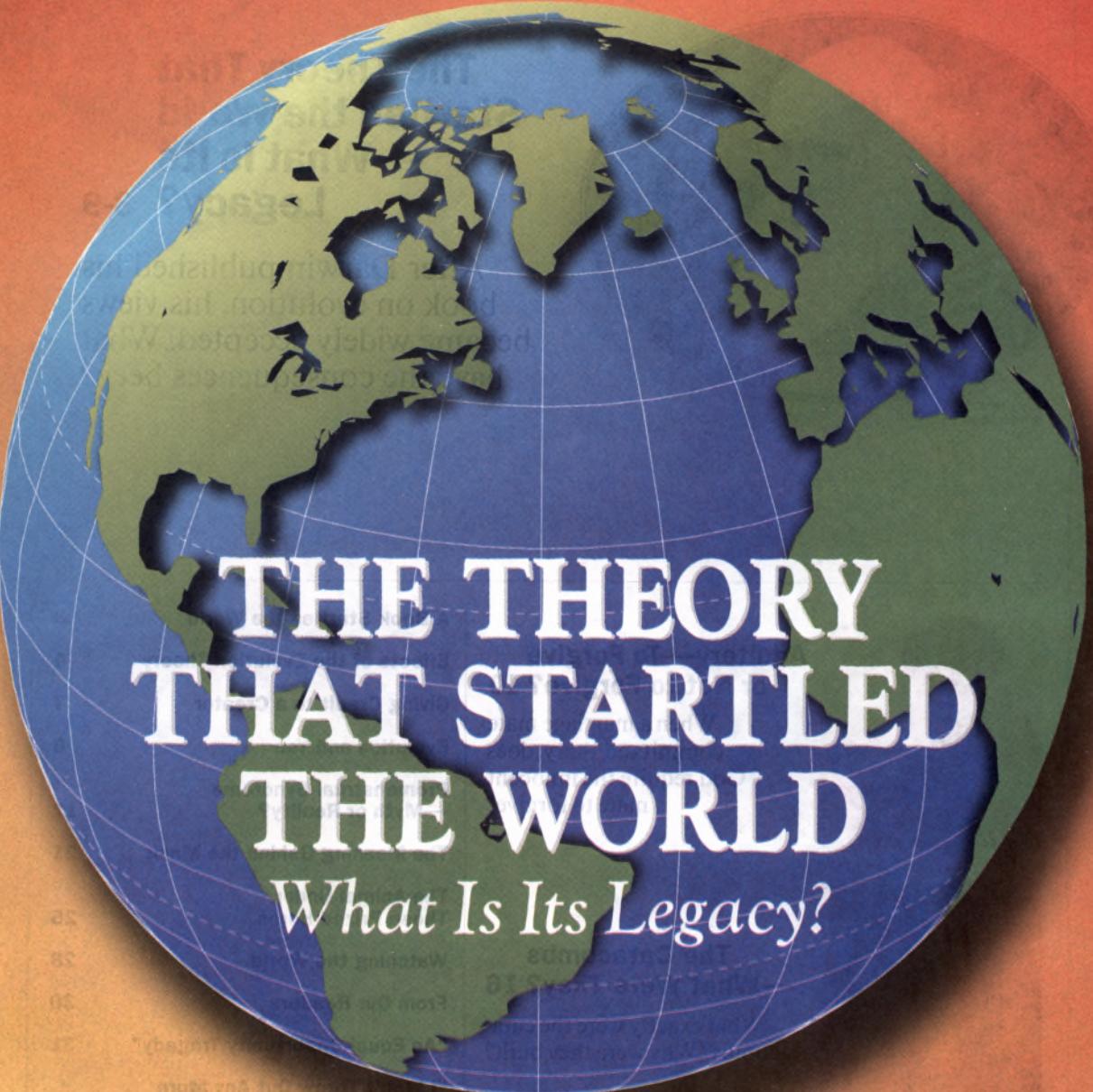


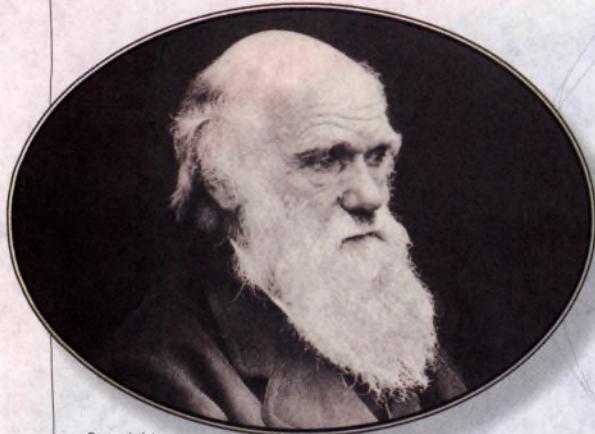
Awake!

August 8, 1995



THE THEORY THAT STARTLED THE WORLD

What Is Its Legacy?



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The Theory That Startled the World —What Is Its Legacy? 3-9

After Darwin published his book on evolution, his views became widely accepted. What have the consequences been?



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When a marriage mate commits adultery, does God require the innocent mate to forgive?



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A BOOK Startles the World

The book: *The Origin of Species.* "Next to the Bible," said anthropologist Ashley Montagu, "no work has been quite as influential."

The author: Charles Darwin, who at the time was called by some "the most dangerous man in England."

The subject: The theory of evolution. Words and phrases such as "natural selection," "survival of the fittest," and "evolution" are now well established. But has the theory affected more than your language?

WITH its release in 1859, *The Origin of Species*, by Charles Darwin, ignited a furious debate in scientific and religious circles.* The debate spilled over into economic and social spheres and even continues today, some 136 years later.

In *A Story Outline of Evolution*, C. W. Grimes wrote regarding Darwin's *Origin of Species*: "No other book ever printed has aroused so much controversy among thinking people. No other subject within living memory has so challenged traditional beliefs, revolutionized the world of Nature, and moulded, congealed, and crystallized human thought as has that of Evolution."

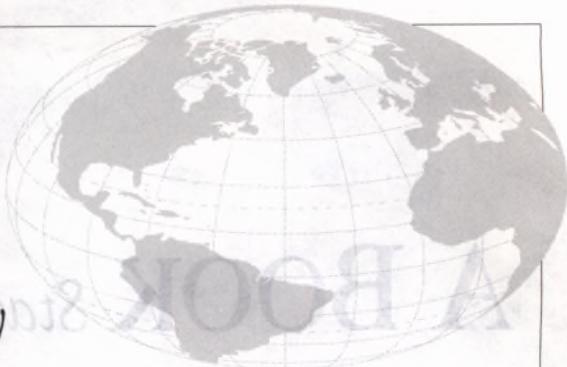
* The complete title of Darwin's book is *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life.*

True, Darwin did not originate the theory of evolution; the concept can be traced back to ancient Greece. There were also several 18th-century forerunners of Darwin who paved the way for wide acceptance of *The Origin of Species*.

It was Darwin's book, however, that became the basis of modern evolutionary thought. It startled, indeed shocked, the world, for his evolution theory sparked more than a revolution in biology. It struck like a storm at the very foundations of society—religion, science, politics, economics, social life, history, and view of the future.

How has the theory affected the world for more than a century now? How has it affected your life? Just what is its legacy? The following articles will examine these questions.

EFFECTS of the Evolution Theory



IN THE early 19th century, religion and science enjoyed a fairly amicable relationship. Just two years before *The Origin of Species* was published, biologist and Harvard professor Louis Agassiz wrote that the living world shows "premeditation, wisdom, greatness" and that a major purpose of natural history was to analyze "the thoughts of the Creator of the Universe."

Agassiz' viewpoint was not uncommon. Many people viewed science and religion as compatible. Discoveries of science were often perceived as evidence of a Grand Creator. But a subtle rift was developing between religion and science.

Skepticism Takes Root

Charles Lyell's *Principles of Geology*, the first volume of which appeared in 1830, cast doubt on the Bible's creation account. Lyell claimed that the creation could not possibly have occurred in six literal days. Physicist Fred Hoyle wrote: "Lyell's books were

largely responsible for convincing the world at large that the Bible could be wrong, at any rate in some respects, a hitherto unthinkable thought."*

A foundation was thus laid for skepticism. In the minds of many, science and the Bible could no longer be harmonized. Faced with a choice, many opted for science. "Lyell's work had thrown the early chapters of the Old Testament into doubt," Fred Hoyle wrote, "and Darwin's book was there to replace it."

The Origin of Species came at an opportune time for those who did not want to accept the Bible as the Word of God. A romance had already blossomed between man and science. An infatuated public was wooed by the promises and accomplishments of science. Like a gallant suitor, science show-

* Actually, the Bible does not teach that the earth was created in six literal days (144 hours). For more information on this misunderstanding, see *Life—How Did It Get Here? By Evolution or by Creation?*, pages 25-37, published by the Watchtower Bible and Tract Society of New York, Inc.

Awake!

Why Awake! Is Published *Awake!* is for the enlightenment of the entire family. It shows how to cope with today's problems. It reports the news, tells about people in many lands, examines religion and science. But it does more. It probes beneath the surface and points to the real meaning behind current events, yet it always stays politically neutral and does not exalt one race above another. Most important, this magazine builds confidence in the Creator's promise of a peaceful and secure new world before the generation that saw the events of 1914 passes away.

Would you welcome more information? Write Watch Tower at the appropriate address on page 5. Publication of *Awake!* is part of a worldwide Bible educational work supported by voluntary donations.

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ered man with innovative gifts—the telescope, the microscope, and the steam engine and later, electricity, the telephone, and the automobile. Technology had already fostered an industrial revolution that was providing the common man with unprecedented material advantages.

In contrast, religion was perceived as a roadblock to progress. Some felt that it held people in a stupor, unable to keep up with the rapid advances of science. Atheists began to proclaim their views loudly and boldly. Indeed, as Richard Dawkins wrote, "Darwin made it possible to be an intellectually fulfilled atheist." Science was becoming mankind's new hope for salvation.

At first, religious leaders opposed the theory of evolution. But as the decades passed, the clergy in general yielded to popular opinion, accepting a blend of evolution and creation. A 1938 *New York Times* headline announced: "Church of England Report Upholds Evolutionary Idea of the Creation." The report, by a commission under the Archbishop of York, stated: "No objection to a theory of evolution can be drawn from the two creation narratives in Genesis I and II, since it is generally agreed among educated Christians that these are mythological in origin and that their value for us is symbolic rather than historical." The archbishop's commission concluded: "You can think what you like and still be Christian."

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For many, such attempts to reconcile the Bible with evolution only diluted the Bible's credibility. It resulted in widespread skepticism of the Bible, and this still exists today, even among some religious leaders. Typical are the comments of an Episcopal bishop in Canada who asserted that the Bible was written in a prescientific age and therefore reflected prejudice and ignorance. He said that the Bible contained "historic errors" and "blatant exaggerations" regarding Jesus' birth and resurrection.

Thus, many, including members of the clergy, have been quick to discredit the Bible. But where has such skepticism led? What alternative hope has been offered? With weakened faith in the Bible, some have looked to philosophy and politics.

Effects on Philosophy and Politics

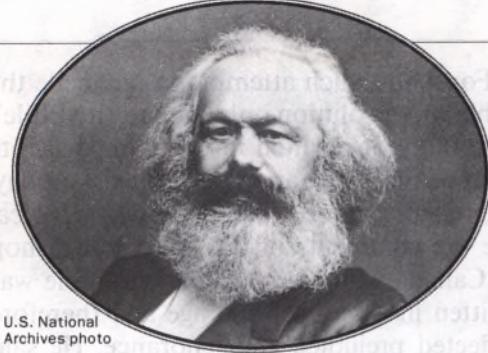
The Origin of Species offered a fresh outlook on human behavior. Why does one nation succeed in conquering another nation? Why does one race prevail over another race? *The Origin of Species*, with its emphasis on natural selection and survival of the fittest, gave explanations that stirred the leading philosophers of the 19th century.

Friedrich Nietzsche (1844-1900) and Karl Marx (1818-1883) were philosophers who had a profound effect on politics. Both were fascinated by evolution. "Darwin's book is important," said Marx, "and serves me as a natural scientific basis for the class struggle

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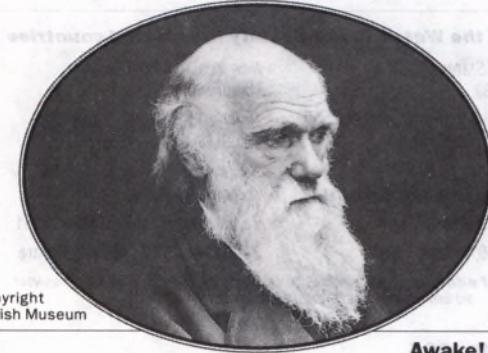
'Darwin's book serves me as a scientific basis for the class struggle in history.'—Karl Marx

in history." Historian Will Durant called Nietzsche a "child of Darwin." The book *Philosophy—An Outline-History* summarized one of Nietzsche's beliefs: "The strong, brave, domineering, proud, fit best the society that is to be."

Darwin believed—and wrote in a letter to a friend—that in the future "an endless

'Lower races will have been eliminated by higher civilized races.'

—Charles Darwin



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number of the lower races will have been eliminated by the higher civilized races throughout the world." He used as a precedent the European conquest of others and chalked this up to "the struggle for existence."

The powerful were quick to latch on to such statements. H. G. Wells wrote in *The Outline of History*: "Prevalent peoples at the close of the nineteenth century believed that they prevailed by virtue of the Struggle for Existence, in which the strong and cunning get the better of the weak and confiding. And they believed further that they had to be strong, energetic, ruthless, 'practical,' egotistical."

Thus, "survival of the fittest" took on philosophical, social, and political overtones, often to an absurd extent. "To some war became 'a biological necessity,'" said the book *Milestones of History*. And this book noted that during the next century, "Darwinian ideas formed an integral part of Hitler's doctrine of racial superiority."

Of course, neither Darwin, Marx, nor Nietzsche lived to see how their ideas would be applied—or misapplied. Indeed, they expected that the struggle for existence would improve man's lot in life. Darwin wrote in *The Origin of Species* that "all corporeal and mental endowments will tend to progress towards perfection." Twentieth-century priest and biologist Pierre Teilhard de Chardin agreed with this, theorizing that eventually there would occur an 'evolution of the minds of the entire human race; everyone would harmoniously work toward one goal.'

Degradation, Not Improvement

Do you see such improvement occurring? The book *Clinging to a Myth* commented on De Chardin's optimism: "De Chardin must have been quite oblivious of the history of human bloodshed and of racist systems such

as apartheid in South Africa. He sounds like a man who is not living in this world." Rather than progress toward unity, humanity in this century has experienced racial and national division on an unprecedented scale.

The hope held out in *The Origin of Species*, that man would progress toward perfection, or at least improvement, is very much unfulfilled. And that hope keeps receding with time, for since the general acceptance of evolution, the human family all too often has descended into barbarism. Consider: More than 100 million people have been killed in the wars of this century, some 50 million in World War II alone. Also consider the re-

cent ethnic slaughter in such places as Rwanda and the former Yugoslavia.

Is this to say that there were no wars and brutalities in past centuries? No, there certainly were. But the acceptance of the theory of evolution, this brutal struggle-for-existence mind-set, this survival-of-the-fittest idea, has not served to improve man's lot. So while evolution cannot be blamed for all of man's ills, it has helped push the human family into ever greater hatred, crime, violence, immorality, and degradation. Since it is widely accepted that humans descended from beasts, it is not surprising that more and more people act like beasts.

Giving Credit to a Creator

"FLOWERS are for beauty, and fruits for use. But many of the fruits are beautiful. Our heavenly Father likes to make beauty go along with what is useful." This quote is not from a religious textbook. It is from a science book entitled *The Child's Book of Nature*. Written in 1887, its author, Worthington Hooker, M.D., intended the book to be used in families and schools for teaching children.

The style of writing in this book gives evidence of the author's belief in and awe of a Creator. Dr. Hooker further writes: "The variety of pleasant tastes in the fruits of the earth is very great, as you will see if you will

think of as many of them as you can. What an evidence is this of God's abundant goodness! He does not gratify us merely in a few things, but in many things. The pleasant things of this world are almost endless in their variety. How strange it is that any one can know all this, and live on day after day without any gratitude to his Maker!"

When *The Child's Book of Nature* was first published, Darwin's theories had been widely circulated for almost three decades. Yet, Dr. Hooker's book shows that even in the late 19th century, a textbook could openly credit God, rather than blind chance, for the wonders of nature.—Compare Isaiah 40:26.



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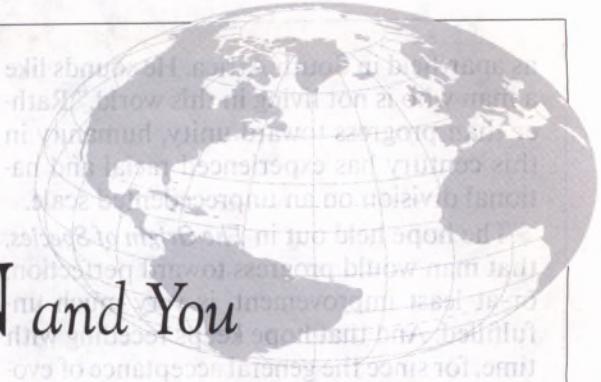
EVOLUTION and You

DURING the 19th century, *The Origin of Species* convinced masses of people that man had survived without divine intervention and would continue to do so. Enthralled by scientific advancements, many felt that God was no longer necessary and that science could save the human race. The book *Age of Progress* noted that the 19th century "was animated by a conviction that rationally applied human effort could transform the world."

Toward the end of that century, however, even Charles Darwin wavered in his optimism. According to one historian, Darwin feared that the theory of evolution "had killed God and that the consequences for the future of mankind were incalculable." Alfred Russel Wallace, a younger contemporary of Darwin, recalled: "During my last conversation with Darwin [shortly before Darwin's death] he expressed a very gloomy view on the future of mankind."

What Has Human Effort Produced?

The history of the 20th century has since revealed that much gloom was indeed



ahead. The technological achievements since Darwin's time merely camouflaged what has proved to be by far the darkest, most violent age in all human history. We live amid what historian H. G. Wells described as "a real demoralization."

Since Wells made that statement (some 75 years ago), the world has continued to experience more demoralization. Nothing that scientists, economists, social agencies, human governments, or this world's religions have tried has remedied the situation or even stemmed the tide. Conditions continue to deteriorate.

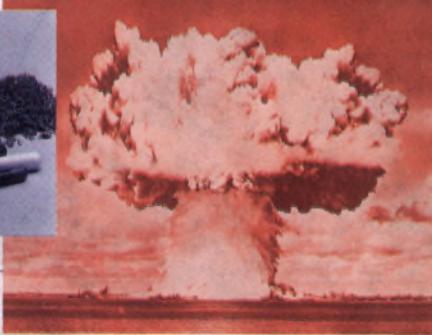
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Starving child: WHO photo by P. Almásy



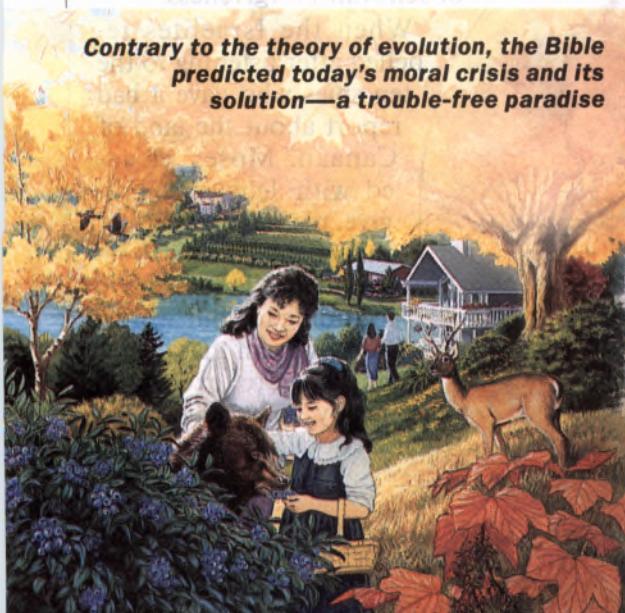
Right: U.S. National Archives photo



In reality, therefore, it must be asked: What has human effort produced? Have science and technology brought about a better world? "When we open the daily paper and look at what's going on," said biologist Ruth Hubbard, "the problems are not scientific. They are problems of social organization, of things having gotten too big, of people going after profit and ignoring human needs." Hubbard added: "I don't really think that in a rational allotment of resources, science is likely to solve any or many of the problems that most trouble people in the world."

Really, of what benefit is it when man can travel to the moon but cannot solve the basic problems of the human family? Did the invention of increasingly destructive weapons, such as the atom bomb, bring an end to wars and ethnic violence? Have the accomplishments of science significantly diminished crime, family breakup, sexually transmitted diseases, immorality, illegitimate births, corruption in high places, poverty, hunger, homelessness, drug abuse, pollution? No, science has, if anything, made some of these things worse. Abandoning God and substituting evolution and science, the human family has not helped its situation but has hurt it.

Contrary to the theory of evolution, the Bible predicted today's moral crisis and its solution—a trouble-free paradise



Millions have been helped to take another look at the evidence for a God of creation, using the book *Life—How Did It Get Here? By Evolution or by Creation?** To date, some 30 million copies have been printed in 27 languages. Also, *Awake!* magazine continues to publish information regarding what the facts of true science show as to the validity of the theory of evolution.

* Published by the Watchtower Bible and Tract Society of New York, Inc.

Not surprisingly, many are having second thoughts about the theory that man evolved from apelike creatures, as opposed to there being a God who created the first humans. A Gallup poll in the United States revealed that only 9 percent of Americans hold to the belief that man evolved with no divine intervention; 47 percent accept the idea that God created man in his present form.

What the Bible Predicted

While *The Origin of Species* predicted that man would progress toward perfection, the Bible foretold that the world would be rocked by a moral crisis. (Matthew 24:3-12; 2 Timothy 3:1-5) The Bible also foretold that this crisis would reach a climax, after which faithful mankind's lot would be a paradise, free from all of today's problems.—Psalm 37:10, 11, 29; Isaiah 11:6-9; 35:1-7; Revelation 21:4, 5.

This hope has caused many to examine the Bible with keen interest. Could it really be that the purpose of life is more than a struggle for existence? Could the Bible hold the key not only to man's past but also to his future, including your future? It would be very much worth your while to investigate what the Bible really teaches about God and his purpose for this earth and its people. If you would like more information, Jehovah's Witnesses would be happy to assist you.

Adultery

To Forgive or Not to Forgive?

FORGIVE whatever you have against anyone; in order that your Father who is in the heavens may also forgive you your trespasses.” (Mark 11:25) Those words of Jesus raise some challenging questions in the case of a marriage shaken by adultery: Must the innocent Christian forgive her mate and keep the marriage intact?* If she decides to divorce, is she jeopardizing her own standing with God? Let us see how the Bible helps to answer these questions.

Must You Always Forgive?

Do Jesus’ words, “forgive whatever you have against anyone,” mean that in all cases—including when a mate commits adultery—a Christian is *obliged* to forgive? Jesus’ statement must be understood in the light of other comments he made about forgiveness.

For example, we learn an important principle about forgiveness from Jesus’ words recorded at Luke 17:3, 4: “If your brother commits a sin give him a rebuke, and if he repents forgive him. Even if he sins seven times a day against you and he comes back to you seven times, saying, ‘I repent,’ you must

forgive him.” Certainly in cases of serious sin, the offended one is encouraged to try to forgive if there is sincere repentance. Jehovah himself views matters this way; to receive divine forgiveness, we must be sincerely repentant.—Luke 3:3; Acts 2:38; 8:22.

This also shows, however, that if an adulterous mate is *unrepentant*, refusing to accept responsibility for his sin, it is understandable that the innocent spouse may choose not to forgive.—Compare 1 John 1:8, 9.

Forgiveness—What About the Consequences?

What, though, if the adulterer is repentant? When there is repentance, there is a basis for forgiveness. But does forgiveness mean that the wrongdoer is exempted from all consequences of his wrong course? Consider some examples of Jehovah’s forgiveness.

When the Israelites rebelled after listening to the ten spies who gave a bad report about the land of Canaan, Moses pleaded with Jehovah: “Forgive, please, the error of this people.” Jehovah responded: “I do forgive according to your word.” Did this mean that the offenders were exempted from any consequences of their actions? Jehovah con-

* Although we will herein refer to the innocent mate as “she,” the principles discussed apply equally when the innocent spouse is the Christian man.



Life

tinued: "But all the men who . . . have not listened to my voice, will never see the land about which I swore to their fathers." (Numbers 14:19-23) Jehovah proved true to his word; that older generation—with the exception of Joshua and Caleb—did not see the Promised Land.—Numbers 26:64, 65.

Similarly, when the prophet Nathan rebuked King David for his sin with Bathsheba, a repentant David acknowledged: "I have sinned against Jehovah." Nathan then told David: "Jehovah, in turn, does let your sin pass by." (2 Samuel 12:13) Yet, although Jehovah forgave David, for the rest of his life David suffered from consequences of his sin.—2 Samuel 12:9-14; see also 2 Samuel, chapter 24.

These examples of divine forgiveness highlight an important lesson: We cannot sin with impunity. (Galatians 6:7, 8) A repentant sinner, though he may receive forgiveness, is not necessarily spared the consequences of his wrong course. Does this mean that the innocent mate may forgive the adulterer—at least in the sense of letting go of bitter resentment—and yet still decide to divorce him?

Forgiveness and Divorce

During his ministry, on three occasions Jesus spoke about divorce. (Matthew 5:32; 19:3-9; Luke 16:18) Interestingly, not once in any of these discussions did Jesus mention forgiveness. For example, as found at Matthew 19:9, he said: "Whoever divorces his wife, except on the ground of fornication, and marries another commits adultery." By saying "except on the ground of fornication," Jesus acknowledged that sexual immorality would give the innocent mate the right, or Scriptural "ground," to divorce. Yet, Jesus did not say that the innocent one *should* divorce. Nevertheless, he clearly implied that she *can* do so.

Marriage is a tie that binds two people together. (Romans 7:2) But when one of them is unfaithful, the bond can be severed. In such cases the innocent spouse is really faced with *two* decisions. First, should she forgive? As we have seen, a significant factor here is whether the adulterer is sincerely repentant or not. When there is repentance, the innocent mate in time may forgive—at least in the sense of letting go of resentment.

The second decision is, should she seek a divorce? Why would this question come up if she has forgiven him?* Well, what if she has valid concerns about the safety of herself and her children, especially if her husband has been abusive in the past? Or what if there are fears of being infected with a sexually transmitted disease? Or what if she feels deeply that because of his betrayal, she can no longer trust him in a husband-wife relationship? In such situations it is quite conceivable that the innocent mate could forgive her erring mate (in the sense of letting go of resentment) and yet still decide to divorce him because she does not desire to continue living with him. Letting go of resentment may help her to get on with her life. It may also help keep any necessary future dealings with the adulterer more civil.

Whether to obtain a divorce from an unfaithful mate is a personal decision, one that the innocent mate should make after carefully and prayerfully weighing all the factors involved. (Psalm 55:22) Others do not have the right to try to dictate or to pressure the innocent mate into deciding one way or another. (Compare Galatians 6:5.) Remember, Jesus did not say what the innocent mate should do. Clearly, then, Jehovah is not displeased with those who choose to divorce on proper Scriptural grounds.

* By resuming sexual relations, the innocent mate would be indicating that she has decided to be reconciled with her erring mate. She would thereby nullify any Scriptural ground for divorce.

Premenstrual Syndrome

MYTH OR REALITY?

Her behavior is erratic and unpredictable. One moment she is agreeable; the next she is argumentative. She utters words of hopelessness. Despite your expressions of comfort, she overreacts to what you say and do. A small issue is likely to get blown out of proportion and become fuel for a raging fire. After a few days, or a week or so, this "other" woman suddenly disappears, and she is once again her normal self . . . for a time.

ADMITTEDLY, not all women undergo such dramatic mood changes. However, prior to the onset of menstruation, some women may have recognized in themselves this female counterpart of Dr. Jekyll and Mr. Hyde. What causes such mood changes? Is such behavior truly the result of changes during the menstrual cycle?

What Is PMS?

According to the *American Journal of Psychiatry*, women who experience "cyclic occurrence of symptoms that are of sufficient severity to interfere with some aspects of life" and that appear consistently prior to menstruation may be suffering from PMS (premenstrual syndrome). Although there are no laboratory tests that can diagnose PMS, women with PMS must experience a symptom-free phase of one or two weeks during each cycle. By this definition, doctors estimate that only 10 percent of women suffer from PMS.



Other clinicians have a different view of PMS. They argue that a larger percentage of women, between 40 and 90 percent, suffer from PMS. They define the term to include the experiencing of various complaints, such as weight gain, fatigue, joint pain, abdominal cramps, migraines, irritability, breast tenderness, crying spells, cravings for food, and mood swings. More than 150 symptoms are associated with PMS. Women, including those who no longer menstruate, may experience any or several of these symptoms. Generally, however, a woman experiences PMS during her 30's. For the majority of women, PMS symptoms are distressing but manageable. In this article we will focus on these sufferers of less severe PMS.

Nancy Reame, a researcher at the University of Michigan, reported that PMS is seen as "a generic health problem" in the United States, but in other countries there are

many differences in the type and severity of symptoms. "Some report much more significant physical symptoms, and other cultures report more emotional symptoms," she said. Reame, who has done research in China, cited the Chinese as an example. "In the Chinese culture it's not okay to have emotional symptoms." As a result, she noted, women will focus on cramps when asked about menstrual problems.

The Beginnings of PMS

PMS was first discussed by Dr. Robert T. Frank of New York in 1931 in his paper "The Hormonal Causes of Premenstrual Tension." He observed women who suffered with fatigue, lack of concentration, and nervous tension prior to menstruation.

It was 22 years later that Katharina Dalton and Raymond Greene, English physicians, published a paper in a medical journal in which they coined the term "premenstrual syndrome." Dr. Dalton referred to PMS as "the world's commonest, and probably the oldest, disease." Her findings of the effect PMS could have on a woman's behavior came to the fore in 1980. She and other doctors were called in to diagnose two British women charged with murder. They theorized that a woman's behavior could be influenced by hormonal fluctuations during her menstrual cycle. Based on their diagnosis of PMS, the murder charges in both cases were reduced. In one decision the defendant received a lesser charge of manslaughter on the grounds of "diminished responsibility."

Incidents of destructive behavior on the part of women, as in the foregoing, seem to be isolated cases. The cause of such behavior and the minor distressing symptoms a majority of women experience around the time of menstruation continue to be debat-

ed on the pages of medical and nonmedical journals.

Is such behavior really the result of cyclic hormonal fluctuations in a woman's body? Or is the idea of raging hormones and the unruly female body simply a myth? There are differences of opinion as to what effect, if any, hormonal fluctuations have on a woman's behavior. Many researchers and doctors agree that a better understanding of the interaction between the brain and the ovarian hormones during the menstrual cycle is a key to knowing why some women suffer with PMS.

The Menstrual Cycle

About once every four weeks, a woman's body enters a highly complex cycle of hormonal fluctuations. Referred to by many as the "curse," the word "menstruation" comes from the Latin *mensis*, meaning "month."

To start the cycle, the hypothalamus of the brain sends a message to the pituitary gland. When the message is received, the pituitary secretes FSH (follicle-stimulating hormone). FSH travels through the blood to the ovaries and triggers the production of estrogen. As estrogen increases, the pituitary reacts by sending out LH (luteinizing hormone). LH slows down the secretion of FSH. One egg cell matures and travels down into the womb. After the egg cell is released, the hormone progesterone is secreted. If the egg is not fertilized, progesterone and estrogen levels drop rapidly.

Without hormones to support it, the lining of the uterus degenerates, with blood, fluid, and some tissue being discharged through the vagina. It takes about three to seven days for a woman's uterus to shed the lining completely, ending one menstrual cycle. As one cycle ends, the brain again releases hormones, signaling the start of a new cycle.

A Battle of the Hormones?

Some argue that an imbalance of estrogen and progesterone is what produces premenstrual symptoms in a woman. They assert that the hormones normally work together to achieve a perfect balance. When more of one is produced than of the other, a battle occurs, and casualties are left behind in the female body.

Elevated estrogen levels may make some women feel irritable. For others, progesterone wins out, causing them to feel depressed and fatigued.

Other researchers disagree with the theory that a hormonal imbalance causes PMS. They argue that psychological and social factors play major roles in producing premenstrual symptoms in certain women. *Patient Care*, in reporting on the causes of PMS, states that "no clear-cut differences have been found in the patterns, ratios, amounts, or timing of gonadal hormones in women with or without severe PMS."

Stress, for example, may speed up, delay, or intensify PMS symptoms. The book *PMS—Premenstrual Syndrome and You: Next Month Can Be Different* notes: "Stress inhibits the release of hormones and an inadequate supply of hormones can lead to the kind of hormonal imbalance that worsens PMS symptoms." Medical, financial, or family problems may appear more intense and less manageable before menstruation.

IN OUR NEXT ISSUE

The Holocaust—Who Spoke Out?

Sexual Harassment —How Can I Protect Myself?

Japan's Sudden Disaster —How People Coped

The Fear of Stigmatization

Some researchers contend that a woman may be viewed as a less-than-ideal worker or decision maker if she manifests symptoms related to her menstruation. "It's a way that the society keeps women in their place. If you're impaired once a month, that means that you then shouldn't be out doing these serious, powerful, influential things," argues Barbara Sommer, a psychologist.

Other researchers contend that women have accepted PMS because it allows them to use the condition as an excuse for their behavior. In an interview in *Redbook* magazine, Dr. Carol Tavris, author of *The Mismeasure of Woman*, states that PMS "allows women to say, 'What's medically wrong with me?' not, 'What is wrong in my life that's making me feel crummy?'"

In 1985, women psychiatrists on the Committee on Women of the APA (American Psychiatric Association) fought against the inclusion of PMS in the APA's Diagnostic and Statistical Manual. Although it is cited in the appendix of the current (1987) manual as "late luteal phase dysphoric disorder," a task force of the APA has proposed listing "premenstrual dysphoric disorder" (PMDD) in the main text of its next edition. Listing it in the manual would make it an official psychiatric disorder.

"It doesn't belong anywhere in the book at all because it's not a mental disorder," notes Dr. Paula Kaplan, former adviser to the task force. "The next time a woman is nominated for attorney general, she'll be asked: 'Have you had PMDD?'" she said.

A Search for Relief

The medical profession continues to debate the issue of PMS. Many theories are emerging on the exact cause and treatment of PMS. Some doctors feel that there may be 18 varieties of PMS, each produc-

**Family members can help by
being especially kind
and considerate**

ing different symptoms. One recent study reported that zinc may play a role in triggering PMS symptoms. Another study suggested that a vitamin-B₆ deficiency may be at the root of the problem, causing mild depression in some.

Treatments such as light therapy, sleep manipulation, deep relaxation technique, antidepressant drugs, and progesterone suppositories are tried by women seeking relief from recurring PMS symptoms. As yet, no consistently effective treatment has been found.

Women who suffer from unmanageable symptoms prior to menstruation should consult a doctor. Each case of PMS is unique, and each woman deserves sound medical advice and proper care. Because PMS can mimic other serious conditions, such as thyroid disease, endometriosis, and depression, a physical exam is important.

It is recommended that prior to the first visit to the doctor, a woman keep a detailed diary or calendar of physical and emotional symptoms she experiences premenstrually. Knowing the days when she may be prone to moodiness, irritability, or depression can help her to adjust her schedule accordingly. It can also help her determine whether she is suffering from PMS.

Doctors may suggest reducing factors that cause stress in her life. A nutritious diet and regular exercise can also combat PMS. A high-carbohydrate, low-protein diet improved the moods of some depressed premenstrual women, said a university study.



A regular workout or a brisk walk during the day may also aid in fighting fatigue and the blues.

Of course, family members, particularly a husband, can help. They should strive to be especially kind, considerate, and understanding when a woman's monthly cycle causes her difficulties.

The Debate Continues

Some claim that labeling normal emotional and physical changes a woman experiences during her menstrual cycle as a "syndrome" is incorrect. And others discredit PMS, claiming that it stigmatizes women.

However, for a number of women, PMS is real. Every month, symptoms are experienced that make coping with a family and a job difficult. A search for relief and understanding can prove frustrating as many in the medical profession and lay persons continue to debate the reality of PMS.

THE CATACOMBS



WHAT WERE THEY?

BY AWAKE! CORRESPONDENT IN ITALY

In gloomy passageways, hidden in the bowels of ancient Rome, are the catacombs. What exactly are they?

Why were they built?

ESSENTIALLY, the catacombs are tunnels dug out of rock for use as cemeteries. It is thought that the word "catacomb," of uncertain meaning (possibly, "at the hollows"), was a place-name describing a particular cemetery on the Appian Way close to Rome. In time, it was applied to all subterranean cemeteries. Even though there are catacombs in many parts of the Mediterranean basin, those in Rome are the best known and also the largest—their overall

length is estimated to be several hundred miles. As many as 60 have been identified, all a few miles outside the historic city center along the consular highways that connected Rome with its provinces.

It appears that during the first century, Roman Christians did not possess their own cemeteries but buried their dead alongside pagans. Halfway through the second century, when professed Christians had already begun to be influenced by pagan

such as Saint Denis (see sidebar) were used in various ways). In fact, certain birds were used as symbols of immortality.

Right: Certain birds were used as symbols of immortality

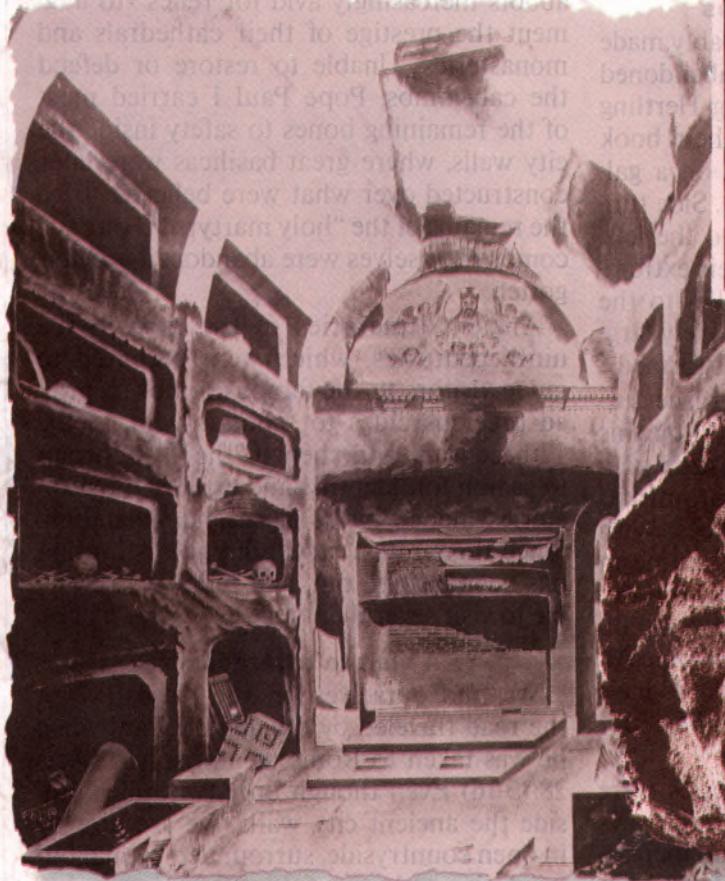
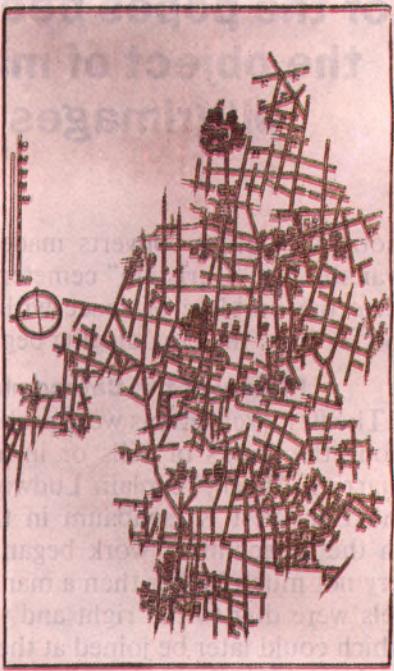
Far right: Labyrinthine plan of some Roman catacombs

Bottom: Brick stamp, useful for dating the tombs

Bottom right: Crypt of the popes



Archivio PCAS



Soprintendenza Archeologica di Roma

The supposed tombs of the popes became the object of mass pilgrimages

thought, wealthy converts made property available for "Christian" cemeteries. To resolve the problem of space without going too far from the city, digging began.

History of the Catacombs

The first excavations were probably made along the flanks of hills or in abandoned quarries. "Then," explain Ludwig Hertling and Engelbert Kirschbaum in their book on the catacombs, "work began on a gallery not much higher than a man. Side tunnels were dug to the right and to the left, which could later be joined at their extremity by another passageway parallel to the first. Thus a simple then progressively larger and more complex network was formed."

The greatest development took place during the third and fourth centuries; by this time, what passed for the Christian religion had been thoroughly contaminated by pagan teachings and practices. With the so-called conversion of Constantine in 313 C.E., the catacombs became the property of the Church of Rome, and some ultimately assumed colossal proportions. Altogether, the Roman catacombs could have held hundreds of thousands of tombs, if not millions.

During this period the cemeteries were adorned and extended, and new stairways were built to facilitate access for an increasing flow of visitors. The fame of the sup-

posed tombs of the popes and martyrs had spread to such an extent (particularly in northern Europe) that the catacombs became the object of mass pilgrimages. With the fall of Rome and the first barbaric invasions at the beginning of the fifth century, the whole area became extremely dangerous, and the use of the catacombs as cemeteries ceased.

During the eighth century, the tombs suffered great damage as they were sacked and pillaged not only by invading armies but also, according to Hertling and Kirschbaum, by "condescending Roman mediators" who furnished large quantities of sacred mementos to "German and Frankish abbots increasingly avid for relics" to augment the prestige of their cathedrals and monasteries. Unable to restore or defend the catacombs, Pope Paul I carried most of the remaining bones to safety inside the city walls, where great basilicas were later constructed over what were believed to be the remains of the "holy martyrs." The catacombs themselves were abandoned and forgotten.

Ancient itineraries of the fifth to the ninth centuries, which were prepared to guide visitors to the famous tombs, provided precious clues to scholars who, in the 17th century and then in the 19th, began to search for, identify, and explore the cemeteries hidden by collapse and vegetation. Since then, much research and restoration has been carried out, and today it is possible to visit several of these evocative places.

A Visit to a Catacomb

We find ourselves on the Appian Way, the road traveled by the apostle Paul when he was taken to Rome as a prisoner. (Acts 28:13-16) Even though only two miles outside the ancient city walls, we are already in open countryside, surrounded by magnificent pine and cypress trees growing among

the monuments and ruins of this once busy highway.

After buying our entrance ticket, we descend a steep stairway to a depth of about 40 feet. The guide explains that this catacomb is arranged on five different levels, reaching a depth of a hundred feet, below which water was found. In fact, Rome is surrounded by extensive deposits of tuff, a soft and permeable volcanic rock, easy to excavate but at the same time strong and solid.

We are walking along a narrow corridor, a yard wide and about eight feet high. The dark brown walls are rough and damp and still clearly bear the signs left by the picks of the fossors, the workers who dug these cramped tunnels. The tombs on both sides have long since been opened and pillaged, but some still contain small fragments of bone. As we proceed in the dark, we realize we are surrounded by thousands of tombs.

The most economical and practical way to bury the dead was to dig rectangular niches along the walls, one above another. These loculi usually contained one body but sometimes two or three. They were closed with bricks, slabs of marble, or terra-cotta tiles, sealed with lime. Many bear no inscription. They could be recognized by small objects placed on the outside—a coin or a seashell pressed into the fresh lime or, as in the Catacomb of Priscilla, a small doll made of bone, presumably left by grief-stricken parents mourning the premature loss of their daughter. Many tombs are tiny, large enough only for newborn babies.

"How can we know the age of the catacombs?" we ask. "There's no conjecture about that," our guide replies. "You see this mark?" We bend down to examine a sign stamped on a large terra-cotta tile used to seal one of the loculi. "This brick stamp was impressed when the tile was made. The factories, many of which were imperial proper-

One catacomb has five different levels, reaching a depth of a hundred feet

ty, stamped information on bricks and tiles they produced indicating the quarry from which the clay was taken, the name of the workshop, the foreman, the consuls (chief magistrates) in office that year, and so on. This is an extremely useful element in establishing a precise date for the tombs. The oldest go back to the middle of the second century C.E., and the most recent to about 400 C.E."

A Mixture of Ideas

Some of those who used these places evidently had a certain knowledge of the Holy Scriptures, as a number of tombs are decorated with Bible scenes. There is no sign, however, of Mary worship or of other themes so common in later "sacred" art, such as the so-called crucifixion.

We also see figures that have no connection with the Bible. "It's true," admits the guide. "Many scenes in these and other catacombs are borrowed from pagan art. You can find the Greco-Roman demigod and hero Orpheus; Cupid and Psyche, who represent the soul's lot in this life and the next; the vine and the grape harvest, a well-known Dionysian symbol of ecstasy in the afterlife. Taken entirely from idolatrous art, according to one Jesuit scholar, Antonio Ferrua, are the personifications of abstract beings: the four seasons represented by cupids; more complex scenes depicting the

The catacombs show the influence of the foretold apostasy from Bible truth

four seasons of the year, Summer crowned by ears of corn and lilies; and so on."

Recurring themes are: the peacock, symbol of immortality, since its flesh was considered incorruptible; the mythological phoenix, also symbolizing immortality, as it was said to die in the flames only to rise again from its ashes; souls of the dead, surrounded by birds, flowers, and fruit, feasting in the afterlife. A real mixture of pagan and Biblical concepts!

Some inscriptions are moving expressions of faith, seeming to reflect the conviction that the dead are asleep, awaiting the resurrection: "Aquilina sleeps in peace." (John 11:11, 14) In contrast with Scriptural teachings, other inscriptions reflect the idea that the dead can help or communicate with the living: "Remember your husband and children"; "Pray for us"; "I pray for you"; "I am in peace."

But why this mixture of Scriptural and pagan thought? Historian J. Stevenson says: "The Christianity of some Christians was permeated by ideas deriving from their pagan past." Clearly, the "faithful" in Rome were no longer acting in harmony with the knowledge transmitted by Jesus' true disciples.—Romans 15:14.

As we continue our visit, the influence exerted by unscriptural devotion to the dead becomes ever clearer. Many desired to be

buried close to the tomb of someone considered to be a martyr, with the idea that from his position in heavenly bliss, the martyr could intercede, helping the lesser one to obtain the same reward.

Many imagine that the catacombs were right underneath the city, but that is not so. They are all a few miles outside the city center. Roman legislation, in fact, prohibited burial within the city walls. The Law of the Twelve Tables, introduced in the fifth century B.C.E., stated: *Hominem mortuum in urbe ne sepelito neve urito* (The dead may not be buried or cremated within the city).

The guide observes: "These cemeteries were well-known to the authorities, so well-known that during the persecution of Emperor Valerian, when Christians were barred from entering the catacombs, Pope Sixtus II was executed when he was found here (258 C.E.)."

Turning yet another corner in the labyrinth, we see the pale light of day illuminating the far end of the corridor, and we realize that our visit has come to its end. We say good-bye to our guide, thanking him for the interesting information, and as we climb another steep stairway to return to the surface, we cannot help but reflect on what we have seen.

Can these be the remains of true Christianity? Hardly. The Scriptures prophesied that shortly after the death of the apostles, a contamination of the doctrines taught by Jesus and his disciples would arise. (2 Thessalonians 2:3, 7) Indeed, the evidence we have seen, of the cult of the dead and of the martyrs and of the idea of an immortal soul, is eloquent testimony, not of faith based on the teachings of Jesus, but rather of the strong pagan influence already present among apostate Roman Christians in the second to the fourth centuries of our Common Era.

THE MEANING BEHIND THE MASK

THE WOODSMAN MAKES HIS WAY TO A TREE IN THE CENTRAL AFRICAN FOREST, AX IN HAND. HIS MISSION IS RELIGIOUS, ONE THAT HAS BEEN CARRIED OUT COUNTLESS TIMES IN AFRICA OVER THE MILLENNIUMS.

THE woodsman believes that within the tree dwells a spirit that merits deep respect. To protect himself from the wrath of that spirit, the woodsman consulted



a diviner before going into the forest. He then underwent a purification ceremony and offered a sacrifice to the spirit of the tree.

He strikes the tree a blow with his ax. Putting his lips to the cut, he next sucks some sap to achieve kinship with the tree. After the tree is felled, he leaves it on the ground for some days to allow the spirit ample time to find a home elsewhere. He believes that the tree has a power of its own, despite the departure of the spirit. The tree's force is so potent that those who handle the wood of it must, for their own protection, carefully follow prescribed traditional rituals.

In the skilled hands of the carver, the wood becomes a mask. As the mask takes shape, the wood is believed to acquire increasing power. The carver is not free to make any form he likes; he must conform to the traditional imagery of his ethnic group. If he does not, he risks the reproach of his community and the anger of the spirit power of the mask.

When the mask is finished, the medicine man performs a consecration ceremony in which he applies magical ingredients to the mask. The mask is now thought to have great supernatural power and to become the abode of the spirit to whom it is dedicated. The mask is now ready to be used in religious ceremonies.

The Meaning of the Mask in Africa

Masks are used in worship throughout much of the African continent. The book *Masks—Their Meaning and Function* states: "The mask can have two functions: it can be used as a fetish, as is the miniature mask; or it can be worn, in which case its role is to conjure up ancestors, spirits or other supernatural beings."

Giving a more detailed explanation, scholar Geoffrey Parrinder states in his

book *Religion in Africa*: "[African wooden masks] are religious, whether they are naturalistic, formal or abstract. They represent the dead or attendant spirits in their rituals, or 'secret societies' connected with the dead or serving to suppress witchcraft. Impassive or terrifying, distorted or abstract, the masks powerfully demonstrate the awesomeness of the dead as well as the conviction that death is not the end. They are made to be worn by people who impersonate the dead, their bodies usually being covered with robes beneath the masks, and they must not be spoken of as human beings but as spirits."

Besides their use in funeral rites and in protection against sorcery, masks play a central role in initiation ceremonies, festivals, judicial matters, fertility rites, and "communication with the dead." Sometimes masks even feature in the celebrations and ceremonies of Christendom. In Sierra Leone, for example, masked "devils" dance to the courtyard of a church to pay their respects at weddings. In all these uses, the masks have the same basic meaning. They are, says the book *African Masks*, "reliquaries of divine power, whether their function is intended to be profound, or frivolous and entertaining."

Among the over 1,000 ethnic groups in Africa, about 100 make masks. Masks vary greatly in form from one group to another, and they differ according to the purpose they serve. Yet, despite this variety, there are established patterns understood by peoples over wide areas of Africa. For example, masks depicting ancestral spirits typically have a serene look, while masks representing nonhuman spirits are often bizarre in appearance. A high domed forehead depicts wisdom and deep spirituality. Protruding eyes or a frozen facial expression indicates a state of spirit possession.

White pigmentation suggests the spirits of the dead and an 'otherworldly' quality. Masks depicting horned animals, especially African buffalo and antelope, relate to ceremonies of exorcism, spirit transmigration, and witchcraft.

The Mask in Action

In Africa masks are not simply hung on the wall; they are used in ritual and dance. They may cover the face or the entire head of the one who wears it. The rest of the person's body is adorned in long robes or strips of raffia palm or woody plant fiber.

The wearer is considered to be in direct association with the spirit force of the mask. *The New Encyclopædia Britannica* describes what happens: "Upon donning the mask, the wearer sometimes undergoes a psychic change and as in a trance assumes the spirit character depicted by the mask. Usually, however, the wearer skillfully becomes a 'partner' of the character he is impersonating . . . But it would seem that the wearer often becomes psychologically completely attached to the character he is helping to create. He loses his own identity and becomes like an automaton, without his own will, which has become subservient to that of the personage of the mask."

To approved onlookers—nearly always men only—the mask does not merely *represent* a supernatural person. They believe that a living supernatural person becomes embodied in the mask. Thus, the mask itself is sacred, and any breaking of the rules is strictly punished by the community, sometimes by death. For his protection, the wearer, like the woodsman and the carver, must follow approved procedures.

The Meaning of the Mask to the Collector

Particularly during the past 100 years, African masks have been collected enthusiastically throughout the world. To the col-

Masks in Many Cultures

What does the word "mask" mean to you? In some cultures the term is a figure of speech to denote the disguising of something. If you are interested in sports, you may think of a mask as something to protect the face from injury, such as in baseball and fencing. Perhaps you think of the gas mask, the surgical mask, or the party mask.

To many peoples today, however, masks mean religion. States *The New Encyclopædia Britannica*: "Masks representing beneficent and maleficent sacred or holy forces in religious dances—particularly in Buddhist monasteries of Nepal, Tibet, and Japan and in the majority of primitive societies—constitute [a] category of sacred representational objects. They are usually worshipped just as statues are worshipped."

Religious masks are found in all cultures and date from earliest times. To our ancestors they likely played an important role in religious and social life. The book *Masks—Their Meaning and Function* states: "Originally, every mask was imbued with significance, and the mask itself or the person wearing it mysteriously represented some power or spirit."

lector the mask means something quite different from what it means to those who practice traditional religion in Africa.

Instead of viewing it as a sacred, religious object, collectors regard the mask as a work of art reflecting African culture. Rather than evaluating the mask according to its function in society, they judge the mask for its directness, vitality, and emotional depth. Collectors ask: To what extent does the carver have a feeling for the wood itself, its grain, its structural pattern? How skillfully does the carver use creativity and

ingenuity and yet stay within the style imposed by cultural tradition?

Of course, the collector does not overlook the role of religion in the quality of the work. Usually, because of differences in the motivation of the carver, there is a big difference between masks used in worship and the replicas carved for the tourist industry. The book *Masks of Black Africa* states: "The carver . . . derived the inspirational elements from his deep conviction, his reverence for his mission to give form to an all-powerful, spiritual being, and, in this capacity, to fulfill his special social responsibility. As soon as this religious faith . . . degenerated, his work, despite its obvious technical achievements, became lifeless and of inferior artistic quality."

Those who collect masks for museums usually give closer attention than do collectors of art to the role a mask has served in the society from which it came. However, such specific information is often lacking because of the way most masks have been acquired over the years. Some were gathered as souvenirs, others were part of the booty from military expeditions, and still others were collected in large numbers for the commercial market. As a result, the original meaning and use of individual masks is often not known.

The Meaning of the Mask to Christians

Thus, masks have one meaning to those who practice traditional religion and another meaning to those who collect them as works of art and culture. To Christians, they mean something else.

The Bible makes it clear that there is no supernatural power inherent in either the mask or the tree from which it comes. The prophet Isaiah describes the senselessness of a person who uses part of the wood from a tree to cook his food and to warm himself

and then carves the remainder into a god to whom he looks for aid. (Isaiah 44:9-20) The same principle applies to religious masks.

Nevertheless, Christians do recognize that there are "wicked spirit forces in the heavenly places." (Ephesians 6:12) Under the power of Satan, they mislead people by means of false religion.—Revelation 12:9.

Christians also acknowledge that the demons use material objects to communicate with humans. Thus, servants of God do not keep anything that has to do with spiritistic religion, whether it is a charm, an amulet, a magical ring, or a mask. In this they follow the pattern of the early Christians in Ephesus. Concerning them the Bible says: "Quite a number of those who practiced magical arts brought their books together and burned them up before everybody. And they calculated together the prices of them and found them worth fifty thousand pieces of silver."—Acts 19:19.

Those who wish to serve Jehovah do not use or keep masks or anything else associated with false worship. Typical is the comment of Pius, a Christian elder in Nigeria: "Masks reflect the religious thinking of those who use them. Masks have names and are venerated or feared depending on the god they represent. I would never display a mask in my home because this would displease Jehovah and also because visitors might assume I agree with the religious beliefs it represents."

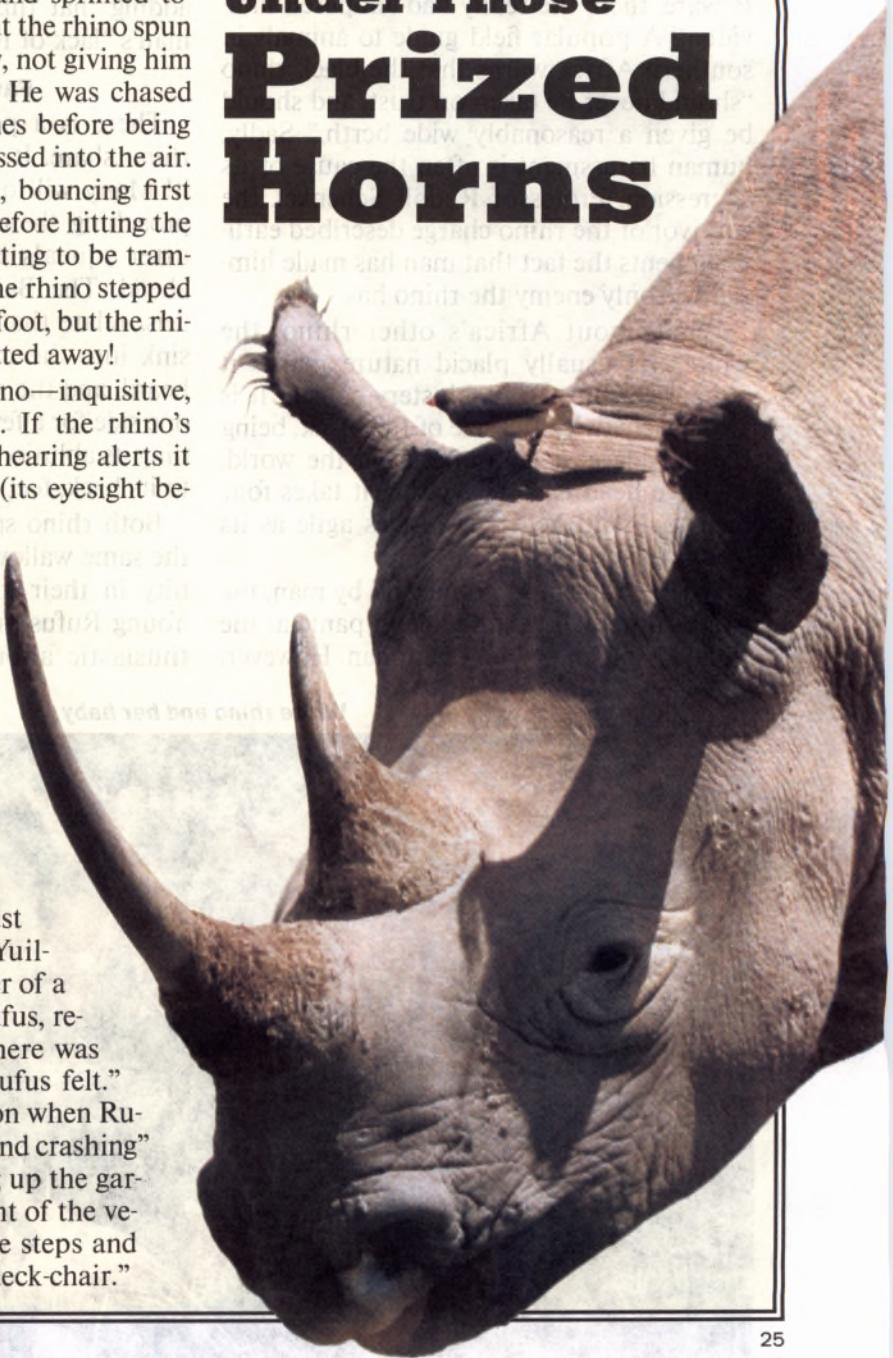
True Christians know that God's clearly stated law given to Israel was: "You must not make for yourself a carved image or a form like anything that is in the heavens above or that is on the earth underneath or that is in the waters under the earth. You must not bow down to them nor be induced to serve them, because I Jehovah your God am a God exacting exclusive devotion."—Exodus 20:4, 5.

SUDDENLY, the rhinoceros was charging at full speed. The man flung himself to one side and sprinted toward a small tree nearby. But the rhino spun around with amazing agility, not giving him time to scramble to safety. He was chased around the tree several times before being hooked with its horn and tossed into the air. Down came the poor man, bouncing first onto the rhino's shoulders before hitting the ground. There he lay, expecting to be trampled or gored to death. As the rhino stepped forward, the man raised his foot, but the rhino merely sniffed it and trotted away!

This is Africa's black rhino—inquisitive, pugnacious, easily alarmed. If the rhino's excellent sense of smell or hearing alerts it to something it cannot see (its eyesight being poor), it will excitedly charge toward the source—be it anything from a train to a butterfly! Although standing about five feet at the shoulder and weighing as much as 2,200 pounds, it can nonetheless gallop at some 35 miles an hour and spin around within its own length!

Sometimes its charge is just bluff or even sheer fun. Yvonne Kearney, onetime owner of a young black rhino called Rufus, relates that "the more dust there was flying about, the happier Rufus felt." She fondly recalls an occasion when Rufus came "snorting, puffing and crashing" through the bush, "charging up the garden only to stop dead in front of the veranda, walk solemnly up the steps and lie down by the side of [her] deck-chair."

The Animal Under Those Prized Horns



This affection for the black rhino is shared by many who have made a study of it. They all agree, though, that personalities differ among rhino just as they do among humans. Beware, then, the really bad-tempered individual! A popular field guide to animals in southern Africa warns that the black rhino "should never be taken on trust, and should be given a reasonably wide berth." Sadly, human harassment is often the cause of its aggression. Professor Rudolf Schenkel, the survivor of the rhino charge described earlier, laments the fact that man has made himself the only enemy the rhino has.

What about Africa's other rhino, the white? Its usually placid nature makes it quite a contrast to its blustery cousin. It is also nearly twice the size of the black, being the third-largest land animal in the world. Its huge head is so heavy that it takes four men to lift it! Yet, it is just as agile as its black cousin.

When confronted in the wild by man, the white rhino will usually flee in panic at the sight, sound, or smell of a human. However,

in their book *Rhino*, Daryl and Sharna Balfour caution against taking this for granted. "More injuries have been caused by white rhino than black in recent years," they write, adding that this has perhaps been due to man's "lack of respect" for it.

Favorite Pastime

There is a particular love that Africa's rhino share. It is the love of mud—lots of it! Many will quicken their pace while approaching their favorite mudhole and will utter squeals of delight at the prospect ahead. The Balfours, who often observed this, relate that as the rhino would slowly sink into the mud, "a sigh would then be heard, and the satisfied animal would lie on one side for a few minutes . . . before continuing its ablutions, often rolling right over on to its back, feet kicking skywards."

Both rhino species will sometimes share the same wallow and will relinquish all dignity in their love of a squelchy pastime. Young Rufus, mentioned above, got so enthusiastic about his mud bath that "he

National Parks Board of South Africa

White rhino and her baby



would sometimes jump up before it was over, just to race around the garden, bucking like a bronco, before returning to the pit in order to savour the delight all over again."

The mud, however, serves also for things other than blissful indulgence. It provides a venue for social gatherings with fellow rhino and other mud-loving animals, relieves the rhino somewhat of irritating fly bites, and cools their bodies from the sun's heat. It is therefore not surprising that rhino can sometimes be seen to linger in their miry bed for hours on end.

Which Is Which?

How can a person tell which rhino is which? Is the one really black and the other white? No. They are both gray—but different shades of gray—if you can see the gray color at all. What you will actually see is the color of the mud of their last wallow, which is now caked on the skin.

But the shape of the mouth will tell you immediately which is which. The black rhino, being a browser, has a pointed top lip that it uses to curl around or hook leaves and twigs off shrubs. Its more accurate name is therefore hook-lipped rhino. The white rhino, on the other hand, is a grazer. Hence, its snout is straight across, so that it crops grass like a lawn mower. Not surprisingly, its more accurate name is square-lipped rhino. But for some reason the black-or-white distinction, which seems to have originated with early Dutch settlers in southern Africa, has stuck.

Those Prized Horns

The name *rhinoceros* is from two Greek words meaning "nose-horned." And what are rhino horns made of? Some people describe them as being agglutinated hair, as they tend to fray near the base. However, they are not true hair, says Dr. Gerrie de Graaff, scientific adviser at South Africa's

How can you tell the difference between the black rhino and the white rhino, since they are both gray?

National Parks Board, but are "microscopically similar to the hooves of ungulates [hoofed animals]."

The horn keeps growing, just as fingernails do. A famous black rhino named Gertrie sported one that was over four and a half feet long, and a white rhino's horn grew to six and a half feet! And if the horn should break off, as sometimes happens, it will replace itself at the rate of about three inches a year.

Why are rhino horns so prized? Many people use them for medicines, and others enjoy the prestige of possessing a dagger with a rhino-horn handle. So great is the demand, and so lucrative the trade, that thousands of rhino have been slaughtered by those greedy for profit.

The white rhino, once on the verge of extinction, has now reasonably recovered, thanks to strenuous efforts of conservationists. But not so its black cousin. Various schemes afoot to stem the poaching tide include dehorning the animal. But this mammoth task is proving to have limited value. With rhino horns fetching up to \$900 a pound, poachers feel that even the stumps of a dehorned rhino are worth gouging out. Hopefully, though, man's greediness will not win out, so that future generations too will be able to find delight in becoming acquainted with this fascinating animal.

WATCHING THE WORLD

Witchcraft Among Refugees

Refugees from war-torn Rwanda are plagued with yet another problem in their camps in Ngara, northern Tanzania: witchcraft. According to Reuters news service, UNHCR (United Nations High Commissioner for Refugees) has singled out witchcraft as a "serious problem" in the camps. Every night, according to UNHCR spokesman Chris Bowers, two or three people are killed in occult rituals. He explains: "We know that witchcraft is involved because we find corpses mutilated in a certain way." By late 1994, some 580,000 people were living in the Ngara camps, with 2,000 new refugees arriving each day. Reuters quotes one UN source as saying: "There is an increase in witchcraft and we don't know how to deal with it."

Priests "Disconnected"

Mobile telephones may represent the utmost in convenient communication, but one bishop in Finland has decided that there can be too much of a good thing. According to Reuters, the bishop asserted that "a mobile phone should serve, not enslave, its user" and ordered church workers and ministers to curtail their use of the gadgets. It seems that parishioners' complaints had reached the bishop's ears—some clerics were taking phone calls during church services. One such call reportedly came right in the middle of a funeral service. Similarly, a Catholic magazine in Italy recently advised priests not to bring their phones into the confessional with them—after a wom-

an complained that she could hear the priest's phone ringing as she confessed her sins.

Good for Moms—Bad for Kids

Many women take iron pills for their health to give a boost to anemic blood, but some don't know how dangerous the same pills can be for children who ingest them. According to *Safety+Health* magazine, iron



pills are the leading cause of poisoning deaths among children under six years of age. The U.S. government has proposed that all such pills be packaged individually in hard-to-open plastic packs instead of bottles. In any case, though, mothers are advised to keep iron pills well beyond the reach of small hands, just as they do other pills and medications.

Gun Battles on the Rise in Japan

Japan is known as one of the world's safest nations. Its annual murder rate is only 1 per 100,000 people, whereas the rate is nearly ten times higher in such countries as Thailand and the United States. Recently, though, Japan has been rocked by an increase in murders involving firearms, reports *Asia-week* magazine. From 1990 to 1993, there were 180 shootings a

year, all of them involving members of organized crime. But frighteningly, in 1994 the number of shootings surged upward, and seven of the victims were ordinary citizens. Although Japan has strict laws against private ownership of guns, the police have stated that there are some 100,000 illegal firearms in the country. After a doctor was shot in a crowded train station, allegedly by a disgruntled former patient, a college student remarked in an interview: "I thought this could happen only in America."

Technology and Sabbath Loopholes

In Israel, observing Sabbath in a high-tech world presents some real challenges to those who live strictly by the Halakah, or ancient body of Jewish law. For example, Orthodox Jews are concerned about walking through a metal detector. If their keys set off the detector, then they have inadvertently closed an electrical circuit—and this, they reason, would violate the Halakah's injunction against lighting a fire. So an organization called Tsomet has designed a metal detector that does not react to ordinary objects like keys, hence posing no threat to Sabbath observance. Similarly, another organization has solved the problem of Orthodox doctors who need to do some routine writing on the Sabbath. They have designed a felt-tip pen that writes in ink that will vanish after a few days. How does that help? The Halakah restricts writing on the Sabbath but defines writing as leav-

ing a permanent mark. *The New York Times* quotes one prominent rabbi as reasoning: "If [God] left a loophole, he put it there to be used."

Endangered Giants

The giant tortoise of the Galápagos Islands is internationally renowned and protected as an endangered species. Recently, though, it has become clear that these massive reptiles face a new danger. For a month a fire raged across Isabela Island of the Galápagos archipelago. Rescue workers dug trenches to protect the island's precious population of 6,000 tortoises and even moved 400 of them to a special preserve. This latter measure was taken to protect the turtles not so much from fires as from people. According to *The Unesco Courier*, "tortoise-hunting, although illegal, is apparently a traditional practice. The meat of the tortoises, especially females, and their blood are regarded as having medicinal properties, apart from being particularly succulent." Rescuers found the remains of 42 of these giants that had been eaten by humans.

Death by Government

The above is the title of a new book by R. J. Rummel of the University of Hawaii. Over a period of eight years, Mr. Rummel collected data from "thousands of sources" on the subject of the role of governments in human slaughter during this century. According to *The Honolulu Advertiser*, the book states: "Almost 170 million men, women, and children have been shot, beaten, tortured, knifed, burned, starved, frozen, crushed, or worked to death; buried alive,

drowned, hung, bombed or killed in any other of the myriad ways governments have inflicted death on unarmed, helpless citizens and foreigners." Rummel says: "It is as though our species has been devastated by a modern Black Plague." "No other century has seen a slaughter of such magnitude," reports the newspaper concerning Rummel's findings.

Useful Worms

"Earthworms are India's secret weapon in preventing another outbreak of plague," reports *New Scientist* magazine. When refuse accumulates, rats and other pests that harbor deadly diseases abound. Now a native species of deep-burrowing worm, *Pheretima*



elongata, has been put to work to convert trash into useful compost. When introduced into garbage receptacles, these worms eat their way through the refuse and produce a fine compost that disintegrates readily. This technique, already at work in Bombay, processes four tons of slaughterhouse waste each day. Local authorities who presently rely on incinerators and landfill are now looking with interest at these useful worms.

Church and War

What role has the Serbian Orthodox Church played in the conflict in the Bal-

kans? That question was taken up at a recent roundtable discussion among Orthodox and Protestant church leaders from England, Germany, Greece, Russia, Serbia, Sweden, Switzerland, and the United States. *Christ in der Gegenwart* (The Contemporary Christian), a Catholic newspaper published in Germany, reported that the talks were organized by the World Council of Churches and were held in Geneva, Switzerland. The talks followed allegations that the Serbian Orthodox Church was biased in the war, "lending massive support" to the side it favored. Despite the grave accusations, the majority at the talks voted to allow the Serbian Orthodox Church to retain its membership in the World Council of Churches, although "not all differences of opinion [could be] settled."

Drug Business Is Big Business

"International drug trafficking," says the Australian newspaper *The Sydney Morning Herald*, "has become the world's second most lucrative business after the arms trade, mopping up \$US400 billion annually and subverting political systems in Asia." This amount of money, says Interpol's secretary-general, "has the power to corrupt almost everyone." Asia is in the spotlight because more than 80 percent of the world's heroin is produced in the Golden Triangle, near the borders of Myanmar, Thailand, and Laos, as well as in the Golden Crescent of Afghanistan and Pakistan. Interpol's chief drugs officer adds: "Drugs have taken over as the chief means of financing terrorism."

FROM OUR READERS

Burnout Thank you for the series "Do You Suffer From Burnout?" (January 8, 1995) Although I serve as a pioneer, for months I have felt sapped of strength and lacked motivation. The article gave me some points that I shall apply personally, especially the suggestion to avoid criticizing others.

M. S., Germany

These were extraordinary articles for me because I finally recognized my problem. I am a wife, the mother of four children, and have a lot to do. Sadly, I get little appreciation from my family. I feel better knowing that this is a common problem among sensitive people. Never stop publishing articles like these!

J. M., Italy

I have been experiencing fatigue, lack of enthusiasm, helplessness, hopelessness, and malaise. After reading the article, I understand the factors that led to these feelings. I want you to know how good it feels to be understood and to know that Jehovah and his organization care enough to write encouraging articles.

Z. L., United States

Burnout contributed to my giving up Bethel service and later giving up pioneering. I was on the verge of giving up serving as an elder! I can now see where I have failed to communicate in times past. I've improved in this area, and my frame of mind is much better.

E. R., United States

It was encouraging to learn that other Christian ministers have endured this problem and that they have overcome it.

C. L., Switzerland

Unwed Mothers Thank you for the article "Young People Ask . . . How Can Unwed Mothers Make the Most of Their Situation?" (October 8, 1994) You acknowledge that the

pregnancy came about through wrongdoing. But instead of dwelling on this and making the girl feel even worse, you offer practical, helpful guidelines.

J. D., United States

I became a single parent ten years ago. But with the help of Jehovah and my Christian parents, I've done well. After graduation from school, I served as a full-time minister for six years and married a Christian man who now serves as an elder. I have benefited greatly from Jehovah's mercy and kindness and am able to use my experience to help others.

A. M., United States

I could not hold back tears as I read the article. I experienced the very situation you described. Now that I am a Christian, I am happy to be able to raise my daughter with insight.

C. R. S., Brazil

Snoring The article "Do You Snore?" (September 8, 1994) warned of the possible hazards of snoring. But you implied that if you are a heavy snorer, you have sleep apnea. Not necessarily. The tendency to snore occurs as we age. It may also occur with allergies and sinus problems. But if the heavy snoring is accompanied by periods of no breathing, followed by gasping or snorting, and daytime sleepiness or fatigue occurs, sleep apnea is likely the culprit. The most common treatment is, not surgery, but devices that use compressed air to keep the airways unobstructed during sleep.

C. S., United States

We appreciate these comments and are sorry if our item caused any misunderstanding. Medical authorities agree that occasional snoring is not abnormal. As with all medical problems, evaluation by a physician is essential for proper treatment.—ED.

"An Equal-Opportunity Tragedy"

"TEENAGED girls just aren't getting the message," reports *The Toronto Star*. What message? That smoking is a deadly habit. A 1991 study revealed that 25 percent of Canadian girls between the ages of 15 and 19 were smokers, compared with 19 percent of boys in the same age group. Even among adults, female smokers outnumber their male counterparts. "Tobacco use among women has become an equal-opportunity tragedy," noted Physicians for a Smoke-Free Canada.

Why do teenage girls begin to smoke? Curiosity, peer pressure, and rebellion play a role. Not to be overlooked, however, is the advertising industry, which portrays female smokers as

being slim. Yes, many smoke to try to prevent overeating, and they fear putting on pounds if they stop. Tragically, these women may be more concerned about the threat of weight gain than about the threat of cancer. Robert Coambs, an assistant professor at the University of Toronto, summarized their attitude: "Lung cancer is 20 years away. Weight gain is immediate."

The tobacco industry also targets women by linking cigarette smoking with independence. Yet, Jean Kilbourne, former adviser to two U.S. surgeons general, wisely stated: "One can only consider cigarette smoking liberating if one considers death the ultimate freedom."



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Awake!

Réveillez-vous!

"I Won't Throw Out Any More Copies Until I Read Them"

A man wrote the publishers of *Awake!* explaining: "I recently found a copy of the April 8, 1994, *Awake!* in my screen door. Wow! What has happened? You have created an up-to-date, informative '90's' publication. I find the transition staggering, and for the first time, I actually read the articles. (I would normally think, 'Oh, they were here again,' and toss it.) There was something there for everyone."

In conclusion he wrote: "You are on the right track. Keep up the good work, and I promise I won't throw out any more copies until I read them."

Top: Courtesy of ROE/Anglo-Australian Observatory,
photograph by David Malin

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