenberg, "Equidistant Letter Sequences in the Book of Genesis," *Statistical Science*, 1994, vol. 9, no. 3, 429-438.
3. Drosnin, 20-21.
4. <http://www.discoveryseminar.org/cgi-bin/var/aishdisc/witztum.html>
5. Ibid.
6. Drosnin, 14.
7. Interview on CNN www page, "Meet Michael Drosnin the Author, *The Bible Code*."
8. Harold Gans, "Bible Codes," <http://www.discoveryseminar.org/bc.html>
9. Drosnin, 79.
10. Aish HaToreh, "Discovery" web page.
11. Yocov Rembsel, *Yeshua* (Toronto, Ontario: Frontier Research Publications, 1996), vi.
12. *Newsweek*, 9 June 1997.
13. [Http://cs.anu.edu.au/~bdm/dilugim/moby.html](http://cs.anu.edu.au/~bdm/dilugim/moby.html)
14. "Equidistant Letter Sequences in Tolstoy's *War and Peace*," bdm@cs.anu.edu.au
15. Ibid.
16. Matthew 24:27.
17. Drosnin, 103, 179.

©1997 Probe Ministries

Evolution and the Pope

Are Science and Religion at War?

We have just passed the one hundredth anniversary of one of the more important books written about the interaction of science and Christianity. The book's title, *A History of the Warfare of Science with Theology in Christendom*, says much about the book.

Andrew White wrote the book in 1896 to justify his belief that a university should be without any religious affiliation. He was the founder and first president of Cornell University in New York and was very outspoken in his views about the hindrance religion has been to scientific progress. It was White who popularized the view that there was a war between science and Christianity, and that in all cases science had ultimately been shown to be right.

A History of the Warfare of Science and Theology in Christendom is one long polemic attempting to show that religion has always held back the advance of science. The author maintains that if only theology would quit sticking its nose into the tent of science, everyone would be better off. Well into this century the book was regarded as being an important statement on the tension between science and religion.

One hundred years, however, has changed the tone of the discussion. Today many historians of science would agree that Christianity was a significant foundation for modern science, even though it is now viewed as an outmoded belief. For several reasons, then, it came to be commonly accepted that Christianity had played a key role in preparing the way for the development of modern science. First, Christians assumed they lived in a world that could be understood because it was created by a rational God—the same God who had also created them. This gave early scientists some reason to

assume that nature might obey laws that could be known. Speaking about the view of the universe that the Church gave to the culture around it, the great mathematician and philosopher Alfred North Whitehead said early in this century, "When we compare this tone of thought [the faith in reason and the regularity of the universe] in Europe with the attitude of other civilizations when left to themselves, there seems but one source for its origin. It must come from the medieval insistence on the rationality of God."

Second, not only was the universe understandable because a rational God made it, but the Bible encouraged believers to look at God's creation for signs of His handiwork. For example, as early as the Psalms David had proclaimed, "The heavens are telling of the glory of God" (Ps. 19:1). Scriptures such as this one, and many others, encouraged Christians to study nature to understand how it glorified God. Christians were confident that nature's design would show forth God's glory.

However, in the nineteenth and twentieth centuries much happened that eroded Christian confidence that they lived in a world crafted by God. In particular, Darwin's theory (that all organisms were descended from a common ancestor and that any appearances of design could be explained by natural selection working over long periods of time) came to have great acceptance among almost all scientists. For many the theory of evolution came to be seen as the complete answer as to why the world is as it is. For them, there was no need at all for a Creator or God to explain anything because evolution could, or would, explain everything.

A notable example of this position is the famous statement by astronomer Carl Sagan, "The universe is all that is or ever was or ever will be." With these words he began his immensely popular series about the universe, *Cosmos*. His words are the creed of the materialist (i.e., if it can be counted, measured, observed, experimented on, understood by natural laws, then it is real). Anything else is either meaningless or, at least, not scientific. According to this view, mountain goats are real because we can see them, touch them, put them in zoos. Angels, on the other hand, are not real because we can do none of these things to them. Science has to do with facts, and if there is any place for religion it is in the consideration of morals or ethics or those other areas where there are no facts.

But some people, such as Stephen Gould, a palaeontologist at Harvard, have remained open to dialogue on how religion and science can coexist. In his monthly column for *Natural History* magazine, he recently put forth his latest elaboration of how evolution, science, and religion are related. His proposed resolution of this issue is the theme of this essay.

Stephen Gould, the evolutionary writer and scientist, addresses what are the proper bounds of science and religion in a recent *Natural History* magazine. He proposes a complete answer to the problem of how they relate to one another. Simply put, they don't interact at all. "The net of science," says Gould, "covers the empirical universe: what it is made of (fact) and why does it work this way (theory). The net of religion extends over questions of moral meaning and value. These two magisteria do not overlap."

The Roman Catholic Church uses the term *magisterium* to refer to its authority to teach in areas relating to the Bible and its interpretation. Gould borrows this term and applies it as well to the legitimate area that science teaches. So the Church may speak about moral issues and science about matters of fact and theory. For this somewhat unbalanced division he creates the wonderful phrase "nonoverlapping magisteria."

Has the Pope's View of Evolution Evolved?

Gould is certainly free to pontificate. However, what is somewhat mystifying is how he draws in

Pope John Paul II as a prime supporter not only of his interesting distinction between science and religion, but also as a firm supporter of evolution!

On October 22, 1996, Pope John Paul addressed the Pontifical Academy of Sciences. The theme of their conference was to be the origin of life and evolution, so John Paul helpfully laid out what the Church had said over the last fifty years.

The Pope made clear that his predecessor, Pope Pius XI, had “considered the doctrine of ‘evolutionism’ a serious hypothesis.” But, John Paul says, “Today, almost half a century after the publication of the encyclical [of Pius XI], new knowledge has led to the recognition of the theory of evolution as more than a hypothesis. It is indeed remarkable that this theory has been progressively accepted by researchers, following a series of discoveries in various fields of knowledge. The convergence, neither sought nor fabricated, of the results of work that was conducted independently is in itself a significant argument in favor of this theory.”

That is as far as John Paul’s statement goes: evolution has moved from a serious hypothesis to a theory with significant arguments in its favor. Yet from this statement, Gould triumphantly draws an amazing observation:

In conclusion, Pius had grudgingly admitted evolution as a legitimate hypothesis that he regarded as only tentatively supported and potentially (as I suspect he hoped) untrue. John Paul, almost fifty years later...adds that additional data and theory have placed the factuality of evolution beyond reasonable doubt. Sincere Christians must now accept evolution not merely as a plausible possibility, but also as an effectively proven fact.

Is this really what the Pope said? We’ll now look more carefully at Gould’s interpretation of the Pope’s statement.

Does Evolution Fit the Truth About Man?

Stephen Gould, writing in *Natural History*, makes the Pope say something far more significant, and from Gould’s point of view, a concession of defeat. How does Gould paraphrase John Paul’s statement? “Sincere Christians must now accept evolution not merely as a plausible possibility, but also as an effectively proven fact.”

Nevertheless, either by reading too rapidly or possessing too much enthusiasm for his own position, Gould misses critical distinctions that the Pope’s announcement makes. To argue that the Pope’s statement (“new knowledge has led to the recognition of the theory of evolution as more than a hypothesis”) means that “sincere Christians must now accept evolution not merely as a plausible possibility, but also as an effectively proven fact” is ludicrous. Gould almost twists the Pope’s statement to contradict what he does say.

In fact, in his next paragraph, the Pope states: “A theory is a metascientific elaboration, distinct from the results of observation but consistent with them...Furthermore, while the formulation of a theory like evolution complies with the need for consistency with observed data, it borrows certain notions from natural philosophy.”

“Metascientific” means going beyond the realms of science into an abstract, philosophical arena. So, the Pope says, evolution is more than a hypothesis; it is a theory, but as such, it also is “distinct from the result of observation” and borrows from philosophy. His next statement is one Gould may have skipped over:

And, to tell the truth, rather than the theory of evolution, we should speak of several theories of evolution. On the one hand, this plurality has to do with the different explanations advanced for the mechanism of evolution, and on the other, with the various philosophies on which it is based. Hence the existence of materialist, reductionist and spiritualist interpretations.

So, rather than saying the words Gould puts in his mouth, the Pope actually says that not only is evolution based on a philosophy, but there are several theories, and he goes on to rule out some of them, at least for Roman Catholics. "Theories of evolution which, in accordance with the philosophies inspiring them, consider the spirit as emerging from the forces of living matter or as a mere epiphenomenon of this matter, are incompatible with the truth about man."

Gould wants the Pope to say, "You talk about science, and I'll talk about religion. You can have the world of facts, and I'll take what's left. These areas won't overlap with each other, and we'll each stay in our own gardens." But the Pope is unwilling to follow Gould's convenient (for science) scheme. Instead, he firmly declares "The Church's magisterium is directly concerned with the question of evolution, for it involves the conception of man." This is what all of us who are Christians should be saying. Evolution, as it is usually put forward, is not just a theory about ancient data. It is also a philosophical statement about where man came from and what, if any, importance he has. While Gould claims his scientific views are not related to his moral views, his words give little support to this.

Is Christianity Concerned About Evolutionary Theories?

Early in his essay Gould has dispatched creationists with a few quick paragraphs. "Creationism does not pit science against religion, for no such conflict exists. Creationism does not raise any unsettled intellectual issues about the nature of biology or the history of life. Creationism is a local and parochial movement, powerful only in the United States among Western nations, and prevalent only among the few sectors of American Protestantism that choose to read the Bible as an inerrant document, literally true in every jot and tittle." Well, so much for a fair, informed assessment of one's opponents.

First he defines out of existence what creationists see as a central argument by merely saying "no such conflict exists." Then he proceeds to caricature creationists as a fringe group only found among a small group of Protestants. Prior to this he has equated "scientific creation," the view that the earth was created in six days and "only a few thousand years old," with all of creationism, which he fails to note includes even those who believe in evolution and an earth billions of years old, but believe God superintended the process.

Gould's claim that "creationism does not raise any unsettled issues" ignores significant questions that have been raised about how life first arose from chemicals, about the source of the genetic code, and of the origination of new biological structures. But does the Pope truly believe in Gould's nonoverlapping magisteria? Gould's summation of the opening of John Paul's speech is that he "begins by summarizing Pius's older encyclical of 1950, and particularly reaffirming the NOMA principle [nonoverlapping magisteria] nothing new here."

Is this really what the Pope said? He begins by saying that "the origins of life and evolution [are] an essential subject which deeply interests the Church, since revelation, for its part, contains teachings concerning the nature and origins of man. . . . I would like to remind you that the magisterium of the Church has already made pronouncements on these matters within the framework of her own competence." This hardly sounds like there is no overlap between what the Church teaches and

science. Toward the end of his remarks John Paul flatly contradicts Gould's neat distinction: "The Church's magisterium is directly concerned with the question of evolution for it involves the conception of man." So it would seem that Gould has used those parts of the Pope's speech which he likes and disregarded the rest.

Two points are important here. First, while Gould sets forth an interesting view about the relationship between science and religion and gives a new name to what used to be called "complementarity," it is not the view espoused by the Pope, and is almost antithetical to it. Second, Gould himself does not abide by this strict separationism in his own views, even when he claims to. When Gould actually makes his own moral position clear, it is hard to escape the conclusion that it comes directly from his views and philosophy as a scientist.

Why Trust Your Mind If No One Made It?

"As a moral position...I prefer the 'cold bath' theory that nature can be truly 'cruel' and 'indifferent.'" This is the summary of Harvard paleontologist Stephen Gould in his *Natural History* essay on how science and religion should relate to each other. "Science," Gould says, "covers the empirical universe: what is it made of (fact) and why does it work (theory)." Religion is left to cover "questions of moral meaning and value."

Gould calls his position nonoverlapping magisteria and claims the Pope holds the same view. As we stated earlier, this is far from true. But Gould then goes on to describe the moral view he takes.

Gould's position, which he immediately claims is not "a deduction from my knowledge of nature's factuality" is "nature was not constructed as our eventual abode, didn't know we were coming... and doesn't give a _____ about us (speaking metaphorically)." He says he finds such a view "liberating...because we then become free to conduct moral discourse...in our own terms, spared from the delusion that we might read moral truth passively from nature's factuality." It is indeed hard not to draw the conclusion that Gould has read his view about the process of evolution into his own moral position. How does he know that nature was not constructed for us if not from his studies of the natural world? How would he know it doesn't care about us unless somehow he saw this in his studies? Where else might he get such ideas?

In his speech, Pope John Paul II spoke quite candidly of his view of evolution:

And, to tell the truth, rather than the theory of evolution, we should speak of several theories of evolution. On the one hand, this plurality has to do with the different explanations advanced for the mechanism of evolution, and on the other, with the various philosophies on which it is based. Hence the existence of materialist, reductionist and spiritualist interpretations.

Stephen Gould has a materialist philosophy behind his theory of evolution. He believes that the material universe is all that exists, and that our own consciousness is a chance phenomena and does not come from a Creator. So, for Gould, where else can he draw his views about the meaning of life and what might be moral? His very thinking is a chance product of evolutionary processes that had no design, either to produce man or to give him a mind. Nonetheless, Gould trusts his mind not only to be able to distinguish between science and religion, he is sure that they should not influence one another.

Gould's view is a version of what is the common denominator of much of science today. At all costs

religion must be kept out of science, or else science will cease to exist. Only material answers can be given to any question because the intervention of a Creator would negate the laws that govern science. What is missed in all of this is that without a Creator of some kind, not only is there no basis to trust the human mind to make true observations, but there is no reason to suppose that it would matter. Why worry about science or religion, and certainly why worry about whether they could have a negative effect on each other? If there is no God, there can only be arbitrary judgments. It is God who gives meaning to what we say and believe.

Christians serve a rational God who made both them and the world. On what does Gould base his trust in either science or the mind?

©1997 Probe Ministries

Genesis Unbound

A New and Different Genesis 1

Have you ever read a book that totally changed the way you thought about something? Or heard an idea that gave you a completely new picture of something you thought you knew well? This essay is about just such a book.

Most of us know the verses of Genesis 1 so well we could recite parts of them from memory. Some have studied them for years and read shelves of books about what the first chapters of Genesis mean. But what if someone suggested that most of what you have thought and pictured and been told about those early chapters might not be quite right? Would you reach for the red tag of “Heresy” to slap on the book? Would you be sure that the author could not possibly be right? In this discussion we are reviewing a new book called *Genesis Unbound*, and it may well cause you to reexamine what you thought Genesis 1 and 2 are about.

The author, Dr. John Sailhammer, is not a newcomer to theology. Educated at Dallas Theological Seminary and UCLA, Dr. Sailhammer taught at Trinity Evangelical Divinity School. He now teaches at Northwestern College. He has written several well-respected books on the first five books of the Bible (the Pentateuch) and is considered an excellent conservative Old Testament scholar. The commentary on Genesis in Zondervan’s *Expositor’s Bible Commentary* is by Dr. Sailhammer. His recent book gives a surprisingly new, and yet very old, look at the first chapters of Genesis.

To lay the groundwork for any new view, it is important to understand the prevailing view first. Sailhammer helpfully provides five basic assumptions that he says make up the core beliefs of nearly all the current views.

The first of these core assumptions is that the first verse of Genesis 1, “In the beginning God created the heavens and the earth,” refers to the creation of some sort of unformed mass that God will make into a universe as the six days progress.

The second assumption that almost all commentators make about Genesis 1 is that the “light”

created on day one was something unique and temporary for dividing the days until the fourth day when God would create the sun, moon, and stars.

Third, it is generally assumed that the sun, moon, and stars were actually created on the fourth day.

Fourth, until recent science began to question the assumption, it has been almost universally believed that the days of Genesis 1 were normal, 24-hour days. Some placed a gap between the first and second verses, to place all of the geological ages, but this was not a widely held view. In our century it is common to make the days long ages so the Bible will agree with the consensus of modern geology.

Lastly, the earth that God is making ready for man in Genesis 1 has almost always been seen as the whole planet. Accordingly, verse one is about the creation of the whole universe, and verse two begins a description of how God fashioned the earth for (1) the creatures He was about to make, and (2) a home for the two people He would make in His own image.

But suppose there were some assumptions in this list that we did not need to make? How would that change our view of these first chapters of Genesis? Next we will consider how a Jewish reader of Moses' time might have understood Genesis 1.

The Forming of the Promised Land

We all make assumptions when we read or hear something; we cannot think without a structure. But sometimes we make unnecessary assumptions that hinder our understanding. Of the five assumptions that many make about Genesis 1, could some be unnecessary baggage? The first assumption was that "In the beginning God created the heavens and the earth" describes an initially chaotic state out of which God would create the material world. But suppose instead that this verse actually described God's creation of heaven and earth? Dr. Sailhammer carefully develops the view that in the Old Testament, the Hebrew word for "In the beginning" often describes a period of indeterminate time. Genesis 10:10 says "And the beginning of his kingdom was Babel and Erech and Accad and Calneh." Jeremiah 28:1 describes "The beginning of the reign of Zedekiah king of Judah, in the fourth year." Genesis Unbound suggests that we picture God creating the whole universe, "the heavens and the earth," over some unspecified time in the past.

When we begin verse two, "And the earth was formless and void," Sailhammer says it is not talking about the whole of planet earth. What are Moses' five books about? The nation of Israel. What is the whole theme of the Pentateuch? How God chooses a people and takes them to the promised land He has made for them. Why not give "earth" in verse two its other meaning of "land"? And specifically "The Land." God, through Moses, is telling us how He prepared the Promised Land for the people He already knew He would choose.

Startling?

Why, then, was the land "formless and void?" It wasn't! Genesis Unbound contends that this assumption crept in with the first Greek translation of the Bible, the Septuagint. It translates the Hebrew into Greek as "unseen and unformed" in order to harmonize the Bible with the view of the Greeks, who believed the world was formed out of chaos, so the translators wanted to seem relevant and mirrored that idea! According to Dr. Sailhammer, it would be better to translate the phrase as "an uninhabitable wasteland." God had not yet prepared it for man, but it was not chaos either. God was preparing to take the "wasteland" and make it the "promised land."

On day two, God prepares the sky for the land He will soon begin to make ready. The word often

translated “firmament” Sailhammer suggests actually refers to what we would call the sky. And the waters above the firmament are the clouds that God sets in the sky. Interestingly, this is exactly what John Calvin thought. He wrote, “To my mind, this is a certain principle, that nothing is here treated of but the visible form of the world. He who would learn astronomy . . . let him go elsewhere.”

On day three, God gathers together the seas and makes the dry land appear. The land is brought out of the water to make a fit place for Adam and Eve. The water settles into rivers and lakes. The Hebrew word for any body of water can be translated “sea.” Here it is plural, while if it referred to the ocean it would be singular.

Then God creates “fruit trees.” In Sailhammer’s understanding, that is what the words describe, not all kinds of vegetation.

At the end of the third day, the Promised Land has been prepared with clouds in the sky, rivers and lakes, and fruit trees for food.

The Filling of the Land

The book *Genesis Unbound* presents what seems at first a completely new understanding of Genesis 1. But by seeing the chapter as God preparing the Promised Land, first for Adam and Eve, and eventually for His chosen nation Israel, many problems are avoided. Dr. Sailhammer takes the days to be normal 24-hour days, but sees the creation of the whole universe as having taken place in the first verse, over some unstated period of time in the past. Then God focuses in on His preparation of a place for His last creation to live.

Now, on day four, God gives a new purpose to the sun, moon, and stars that have been shining since He created them “in the beginning.” On day four, God declares they are to guide the people He is about to make. They will act as measures of time; they will serve humanity. There have been no people placed on earth yet, so the sun has merely been a star in the sky. Now God speaks, and the host of heaven takes on a new function as celestial markers. On the first three days, God created the land and places for things. Now He is declaring what is to fill each part of the stage, and what their functions will be.

On day five the same word for “create” that was used in verse one occurs again: *bara*. Why does God use this word again? Dr. Sailhammer suggests that Moses is drawing our attention back to 1:1 to remind us that only God can create things out of nothing. But on day five, when God populates this new land He has made, it is with animals and birds that are descendants of those He made on day one. God speaks, His creation responds, He sees it is good and blesses His creation.

Day six is the climax of the account, and the center of God’s activity. From nothing God has created the universe in Genesis 1:1. He has prepared a special land and populated it with His creations. And then we come to man.

Here God changes His whole approach. He now announces, “Let us make man in Our image.” And in order for the creation to fully bear His image, He makes them male and female. Sailhammer makes an interesting point here as he discusses why the text suddenly says “Let us.” He sees a reflection of God’s character in the fact that it takes both a male and female before God’s image can be born by humans. Just as men and women complement one another, so too the “us” points to the relationships that exist within the Godhead. So, in Dr. Sailhammer’s fascinating argument in *Genesis Unbound*, when God sets out to create “in His image” for the first time, He first creates a special land for them, then appoints the sun, moon, and stars to a new purpose, fills the land, sky, and waters with

creatures, and creates a garden for Adam and Eve to live in.

Some might object that God doesn't seem to do very much. But, Sailhammer argues that God had already created everything out of nothing in Genesis 1:1. Now, God speaks ten times (just as He spoke the Ten Commandments) and makes a land perfect for humans to live in. He creates for Adam and Eve a garden. And that garden will someday be the very land that God promises to Abraham, and eventually brings the nation of Israel to, for as we will see next, Eden is the land of Israel.

Does Genesis 2 Contradict Genesis 1?

At last we come to day seven. God has created a place for each of His creations, and just as He instructs His creation to do in the Ten Commandments, God Himself is said to "rest."

He has taken a wild land, unfit for people, and made it into a literal garden spot. Now, in a pattern that He sets for His creation to follow, He takes a day of rest. This becomes deeply significant later on when Moses receives the Ten Commandments. In Exodus 20:11 God says "For in six days the LORD made the sky, the earth, and the seas and all that is in them, and rested on the seventh day." Thus the divine pattern is also to be the human plan. Even now that we are burdened with the effects of the Fall, even in our rebelliousness, God still wants His creation to rest, and take time to bless our Creator.

Then what are we to make of Genesis 2? Many modern scholars have spoken of two creation accounts and seen this as an inconsistency or an error in the Bible. The usual answer has been that the account in Genesis 2 is a narrowing of focus from chapter 1, looking just at the creation of man and woman in detail. If this is so, Dr. Sailhammer asks, then why not see Genesis 1 as describing the same place as Genesis 2, Eden? Thus he continues his argument into chapter 2.

In Genesis 2:5-6, some have seen a contradiction with the first chapter. How can there be no shrubs or plants or rain? What *Genesis Unbound* sees in these verses is a comparison being set up between before and after the Fall. There are no "shrubs of the field" or "plants of the field" because these would come as a result of Adam and Eve's disobedience. These are the "thorns and thistles" and "plants of the field" that Adam is told he must work to cultivate in Genesis 3:18-19.

When the text says "it had not rained on the earth," it is a contrast to when God will "send rain on the earth" during the Flood. And there was "no man to cultivate the ground" because this too would come as a result of the Fall in Genesis 3:23. So the text is already preparing us for what the results of man's disobedience will be, even as the Garden is being made.

Dr. Sailhammer also finds the large amount of space devoted to locating Eden of considerable significance. While modern commentators have despaired of ever locating the exact place, he sees the length of the description as indicative that at least Moses expected people to recognize where Eden was located.

The primary way that Eden is located is by the rivers that flow from it. And what are those rivers? One of them is the Pishon, a river now unknown. But the second is the Gihon, which flows around the land of Cush. Since Cush is roughly the same as Egypt, might not the river Gihon be the Nile River of Egypt? And the other two rivers are the Tigris and the Euphrates. Sailhammer thinks it is not coincidence that two of these rivers are exactly the ones that God uses to explain to Abraham where the promised land will be (Gen. 15:18).

Next we will consider why Eden and Israel are so closely connected, and whether Genesis should be read as poetry or not.

Genesis Unbound and the Rest of Scripture

Dr. John Sailhammer's new book *Genesis Unbound* has many novel explanations of Genesis 1 and 2. But at the same time, it both helps us see how a Hebrew reader might have understood what Moses wrote and answers a number of puzzling questions that most of us have had about the text. One of these questions is, "What became of Eden after God devoted so much care to making it?"

Earlier we looked at how the rivers God uses to describe where Eden was, are much the same as the ones He uses to tell Abraham where the promised land was to be. Think of the parallels. In the same way that God prepares a special place for Adam and Eve, a place they will be driven out of if they are disobedient, so too, He promises first Abraham, and then the whole nation of Israel a special place, that they will be driven out of if they are disobedient. In fact, both are sent the same direction, to the east, when they do disobey. And then, where will the Messiah come to? Exactly the same area as the first Adam lived! And where is the New Jerusalem of Revelation 21 located? Just where God placed the first Jerusalem, which was in the same place that He created for Adam and Eve: Eden!

In this view, the whole Bible ties together in a way that makes complete sense and has God wasting nothing as He prepares a land for His people. The blessings and curses that form so much a part of the later books of the Pentateuch, can now be seen as being foreshadowed in God's initial command to Adam and Eve.

But should we even be reading Genesis so literally? After all, isn't Genesis really poetry? As an Old Testament scholar, Sailhammer makes short work of the argument. What is it that characterizes all Hebrew poetry? Parallelism and meter. Parallelism is the use of two lines to express the same idea in two ways. For example:

The Lord is a great God
And a great king above all gods.

These express the same thought in two related ways. Hebrew poetry also has a certain meter, where either the number of words or symbols will be approximately the same between two lines. Does Genesis 1 or 2 fit that pattern? Absolutely not. And in fact, Sailhammer chides Evangelicals, who, to try to take these chapters less literally, speak of "poetry-like" language. As he says, this seems like "little more than an attempt to dismiss the obvious intent of these narratives to tell us, in literal terms, what actually happened at creation."

In conclusion, he considers the question, "Is the Big Bang being described in Genesis 1:1?" Interestingly enough, his answer is a fairly firm, "No." As he pointedly comments, "When understood as the Big Bang, creation becomes just another example of the forces of the physical world we see around us today. . . . Our world, however, cannot be traced back to the divine act of creation. Science and history will always be separated from the divine acts of creation."

You will have to read all of Dr. Sailhammer's provocative book to make up your own mind. But at least give him the chance to make his case directly from the text. *Genesis Unbound* is a book to stir your thinking, and should be read slowly. But go back and read Genesis to be reminded of God's greatness in His creation.

World Population

The battle to feed all of humanity is over. In the 1970s the world will undergo famines; hundreds of millions of people are going to starve to death in spite of any crash programs embarked upon now.

So predicted Stanford professor Paul Erhlich in his widely influential 1968 book *The Population Bomb*. It sold more than three million copies but its many predictions of global catastrophe never came true. Most famines in the 70s and 80s were in African countries saddled with Marxist governments or political turmoil.

Has Erhlich admitted these errors? No, in 1989 he wrote *The Population Explosion*. Without comment on his past mistakes he merely moves them into the future again, like those who predict the end of the world. Erhlich wrote,

The Population Bomb tried to alert people to the connection of population growth to such events...but society has turned a deaf ear. Meanwhile, a largely prospective disaster has turned into the real thing.... There still may be time to limit the scope of the impending catastrophe, but not much time.

Are we really that close to disaster? In September of 1989 the *Scientific American* published a series of articles on "Managing Planet Earth." While somewhat pessimistic in tone, they are generally balanced in their reviews. In an article on "Strategies for Agriculture" the authors conclude, "World food production could grow significantly more slowly than the current rate and there would still be enough food for 10 million mouths by the time they arrive."

In 1968 Erhlich forecast "[I]f...our population growth, and our water use continue, in 1984 the United States will quite literally be drying up." He also declared "Lake Erie has died.... Lake Michigan will soon follow it in extinction." In fact, Lake Erie has been reclaimed, and we have not exactly dried up either.

In 1980 Julian Simon, an advocate of population growth to fuel economic growth, bet Paul Erhlich \$1,000 that prices of five non-renewable metals would go down. For years, Ehrlich and others had been prophesying that the world would soon run out of many metals, halting industrial growth. They claimed that the world's supplies of oil and gas would soon be exhausted and the West would be subjected to crippling shortages. In 1990 Erhlich quietly paid Simon the \$1,000. Not only had the price of all five metals dropped, but the known world reserves has gone up!

In his 1989 book, *The Population Explosion*, Erhlich not only continues to predict apocalyptic devastation, but he connects population growth to many social problems we are currently facing. Most people are unaware," he writes, "of the role that overpopulation plays in many of the problems oppressing them.... Visitors to our nation's capital find homeless people sleeping in the park opposite the White House, and drug abuse and crime sprees fill the evening news. News about the AIDS epidemic seems to be everywhere."

It is certainly true that homelessness and AIDS are terrible problems, but to blame them on

overpopulation in America seems either a display of great ignorance (unlikely, as Erhlich is a Stanford professor) or willful misinformation.

Are There Really Too Many People?

In the book of Genesis, Adam and Eve were given the command to multiply and fill the earth. In Genesis 9 Noah is given the same charge. We must consider the rest of the creation as we determine if we have yet fulfilled that command. But world population is not the problem.

We share the planet with 5.7 billion people. If one could stand all the people in the world, men, women and children two feet apart, how much of the world would they take up? All of Africa? All of North America? New York state? If every person alive today stood two feet apart they would fill less than the area of Dallas County! And there would still be room for all the buildings! If the world's people were put together into families of four living on 50' by 100' lots, they could all live in the state of Texas, with more than seven thousand square miles left over. So the total number of people is not the real problem, at least at this point.

One of the statements one hears with depressing regularity in discussions of world population is "If the present rate continues. ..." But in fact the "present rate" is almost never continuing. Consider a frequently used figure, the doubling time for a country. This is the time it takes for a nation of 100 million people to reach 200 million. It is also a measure of how fast new food supplies must be found. The faster the doubling time the more urgent the need for agricultural development.

In 1968 the world's doubling time was about every 35 years. This was frequently used as the basis for pronouncements that "if the present rates continue" the world will be faced with mass starvation in some small number of years.

But the "present rate" was already declining, and the world now doubles about every 82 years. And more conservative scholars had pointed this out years ago. As the standard of living of a country increases, its doubling time also increases. Thus the developed nations are close to stability now, and as less developed nations become more industrialized their population growth also slows. That is the basis on which many experts predict that the world population will stabilize at about ten to eleven billion people.

Malthus's essay "On the Principle of Population," has, as he himself said, "a melancholy hue" about it. It was Malthus, with his view that human populations would soon overtake food production, who inspired the labeling of economics as the "dismal science." But was Malthus right?

Malthus assumed that food supplies would always limit population growth. But in the two hundred years since he wrote, this has not been the case. By one means or another farmers and agricultural scientists have always found a way to increase farm production to keep up with population growth. But we have yet to find efficient ways to get food from where it is produced to where it is needed most.

One Christian has seriously suggested that old oil tankers, which now sit unused because of the huge world supply of oil, could be put back into service cheaply transporting grain from producers to consumers.

The fact that we have 5.7 billion people in the world is not why we have starving people. We have the surplus food to feed all the world's people. What we do not have are stable governments and economic opportunities that allow people to earn a fair wage for their labor.

Alarmism and Faulty Predictions

In his 1968 book *The Population Explosion*, Paul Erhlich announces the approaching food crisis. "Then, in 1965-66 came the first dramatic blow...mankind suffered a shocking defeat in...the war on hunger.' In 1966, while the population of the world increased by some 70 million people, there was no compensatory increase in food production." He continues by laying out likely scenarios of the world being rocked by food rebellions that will lead to nuclear war and the devastation of the planet, possibly leaving cockroaches as the most intelligent creatures on earth.

Fortunately Erhlich was wrong. Food production continued to increase and more than keep pace with the population. So what did Erhlich learn?

In 1989 he wrote another book, *The Population Explosion*. Doom was again close: "In 1988, for the first time since World War II, the United States consumed more grain than it grew...only the presence of large carryover stocks prevented a serious food crisis. It is not clear how easy it will be to restore those stocks."

Again, thankfully, Erhlich was wrong. By 1990, world grain production was up 50% from 1988! And it has continued to increase to the present.

Erhlich's inaccurate prophecies are numerous. In 1968 he quotes Louis H. Bean approvingly: "My examination of the trend of India's grain production over the last eighteen years leads me to the conclusion that the present 1967 1968 production...is at a maximum level." But in seven years India increased its grain production by nearly 26%! By 1992 it had increased it 112%!

Famines are the exception in most countries, and even then absolute lack of food is usually not the problem. In a *Scientific American* article on world population one author says: "Food surpluses exist in many nations, and even when famines do occur the cause is much less the absence of food than its maldistribution which is often accentuated by politics and civil war, as in the Sudan." This passing comment touches on the real problem. Most famines in the last twenty years are a direct result of internal wars in African nations.

Whether in Ethiopia, Sudan, or Somalia, the devastating famines and the hopeless faces of dying children we have all seen on TV are the result of politics. As one segment of the population wars against another, starvation is often a political weapon. And in each of the famine-torn countries of Africa one can show that it has been disrupted distribution more than low food production that has caused people to starve to death.

The Bible itself gives evidence that population pressures do not cause famines. When is the first famine in the Bible? In Abraham's time, when the world population could not have been a problem. There have always been famines, but wise leaders have also known how to prepare for famines, as did Joseph later in Egypt.

Many researchers expect the world's population to level off between ten and eleven billion people. Two specialists predicted that "world food production could grow significantly more slowly than the current rate, and there would still be enough food for 10 billion mouths by the time they come."

The earth can provide all the food needed for the foreseeable future. So why are so many saying we must take powerful measures, like widespread abortion, to control world population?

Environmentalism and World Population

One of the driving forces behind much of the population explosion movement is that of environmental concern. People are afraid that the earth is being rapidly ruined, and they are sure that world population is one of the worst problems. Unfortunately there is some truth to this. There are areas in the world where too many people have been squeezed into one place, or where too many animals are grazing the grass to the ground. But these happen because other people do not care to help. The environment is damaged when people must choose between death by starvation and cutting down trees or overgrazing fields. What we need to protest is the way the people are treated, not their existence.

Many of the role models put forward by the environmental zealots often have very mixed messages. Paul Erhlich praises Prince Philip of Great Britain for having “taken courageous stands in the population issue and its connection to environmental problems.” But this is the same Prince Philip who, when asked what he would like to be reincarnated as, replied: a “killer virus to lower human population levels.” Certainly a princely thing to say.

There are also ecological movements that hate people. The Deep Ecology movement is one such loosely organized movement. Groups like Green Peace, Earth First!, and the Animal Liberation Front tend to see the human race as a cancer on the environment, something to be suspected and tolerated, but only in small numbers. Some want to see no more than 250 million people on earth; others wouldn't mind if humans died out altogether. These people see any large population as a problem, and are ready to take action to make the earth “right” again. Others have openly said that the AIDS virus is a good thing in that it will eliminate at least some people who are ruining the environment. Often the extreme positions of groups like these make other ecological organizations seem almost conservative by comparison.

Much of the time, people accept the argument that the earth is too crowded because that is all they hear. The media are usually not interested in reasoned, factual responses to problems because they lack the shock appeal that gets people to tune in, or read a paper, or buy a magazine. Thus, TV is filled with those who have extreme views, or who can speak eloquently about the latest crisis.

So how can Christians make a difference in all of this confusion? First, by actually being involved in caring for the creation God has given us charge of. Too many of us read in our Bibles about how God created the world and cares for it, but fail to act as if it were really true. Let us be actively involved in saving the creation, and then we may earn the right to speak about why we are doing it.

Most Christians were slow in protesting abortion; so too many of us have been slow in showing an active concern for the environment. The earth that God created can provide places to live and food for all that God has made. But just as we must take care of our own houses if we want them to last, so too we must take care of the earth God has given us to live in.

A Christian Response

The plight of starving people in other countries seems to be like many other major world problems so immense and complicated that we feel we can do little or nothing about them. We often feel overcome by the task before we even start. How should we begin? What should we do?

One stock statement of the environmental movement is “Think globally, act locally.” As Christians we should change this to “Pray globally, act locally.” Because our God has created the whole world, we, too, are to be concerned and to pray for it. Second, we can also show our concern by how we act in our own communities. And finally, we can give to those organizations that can act as our hands in

other places.

Prayer is always our most powerful weapon. We need to be praying that God would make us sensitive to the needs of the world. Pray that God will help us be willing to give of what we have in order to help others. Pray that our lives will be an example to others of a real concern for the poor and hungry, just the way Jesus' own life was.

We can also encourage our churches to consider issues like world population and caring for the creation in the larger picture of biblical teaching. Instead of "Earth Day," why not "Creation Day?" Our churches should teach how stewardship can be lived in daily activities.

One good way to be involved is to give to a relief fund that not only feeds the hungry but also helps people develop the skills to farm more efficiently. Many relief organizations are involved in community programs such as improving the local water supply or teaching new crop rotation techniques. Seek out these organizations and give to them.

Get alternative sources of information. Best-selling books and TV programs usually follow the most sensational sources of what's new. Find books that cover world hunger from different perspectives. Look in your local library. Write to Probe.

The problem in the world today is not that there are too many people. The earth can feed many more mouths than it currently does. But we must pray and work for justice to prevail in many of the countries that now suffer famines caused by political wars. More than enough food is produced each year to feed all the people in the world. But we do need to increase the standard of living and develop agricultural resources in a way that does not destroy the land in the process. We need Christians trained in agriculture and resource management.

Why not consider a career in agriculture? It would be very difficult to get into Saudi Arabia as a missionary. But if you go as an agricultural consultant or an irrigation specialist you will be greeted with open arms. "Sustainable agriculture" is the need of the future, and if you train in this field you will be able to go to almost any less-developed country in the world. What a great way to be involved in a greater harvest of both food and souls for the kingdom of God.

When we look out at the world we must not just see teeming hordes of people but men and women for whom Christ gave His life. And as we consider our responsibility to the world around us we need to remember what the Psalmist said: "The earth is the LORD's and all it contains" (Ps. 24:1).

©1995 Probe Ministries

The Origin of the Universe

What is the newest evidence for the Big Bang? The cosmic background radiation is exactly what was expected if the universe began as an immensely hot event 10-20 billion years ago. But the universe that was created is "just right" for life. Richard Milne explains that dozens of factors are exquisitely fine-tuned for life to be able to exist, at least on our planet.

What Was the Big Bang?

"If you're religious, this is like looking at God."{1}

A mystic, describing his vision in a trance? A poet, looking at the beauty of nature and seeing God? No, a Berkeley astrophysicist, commenting on the data he was making public in 1992 that seemed to confirm a basic expectation of the Big Bang theory.

Just what is the Big Bang theory of the origin of the universe? One scientist summed it up succinctly by saying: "The explosion from zero volume at zero time of a corpuscle of energy equivalent to the mass and radiation that now constitute the Universe." {2} What does that mean? It means that everything we now see or know about was once compacted into an unimaginably small blip that suddenly expanded in a huge explosion that created the very space and time it was expanding into. Or as Calvin of *Calvin and Hobbes* put it, "The Horrendous Space Kablooiie."

The Big Bang has become as much a part of our common science knowledge as dinosaurs, something we speak about with the same sense of familiarity we talk about atoms. But, like atoms, how much do we really know about this wondrous explosion of everything?

In this essay we'll talk about what scientists mean by the Big Bang theory, why it's often in the news, why some scientists oppose it, what it tells us about our home the universe, and what we as Christians can learn from all of this.

Science is often seen as attacking the God of the Bible, but in this case scientific discoveries seem to be revealing God's work. The Bible begins with the statement that God created the heavens and the earth, leaving no doubt that all we see had a beginning and had a Creator.

But by the 1700s many people accepted an earlier theory that Immanuel Kant made more popular. The theory held that the universe is an infinite expanse with no beginning and no end. This fit the philosophy of the time, as people did not want to think that they might have to face judgment by a God who had the power to both begin and end the universe.

In the roaring twenties, Edwin Hubble had begun to investigate mysterious masses of stars called nebulae. Some thought we were all part of one giant galaxy; others thought there might be a whole world of galaxies outside our own. Hubble was able to show that there are many galaxies besides our own. In 1929 he announced we were in a huge universe, so big it would take light billions of years to travel across it. Not only was it immense, but every part was moving away from every other part at incredible speeds, some receding at 100 million miles an hour!

Priests do not enter into this story very often, but in the late 20s and early 30s a Belgian priest and mathematics teacher by the name of Georges Lemaître (who was fond of saying "There is no conflict between science and religion") first constructed and then published a theory that changed the course of cosmology in the twentieth century. Taking Hubble's observation that the galaxies were rapidly receding from one another, he ran the theory backwards to a time when all the matter in the universe was very close together. He called this the "primordial atom" and imagined a beginning when the whole universe exploded like "fireworks of unimaginable beauty" with a "big noise." {3} Thus was born the Big Bang theory.

Why Is Everybody Excited?

Geffory Burbidge has been complaining recently that his colleagues in astronomy have been all too

quick to join “the First Church of Christ of the Big Bang.” And what is causing this big rush? Findings from the Hubble Space telescope and the COBE (Cosmic Background Explorer) satellite that are confirming the Big Bang theory in unprecedented detail.

When the Big Bang was originally formulated about sixty years ago, not much thought was given to the conditions of the universe at the very beginning. But by the early 60s some scientists had realized that such an incredibly hot origin might have left slight traces behind. There might still be a whisper of the beginning of everything. This whisper would be a very small remnant of the heat of that first fiery instant.

In 1965 two Bell scientists announced they had indeed found such a remnant, a cosmic background radiation. This radiation, the signature of the heat of a long ago creation, was very close to what several theorists had rather off-handily predicted some years before. Their paper had gone unnoticed because there was at that time no way to measure such a small signal, but when Arno Penzias and Robert Wilson, of Bell Laboratories, published their short article, it was quickly seen as confirmation of the Big Bang, and they received the Nobel Prize in 1978.

Then, in 1989, the United States launched the COBE satellite to look for details of the cosmic background radiation. The first evidence looked promising, but showed a background radiation so smooth that it was hard to understand how any cosmic structures like stars or galaxies could have formed. Unless there were some differences in the initial temperature of space, there would have been no reason for matter to cluster and form stars.

Then, in a dramatic press conference in 1992, George Smoot and others announced that they had found ripples of temperature differences in the radiation data. Even Stephen Hawking, the wheelchair-bound English astrophysicist, proclaimed, “It is the discovery of the century, if not of all time.”{4} Every major newspaper in the world carried stories about the “echoes of creation.” And many assumed that the Big Bang was proved.

But even as many scientists exulted in the new data, new questions also began to arise, but they were not questions about whether the Big Bang happened, but about how it progressed. For most scientists, the Big Bang theory is not “in trouble” as is sometimes reported. What is in question is how this sea of energy that was there in the first moments of the Big Bang was transformed into the myriad of galaxies, clusters, quasars, and other astronomical oddities.

Science, by its very nature, attempts to find the best explanation for observed phenomena. But the Big Bang has drawn an impenetrable curtain across the stage of history. For some this is a frustration: “This view of the origin of the universe is thoroughly unsatisfactory . . . [because] the origin of the Big Bang itself is not susceptible to discussion,” fumes the editor of *Nature*.{5} But for others, the very impossibility of going behind the creation points to God in a powerful way. “For since the creation of the world His invisible attributes, His eternal power and divine nature, have been clearly seen, being understood through what has been made, so that they are without excuse” (Rom. 1:20).

“Big Bang Theory Collapses”

The banner headline in *Nature* magazine read “Down with the Big Bang.”{6} Sounding more like a 60s chant about the Establishment, the editorial was, however, very serious. And *Nature* magazine is perhaps the most respected science publication in the world. Why was the editor so exercised about the leading cosmological theory? Because it was “philosophically unacceptable.” “The origin of the Big Bang is not susceptible to discussion,” fumed John Maddox. And besides that “Creationists . . .

have ample justification in the doctrine of the Big Bang." So, for Maddox, a scientific theory that is only rivaled in acceptance by evolution is "thoroughly unsatisfactory" because 1) it says that scientists cannot know everything, and 2) the theory might encourage belief in a creator. But materialists like Maddox are not alone.

"Big Bang Theory Collapses" shouted the title of an article written in a creationist journal. It went on to make such remarks as "The Big Bang theory has received one body blow after another" and "A cruel fate has befallen the grandest theory of all." They reported the "death knell of the cold-dark-matter theory" as if this were the main theory cosmologists had developed. Remarks suggesting results from the COBE satellite "should really make them wish they had gone into some other field" came across as very unprofessional. The description of scientists as "smug in their assurance" about the cosmic background radiation seemed more descriptive of this article itself than the theory it was attempting to criticize.{7}

Young earth creationists find the Big Bang theory a failure primarily because it does not fit an interpretation of Genesis 1 that requires the universe be created less than 50,000 years ago. But what are the scientific problems with the Big Bang?

One continuing problem surrounding theories of the origin of the universe has been "How much matter is there in the universe?" It is generally agreed that there is indirect evidence of far more matter in the universe than we have been able to detect. But what form is this matter in? This so-called "missing mass" may, by some estimates, make up 90% of all the matter in the universe. But where is it? Several theories attempt to answer this question, but at the moment, there are not many ways to test competing theories.

Another continuing problem is finding out what caused the clumpiness of the universe? When we look out into the sea of galaxies that surrounds our own, we find that the swirling pools of stars are not evenly distributed in space but rather segregated into "walls" separated by "voids." It is not yet known what accounts for this foam-like structure, but any theory of galaxy formation needs to provide an answer.

So, while the Big Bang certainly has difficulties, and may be replaced some day, it has also been the basis for many correct predictions about the structure of the universe. Like any scientific theory, the Big Bang is not a static idea but a theory that is always open to new information that may change its basic form, or lead to its rejection, or merely confirm that it is indeed correct. But, especially for Christians, it's ironic that while most scientists have been searching for a naturalistic answer for the origin of the universe, they have instead, ended up with a theory that points strongly to a Creator.

A "Just Right" Universe

Imagine piles of dimes stacked on all of North America as high as the moon. More than you could possibly ever count. Then imagine a billion other continents covered over with more dimes. Now, somewhere in those billion piles, hide one red dime. What are the chances of taking a blind-folded person out into these piles and having them pick up the one red dime on the first try. Not likely? Well, the odds of the universe just happening to have the correct number of protons and electrons is the same as the odds for getting the red dime the first time. And if the universe did not have just the right ratio of these particles, galaxies, stars, and planets could never have formed, let alone people and all the rest of nature.{8}

In the last fifteen years, scientists who study the make up of our solar system, and the stars in our galaxy, have come to the conclusion that unless conditions had been perfectly fine-tuned for us, life

could never have arisen on planet Earth even by evolution. Every time we learn something about the form of the universe, we find new reasons to glorify God, and to thank Him for His creation.

Arno Penzias, who with Robert Wilson was awarded the Nobel Prize for detecting the cosmic background radiation in 1965, much later remarked that: "Astronomy leads us to a unique event, a universe which was created out of nothing, one with the very delicate balance needed to provide exactly the conditions required to permit life, and one which has an underlying (one might say supernatural') plan." {9}

Robert Griffiths summarized it nicely when he said: "If we need an atheist for a debate, I go to the philosophy department. The physics department isn't much use." {10} Obviously those physicists know too much.

When Paul talks about what all people know about God, he points to the natural world as the foremost witness (Rom. 1:20). And, in these last years of the twentieth century, as we discover more and more about the conditions necessary for life, we find everywhere signs that we could not possibly be here by chance. Every detail of the basic structure of nature, even such things as how far away the moon is from the earth, must be fine-tuned to an unprecedented degree for us to live here on earth.

In the design of the universe, in the construction of our solar system, and in the very systems of our own earth, there is immense evidence of planning. The Big Bang theory provides strong evidence of fine tuning so clear that even a dogmatic atheist such as Sir Fred Hoyle was moved to affirm that "a superintellect has monkeyed with physics, as well as with chemistry and biology" {11} to create a world for humans to live in.

Will we give glory to God for His great creation, or will we continue to proclaim that we are merely the chance creations of a random process of undirected evolution? The choice is ours.

What Can Christians Learn?

"The scientist's pursuit of the past ends in the moment of creation. This is an exceedingly strange development, unexpected by all but the theologians. They have always accepted the word of the Bible: In the beginning God created heaven and earth." {12} This has been a difficult lesson for scientists, and many have yet to learn it. But what lessons can Christians learn from the search for Big Bang?

One of the primary lessons is that we need to know what it is a theorist is trying to prove. Often, as one reads the literature, one sees some rather clear statements about why certain possibilities are chosen. As is often the case, Sir Fred Hoyle is a good example: "This possibility [of a steady state universe] seemed attractive, especially when taken in conjunction with the aesthetic objections to the creation of the universe in the remote past." {13} Hoyle is very clearly saying that, because he disliked the idea that the universe might have been "created" sometime in the past, perhaps by God, he would seek to develop another theory that avoids that possibility.

A second lesson is that we must be careful of the role we give to science. A scientist very astutely observed that "We live...in an age obsessed with scientific sanctification and technological authority.' If creationism is judged scientific, America will respect it." {14} His point is that Christians, like everyone else, have fallen prey to the idea that if an idea is judged "scientific" it must be right. The phrase "scientific creationism" is an excellent example of this tendency. But is science really the final judge of truth? For the Christian, and anyone else who believes that not all of

what makes humans both beautiful and unique is measurable, the answer must be “No.” Science is a good companion, but not a good guide. Whenever Christians have wedded themselves to a scientific theory they have suffered through painful divorces when that theory has proved to be an unfaithful guide to the world. The church’s acceptance of an Aristotelian unmoved earth is but one example of the church not recognizing that science can and will change. The Big Bang may be today’s best theory, but, as one of the best scientific authors on the Big Bang has written: “[O]ne ought to take the extrapolations back to the beginning of time with a healthy dose of skepticism. The Big Bang cosmology may yet be superseded.” {15}

Whether we are young earth creationists or materialistic evolutionists, this warning is equally true. The Big Bang is the best answer we have at this moment. It may change next year, and by next century it will almost surely have changed, perhaps dramatically. If science fully supports our view of Scripture now, will we be willing to change it when science changes? The Bible is beautifully clear that “The heavens are telling of the glory of God; And their expanse is declaring the work of His hands” (Psalm 19:1), but we must admit that we are not always clear exactly what the details of the message are. It is God’s glory that we must be clear about.

© 1995 Probe Ministries

Notes

1. *Scientific American*, July 1992, 34.
2. *Nature*, 356:731 (30 April 1992), unsigned opinion.
3. *Los Angeles Times*, 12 January 1933. Quoted in Timothy Ferris, *Coming of Age in the Milky Way* (New York: William Morrow, 1988), 211.
4. Hugh Ross, *The Creator and the Cosmos*, second expanded edition (Colorado Springs, Col.: NavPress, 1995), 19.
5. *Nature*, John Maddox, 340:425 (10 August 1989).
6. *Ibid.*
7. Duane T. Gish, “Big Bang Theory Collapses,” *Impact* #216, June 1991.
8. Hugh Ross, *The Creator and the Cosmos*, chapter 14.
9. *Ibid.*, 122.
10. *Ibid.*, 123.
11. *Ibid.*, 121.
12. Robert Jastrow, *God and the Astronomers* (New York: W.W. Norton, 1978), 115.
13. Hugh Ross, *The Fingerprint of God* (Orange, Calif.: Promise Publishing, 1989), 76.
14. *Discover*, March 1987, 6.
15. *Nature*, Joseph Silk, 322:505 (7 August 1986).

Israel’s History Written in Advance

According to an old story, the powerful Prussian King Frederick the Great had a chaplain who was a Bible-believer, though Frederick himself was a rationalist. One day, Frederick challenged his chaplain, “In a word, give me a good argument for the God of the Bible.” His chaplain, a knowledgeable man, responded, “The Jew, your majesty!” To unpack the chaplain’s concise remark is the purpose of this essay.

Neglected Evidence for the God of the Bible

The history of the Jews is a demonstration of God at work, sometimes miraculously, sometimes providentially, in the affairs of men and nations. The particular significance of the Jews—in contrast to other nations—is that God called Israel His special people and made covenants with them through Abraham, Moses, and David. In addition, the Old Testament predicts what God planned to do with His people. We'll look at three rather wide-ranging prophecies about the nation Israel and see how they have come to pass. These involve first, the covenant curses; second, an acted parable of the marital relations between God and Israel; and finally, a prediction of Israel's return to her own land.

The first area of prophecy involves what God promised to do to the nation of Israel if they did not keep the laws Moses had given them from Mt. Sinai.

When the Israelites were rescued from slavery in Egypt about 1,400 B.C., God made a contract or covenant with Moses to define Israel's relationship to Him as His own special people. This covenant reminded them of what God had already done for them and what He promised to do in the future. God had saved them from slavery, brought them safely through the desert, was about to bring them into possession of the land of Canaan, and would protect them from all disasters if they would be faithful to Him. To test their faithfulness, God gave them an elaborate set of laws—some moral, some civil, some ceremonial—which also set them apart from the nations around them. God showed His reality through the lifestyle that He had designed for Israel. In Deuteronomy 4:5-8 Moses explained it:

See, I have taught you decrees and laws as the LORD my God commanded me, so that you may follow them in the land you are entering to take possession of it. Observe them carefully, for this will show your wisdom and understanding to the nations, who will hear about these decrees and say, 'Surely this great nation is a wise and understanding people.'

Moses goes on to say only Israel has a God who is near when they pray, and only His people have such righteous laws to guide them.

In the 28th chapter of Deuteronomy and the 26th chapter of Leviticus, the provisions of the covenant are set out in the form of blessings and curses—blessings if Israel would obey God's commands and curses if they disobeyed. Through these sanctions, Israel would be reminded of how they were doing in obeying God, and their neighbors would see an objective demonstration of God's judgment in history.

Israel as a History Lesson

Israel's history demonstrates that when they broke the laws God gave them, they experienced exactly the results God predicted would happen if they were unfaithful. No other nation has prophesied its own downfall with such accuracy. Thus history demonstrates how accurately God predicted what would happen to Israel if they disobeyed His laws. And what did God predict? To summarize nearly a hundred verses, Israel's disobedience brought wasted effort in labors; natural disasters such as drought, blight, and locusts to their crops; and disease and death to their animals and themselves.

Their enemies would defeat them in battle and besiege their cities, resulting in plague, famine, cannibalism, and starvation. They would be scattered to foreign countries. There some would die;

others would live in constant fear of both real and imagined disasters, or turn to other gods. They would be sold as slaves. Their numbers would decline greatly, as they suffered from fearful plagues, prolonged disasters, and lingering illnesses. What an amazing list of disasters!

Not only are these curses severe, but the Bible predicts them in some detail. In Deuteronomy, fourteen verses describe the blessings and fifty-four the curses. In Leviticus, eleven verses are blessings and thirty-two are curses. Altogether, over 75 percent of the verses concern curses for disobedience. God- predicted disasters will be a major part of Israel's future.

This proportion is very unusual. Other religious people might concede that their own history had been three-fourths disaster, but who would admit it had been three-fourths disobedient? And this proportion is borne out not only by the history of Israel recorded in the Bible, where one might claim the biblical history writers either molded the narrative to match the prophecy or adjusted the prophecy to match the history. It is also demonstrated in the long history of disaster experienced by the Jews after the Bible was written.

No other national group has experienced such disaster as the Jews. Most nations have not survived long enough to experience so much disaster! Yet Israel has experienced disaster at every point sketched in the long lists of Leviticus and Deuteronomy. They have, unfortunately, been persecuted again and again for over two thousand years. For most of that time they were without a national homeland, having been driven out of Palestine. They have faced decimation and sometimes genocide from nearly every group they have lived among: Greeks, Romans, Christians, Muslims, Nazis, and Communists. Even now the recently re-established nation of Israel faces continual harassment and threats of annihilation from hostile forces all around her.

In the midst of these curses, however, comes a promise that Israel will not be totally destroyed.

Yet in spite of this, when they are in the land of their enemies, I will not reject them or abhor them so as to destroy them completely, breaking my covenant with them. I am the LORD their God (Lev. 26:44).

But as predicted, the Jews still exist as a people today. "Of course!" you say. "If Israel had been destroyed, we would never have heard of them." Not true — unless they had been destroyed before the coming of Jesus. With the rise of Christianity, the Old Testament was preserved by non-Jews and would have survived whether the Jews survived or not. In fact, many of the threats the Jews have faced came in the past two thousand years. Yet Israel, unlike most oppressed nations of antiquity, has survived as a distinct people.

Thus the evidence from Israel's predicted covenant curses points to God's activity in history, keeping His words of both judgment and promise.

Israel's Harlotry

It's easy to miss the book of Hosea in the Old Testament. But it describes an amazing parable that would picture Israel's situation for some two thousand years. The prophet Hosea was divinely directed to live out a powerful parable depicting God's relationship with Israel.

In chapter 1, Hosea is instructed to marry a harlot, Gomer, and have children. He obeys, thereby picturing God's choice of the nation Israel for a personal relationship with Him, even though Abraham was an idolater when God called him and the Israelites were idolaters when they were called out of slavery in Egypt.

In chapter 2, Gomer runs off with her lovers. In the same way, Israel abandoned God for the more sexually exciting worship of the Canaanites, even though God had brought the people safely into the promised land. Finally Gomer winds up in slavery, as Israel would later be taken captive to Assyria and Babylon.

In chapter 3, Hosea is directed to go and buy her back. But she is to have no relations with Hosea or with her lovers. This last event in Hosea's living parable is a prediction of the status of Israel for a long time to come:

For the sons of Israel will remain for many days without king or prince, without sacrifice or sacred pillar, and without ephod or household idols. Afterward the sons of Israel will return and seek the LORD their God and David their king . . . in the last days (Hos. 3:4-5).

Hosea predicted that Israel for "many days" will lack a king, even though God had promised that Israel would never lack a descendant to sit on the throne if the nation was obedient to God.

In fact, the prediction states that Israel will lack even a prince. Since in Hebrew, "prince" means a government official, not the son of the king, Israel would lack both government and king.

Hosea also predicts that sacrifice, pillar, ephod, household idols will be lacking. Two are associated with the sacrificial system and two with idolatry. Sacrifice was an integral part of Israel's covenant and worship. The ephod, a sort of vest, was one of the most important of the ceremonial garments worn by Israel's high priest. Although some pillars had orthodox uses, the most common reference is to those used in Canaanite worship. Israel was to lose both true worship and the false religion which had been such a problem since it entered Canaan.

This has happened exactly! Since A.D. 44 (the death of Herod Agrippa I), Israel has had no native king to this day. For 1,878 years, from the fall of Jerusalem in A.D. 70 to the formation of the modern nation in 1948, Israel had no government of its own either. Thus the predictions regarding Israel's governmental status were fulfilled in detail.

With the loss of the Temple and the priestly garments came the end of the sacrificial system. Israel has not had a high priest to this day. So Hosea's prophecy about the loss of sacrificial worship has also proved true.

From A.D. 70 to 1948, the "sons of Israel" lacked all six items predicted in Hosea 3:4. Now they have a government, but five are still lacking. Hosea 3:4 has been literally fulfilled.

A Regathering of Israel?

In our own generation we may also be seeing the fulfillment of Hosea 3:5. Many Jews have physically returned to Palestine in this century. If their seeking of "God and David their king" is understood as a turning to Jesus as the true Messiah, we can point to the growing Messianic Jewish movement which has flourished in the past two decades. But we are still too close to these events to be sure.

Whether or not Hosea 3:5 refers to Israel's return to the promised land, a number of other Old Testament passages do. Let's look at one such passage, Isaiah 11:11-16. Verse 11 reads:

Then it will happen on that day that the LORD will again recover the second time with

His hand the remnant of His people, who will remain, from Assyria, Egypt, Pathros, Cush, Elam, Shinar, Hamath, and from the islands of the sea.

Sometime after Isaiah wrote these words, Israel was to be regathered to its homeland. The reference to a "second time" as well as the places from which they would return suggests that this is not the return from the Babylonian exile.

According to the whole passage, several significant features will characterize this return. First, verse 13 suggests that Israel will no longer be two nations as it was after Solomon's time, but a single unified country. Second, Israel will fight the surrounding nations (the Philistines, the Edomites, The Moabites, the Ammonites, and the Egyptians) as a part of this return (vv. 14-15). Third, something spectacular will happen to dry up the "tongue of the sea of Egypt" and the "River," presumably the Euphrates (v.15). Fourth, the places from which the return will take place are explicitly named, except for the general phrase "islands [or 'coastlands'] of the sea" (v.11).

Of these four items, three have already occurred in the return of Jews to Israel in our own generation; only the third has not yet taken place.

The return of Jews to Palestine and the formation of a state of their own is amazing in itself, given that just a century ago the territory was controlled by the Muslim Turks who hated the Jews. Yet a world Zionist movement was formed; the land came under the control of Britain at the end of World War I; Britain allowed the Jews to have a homeland; the Nazi holocaust drove Jews to Palestine who otherwise would have stayed in Europe; the United Nations agreed to partition Palestine into an Arab and a Jewish state; and the Jews were able to defeat a coalition of Arab states bent on their destruction.

The Jewish state formed in 1948 in Palestine included persons descended from both the northern and southern tribes. The enmity of the divided kingdoms that existed at Isaiah's time has, in fact, been healed.

Israel has already fought with all the surrounding nations, in 1948, 1956, 1967, and 1973. Though the Philistines, Edomites, and such are no longer identifiable as separate peoples, the Arab nations occupying their lands (and most likely including some of their descendants) are Egypt, Palestine, Jordan, and Syria. These were the nations Israel fought and dispossessed to regain its territory.

Once again, the prophecies of the Bible about the Jews show the God of the Bible to be true.

In this essay we have examined three significant passages in the Bible that predict the history of Israel. We have shown that numerous prophecies from the Old Testament regarding Israel have been fulfilled. We have made the following observations:

1. The Jews would have fierce and repeated persecution and disaster. This has been characteristic of the nation for two thousand years.
2. In spite of such disasters, the Jews would continue to exist as a recognizable people group, in spite of treatment which has destroyed other such people groups.
3. Israel would be without a king for a long period of time. Israel has been without a king for nearly two thousand years, though a Davidic royal dynasty was an important part of the Old Testament revelation.
4. Israel would lack government officials for a long time. Now, after almost 1,850 years, the Jews

have them again.

5. Israel would lack sacrifice and ephod, both associated with God's commands at Mt. Sinai. This has been true for nearly two thousand years and is quite surprising in view of how important sacrifice and the priesthood were in the Old Testament.

6. Israel would lack pillar and idols. This seems obvious today, because the Jews so adamantly worship one God, but the situation was rather different when Hosea made the prediction about 800 B.C.

7. Israel would return to its land as a single united nation. A century ago, such an event would have seemed almost impossible. Palestine was controlled by a Muslim government which had no interest in providing a homeland, much less an independent state, for the Jews. Yet it has come to pass!

8. The countries explicitly named in Isaiah 11 have been nearly emptied of Jews in this return to Palestine.

9. The Jews have fought successfully with the surrounding nations in establishing and maintaining the new state of Israel.

Sadly, some elements of the Christian church have ignored or participated in the persecution of God's special covenantal people, the Jews. Yet Romans 9-11 exhorts Christians never to rejoice in the misfortunes of the Jews. To do so brings shame to the church and to our Lord.

As we look at God's hand in the history of Israel it may seem fierce to us, for at least two reasons: first, we regularly ignore the biblical teaching that there is a life beyond this one, and that in the last judgment with its rewards and punishments everything will be made right, and no one will get less than he or she deserves; and second we regularly minimize our own sin, blaming our actions on circumstances and environment. Whatever may be the faults of our parents, teachers, or society, God will apportion to them (and us!) exactly what we deserve—unless we accept the offer of God's forgiveness through believing on Christ as our personal Savior.

Are all the predictions we have listed trivial? Did they just happen by chance? Or is the God of the Bible indeed the One who controls history and who announces the end from the beginning? The decision is yours.

© 1994 Probe Ministries.

Animal Liberation: Do the Beasts Really Benefit?

Are You a Speciesist?

"When it comes to feelings, a rat is a pig is a dog is a boy."(1) That is the moral bottom line for Ingrid Newkirk, founder and director of People for the Ethical Treatment of Animals (or PETA). I intend to discuss in these pages the contentious issue of animal rights; yet for Ms. Newkirk the issue

is settled: a boy has no more (and no less) rights than a rat.

Almost every week there is a story in the media about a research project stopped by an animal rights group, a protest against women wearing furs, a laboratory bombed by a militant animal rights activist, or a media figure protesting the conditions of animals on factory farms. What are all these protests about, and how should a Bible-believing Christian approach these issues? That is our subject in this pamphlet.

In 1975 Australian Peter Singer wrote a book whose title was to become the banner of a new movement: *Animal Liberation*. This book laid the foundation for most of the discussion since 1975, but it also set the tone of that discussion as specifically anti-Christian. Singer is quite clear about his distaste for Christianity: "It can no longer be maintained by anyone but a religious fanatic that man is the special darling of the universe, or that animals were created to provide us with food, or that we have divine authority over them, and divine permission to kill them."(2)

By using the echoes of specific passages from the Bible and claiming that only a "religious fanatic" could still believe them, Singer is making clear not only that his view is not based on anything resembling a biblical worldview, but that, in fact, the Bible is the root of much of the problem.

It was Peter Singer's book that also made popular the rather ponderous term "speciesism." He writes of this as, "a prejudice or attitude of bias in favor of the interests of members of one's own species and against those of members of other species."(3) Singer says speciesism is just as bad as sexism or racism.

So what does "speciesism" really mean? If you think it's acceptable to test a medicine on laboratory animals before giving that medicine to a sick child or a cancer patient fighting for life, then you, too, are a speciesist. If you believe it is all right to eat meat or fish or shrimp, you are clearly a speciesist, just as guilty as someone who thinks that slavery is an acceptable way to treat another human being, according to Singer and others in the animal rights movement.

Why should Christians even bother to think about issues like animal rights when people are not even treated as well as animals in places like Bosnia or Iraq or many inner cities? Christians need to be actively involved in speaking out and acting clearly on this issue because the very definitions of humanity, of human dignity, and human responsibility are being rapidly reconstructed and any hint of man as created in the image of God or of a God who creates and gives value is seen as "speciesist" and dangerous.

Are We the Creation's Keeper?

The wolf will live with the lamb, the leopard will lie down with the goat, the calf and the lion and the yearling together; and a little child will lead them.... They will neither harm nor destroy on all my holy mountain, for the earth will be full of the knowledge of the LORD as the waters cover the sea. That's how God describes His coming kingdom in Isaiah 11.

Clearly God is concerned for all the animals He has created, and they will share a future, a non-violent future, with us. But what of today? How does God intend us to treat animals now?

The animal liberation movement opposes favoring humans over other animals. "Speciesism," they say, is treating humans as if they were more valuable than other animals. What does the Bible say?

God, in Genesis, tells us we have a responsibility as stewards to care for His creation. We are God's representatives on earth, but we are not Lords of the earth. In Proverbs Solomon says that "a

righteous man cares for the needs of his animal” (Prov. 12:10). It is a mark of righteousness that we give animals the care they need. But at the same time we must understand that both we and the rest of creation have value because a sovereign God created us and gave us value because He cares about us. Our value comes from God and not ourselves.

Our concern for animals does not mean we should give up the Bible’s insistence that we are unique in all of God’s creation because we bear His image, or that we should immediately eliminate all use of animals for any purpose and live resolutely vegetarian lives. What place, then, should animals have? In Matthew 12:11-12 Jesus berates the Pharisees’ willingness to help an animal on the Sabbath but not a human.

If any of you has a sheep and it falls into a pit on the Sabbath, will you not take hold of it and lift it out? How much more valuable is a man than a sheep! Therefore it is lawful to do good on the Sabbath.

Jesus’ point is clear: we should have compassion on animals in trouble, but have even more compassion for human beings, because they are “much more valuable” than sheep! But Christians sometimes show little compassion for either.

As Christians we have often not lived up to our responsibilities to animals as creations of God. Frequently we have acted as if all animals are here **only** for our use, to do with whatever we wanted. We have taken God’s statement in Genesis 1:28, “Be fruitful and multiply, and fill the earth, and subdue it; and rule over the fish of the sea and over the birds of the sky, and over every living thing that moves on the earth,” as giving us the right of despots, not the responsibilities of stewards. As Christians we have not set an example for the world of valuing the rest of creation because it belongs to God, and we have often abused the creation with no sense of damaging a creation that is not our own.

Next, we will look at what happens when people who deny God try to find an adequate basis on which to build value for themselves or animals, and how far into dangerous territory this can lead them.

From Animal Rights to Abortion: A Small Step from Man to Animal

“Six million Jews died in concentration camps, but six billion broiler chickens will die this year in slaughterhouses.”(4) This is how Ms. Newkirk of People for the Ethical Treatment of Animals sums up her outrage at the killing of animals. What happens when well-meaning people try to give animals value without God? Ms. Newkirk may think she has improved our view of chickens by comparing them to Jews who were killed in concentration camps. But actually she only trivializes one of the most brutish examples of evil in our century. In her view numbers are everything; if more chickens than people were killed, then poultry farming is worse than Nazi Germany.

What is the foundation of Ms. Newkirk’s sense of value? She speaks of Peter Singer’s book, *Animal Liberation*, as “the Bible of the animal-rights movement.” Singer develops a purely utilitarian view of the greatest good for the greatest number of beings that can experience pain. For Singer there can be no God over creation. He almost sarcastically says: “The Bible tells us that God made man in His own image. We may regard this as man making God in his own image.”(5) So Singer turns to evolution to consider how we are related to other creatures.

Singer believes the evolutionary history of humans and other animals, particularly mammals, makes

our central nervous system and theirs very similar. His conclusion? That many animals must feel pain like we do. Since we have no basis, in his view, to see humans as any different from other animals, if it is bad to do something to another pain-feeling human being, then it is wrong to do it to any other pain-feeling animal. The logic is simple, but it leads to just the kinds of confusion that cannot separate Jews dying in gas ovens from chickens dying in processing plants.

Where does a view like this ultimately lead? Singer willingly points the way in its application to newborn children. Writing for physicians in the journal *Pediatrics*, he shows how his ethic applies to humans,

Once the religious mumbo jumbo surrounding the term “human” has been stripped away...we will not regard as sacrosanct the life of each and every member of our species, no matter how limited its capacity for intelligent or even conscious life may be.(6)

With chilling clarity, Singer says that once we come to his position of valuing a life only if it meets certain requirements, it is much easier to take the life, not only of the unborn, but of those who have a “low quality of life.” He argues for the right to take the lives of new-born children who do not have certain capacities for “intelligent or even conscious life.” Singer concludes:

If we can put aside the obsolete and erroneous notion of the sanctity of all human life,...it will be possible to approach these difficult decisions of life and death with the ethical sensitivity that each case demands, rather than with a blindness to individual differences.(7)

In other words, if a baby does not measure up to Singer’s standards, it is not kept alive. The values of animal rights, applied to people, lead coldly to abortion and euthanasia.

While there are many areas where Christians might disagree with the animal rights movement, one might well ask, Have we Christians lived up to the responsibilities God gave us towards animals?

Are Farm Animals Just Machines?

After the Flood, God tells Noah: “Everything that lives and moves will be food for you. Just as I gave you the green plants, I now give you everything.” God also makes a covenant, not only with Noah, but “with every living creature that was with you—the birds, the livestock and all the wild animals, all those that came out of the ark with you—every living creature on earth” (Gen. 9:3, 10).

So, while there is no question that God has given us permission to eat meat, we must also remember that we are moving towards a kingdom in which, as we saw in Isaiah 11, all of creation will live at peace with one another. So what should we be doing now, as we await perfection?

We have already looked at problems with the animal rights position. On the other hand, there are some uses of animals that should cause Christians significant concern.

One of the great changes in Western economies has been the change from the small family farm to the huge “agribusiness.” With this change has come not only increased production and lower food prices, but the treatment of animals as machines and land as a commodity. One area where animal rights activists have done commendable work is in showing the appalling conditions under which

most farm animals now live.

Chickens live in battery cages that, on average, allow them only 36 to 48 square inches. This means that two chickens live in less space than a page of paper. Generally four or five chickens share a cage, so that they must almost physically live on top of each other. Does this sound like what Solomon means when he said that “a righteous man cares for the needs of his animal”?

As one other example, pigs too are treated as machines to produce food. The United States Department of Agriculture tells farmers: “If the sow is considered a pig manufacturing unit, then improved management...will result in more pigs weaned per sow per year.” This is surely not man acting as a good steward of created beings that belong to God. The decline of any belief in God has been accompanied by a decline in any attempt to treat animals on farms as anything other than “manufacturing units” to be treated in whatever way will cause them to produce the most.

If we truly believe what the Psalmist says, that “The earth is the LORD’s and all it contains” (Ps. 24:1), then we must not accept how those who do not believe this have acted. While we are directly given permission in Scripture to eat meat, it might well make a great difference in how animals are treated if Christians choose not to buy from those meat producers who do not tend to their animals as if they really did belong to God.

In the same way that if we believe in the sanctity of human life we must stand against abortion, so too, if we believe that “the earth is the LORD’s” then we must consider whether we can support those who do not treat animals as animals but only as “manufacturing units.”

I want to conclude this discussion with some suggestions about how we can both uphold the uniqueness of humans and stand against the mistreatment of God’s creation.

Recovering the Creation as Compassionate Stewards

I have pointed out the disturbing consequences of abandoning the biblical view that humans are created in the image of God. As theologian and social critic Richard John Neuhaus perceptively puts it: “The campaign against ‘speciesism’ is a campaign against the singularity of human dignity and, therefore, of human responsibility.... The hope for a more humane world, including the more humane treatment of animals, is premised upon what [animal rights activists] deny.”(8)

If we are merely animals, we have no reason to be less species-ist than other animals. Dogs show no concern for the welfare of cats. If we are moral in a way that other animals cannot be, then we are both different from other animals and responsible to God for that difference. Because we have a spiritual aspect that no other animal shares, what the Bible calls the “image of God,” we also have a responsibility to care for what God has entrusted to us. How should we live out that responsibility?

First, we must live in obedience to Jesus Christ. It was Jesus who reminded us that God clothes even the grass as an example of His care for all His creation. We need to demonstrate in our actions and in how we teach our children that we, too, consider all of God’s creation as something that shows His glory.

Secondly, we must consider what our own role is as God’s stewards. Just as not all are called to give their lives in vocational missionary service, so, too, not all are called to be full-time activists for better treatment of God’s creation. But we are all called to be missionaries, and we are all called to be stewards and not spoilers of the natural world.

Medical research and experiments on animals provide an excellent place for Christians to be

proactive. Animals must be humanely treated, but at the same time we have much to learn about the treatment of cancer, diseases of the nervous system, and the management of serious injuries from animal experiments. If a cure for AIDS or any one of a number of genetic diseases is to be found, it should first be tested on animals. However, just as on farms, we have a duty as stewards to see that animals are treated with the respect due them as part of God's creation. Like Jesus, who regarded helping the sheep out of the well as more important than keeping the Sabbath, so too we must speak out strongly for the humane treatment of animals whenever they are used by humans.

We have been given the right and the responsibility to rule over the earth by its Owner, God. Once Christians led in this area, starting the whole movement for the humane treatment of animals. Now we have little to say to our culture about real stewardship. We must read our Bibles carefully and prayerfully consider how God would have us help recover His creation. Animals may not have rights, but we as Christians clearly have responsibilities to them.

As Christians we must stand for man as created in the image of God and His creation as a reflection of His glory. Let us say with the Psalmist: "How many are your works, O LORD! In wisdom you made them all; the earth is full of your creatures" (Ps. 104:24).

Notes

1. Ingrid Newkirk cited in Charles Oliver, "Liberation Zoology," *Reason* (June 1990), p. 22.
2. Peter Singer, *Animal Liberation* (New York: Avon Books, 1975), p. 215.
3. Peter Singer, *Animal Liberation*, new revised ed. (New York: Avon Books, 1990) p. 6.
4. "Liberation Zoology," p. 26.
5. *Animal Liberation*, new rev. ed., p. 187.
6. Peter Singer, "Sanctity of Life or Quality of Life," *Pediatrics* (July 1983), pp. 128-29. (Cited in Francis Schaeffer, *The Great Evangelical Disaster*.)
7. Ibid.
8. Richard John Neuhaus, "Animal Lib," *Christianity Today*, 18 June 1990, p. 20.

See Also Probe Answers Our E-Mail:

- What's Up with Animal Rights?