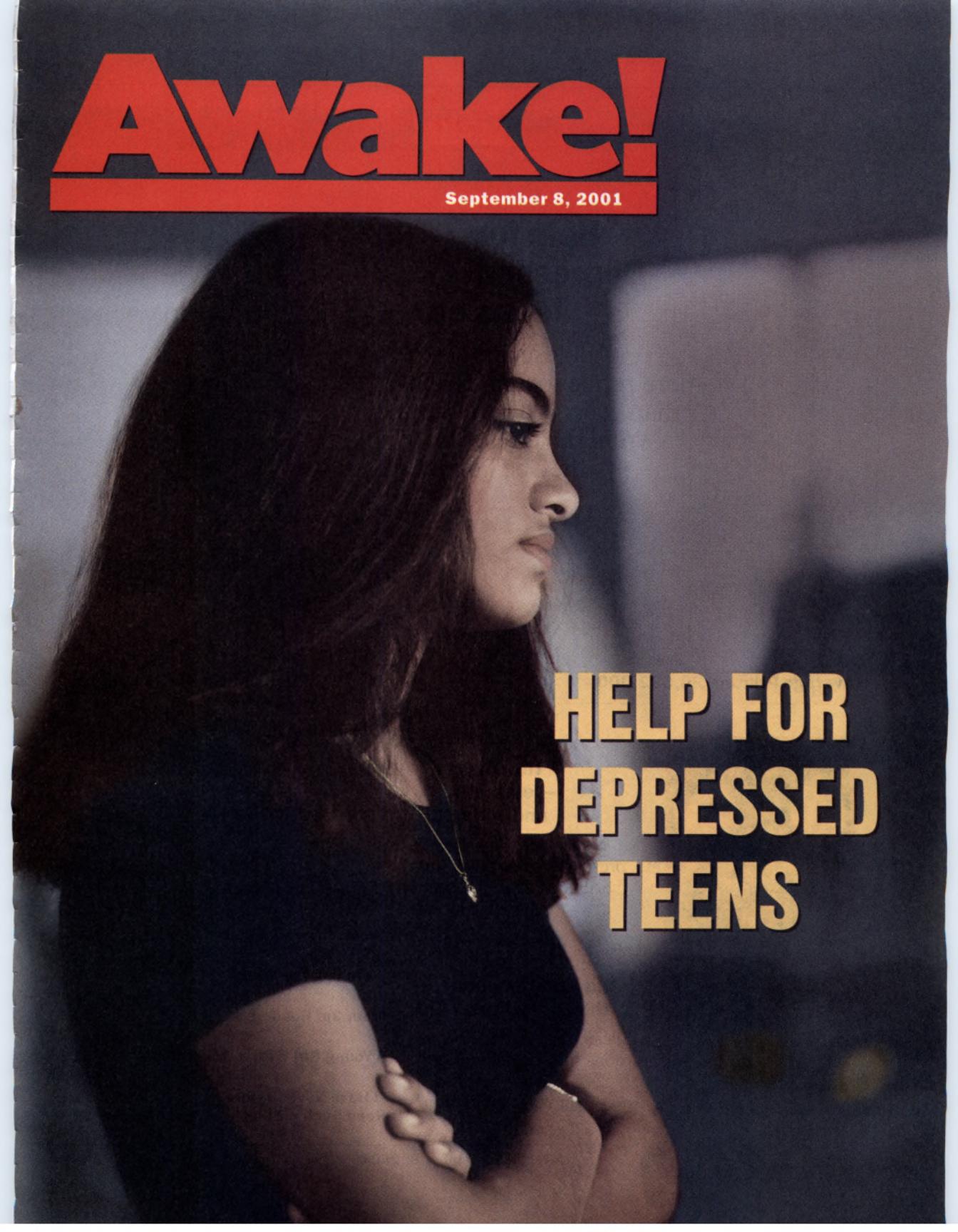


Awake!

September 8, 2001

A black and white photograph of a young woman with long, dark, wavy hair. She is shown from the chest up, in profile facing right. Her gaze is directed off-camera, and she has a contemplative or somber expression. She is wearing a dark, possibly black, turtleneck sweater and a thin necklace with a small pendant. Her arms are crossed over her chest. The background is dark and out of focus.

**HELP FOR
DEPRESSED
TEENS**

Help for Depressed Teens 3-14

Adolescents seem more prone to depression than ever. Why are they vulnerable? How can they be helped?



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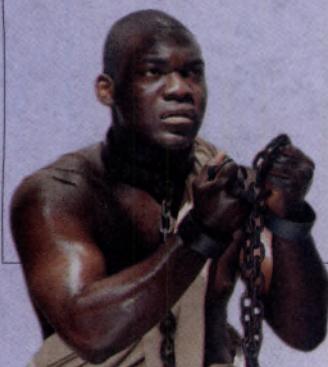


The Maya —Yesterday and Today 15

Read about the past and present of one of the most brilliant early American civilizations.

Did God Condone the Slave Trade? 20

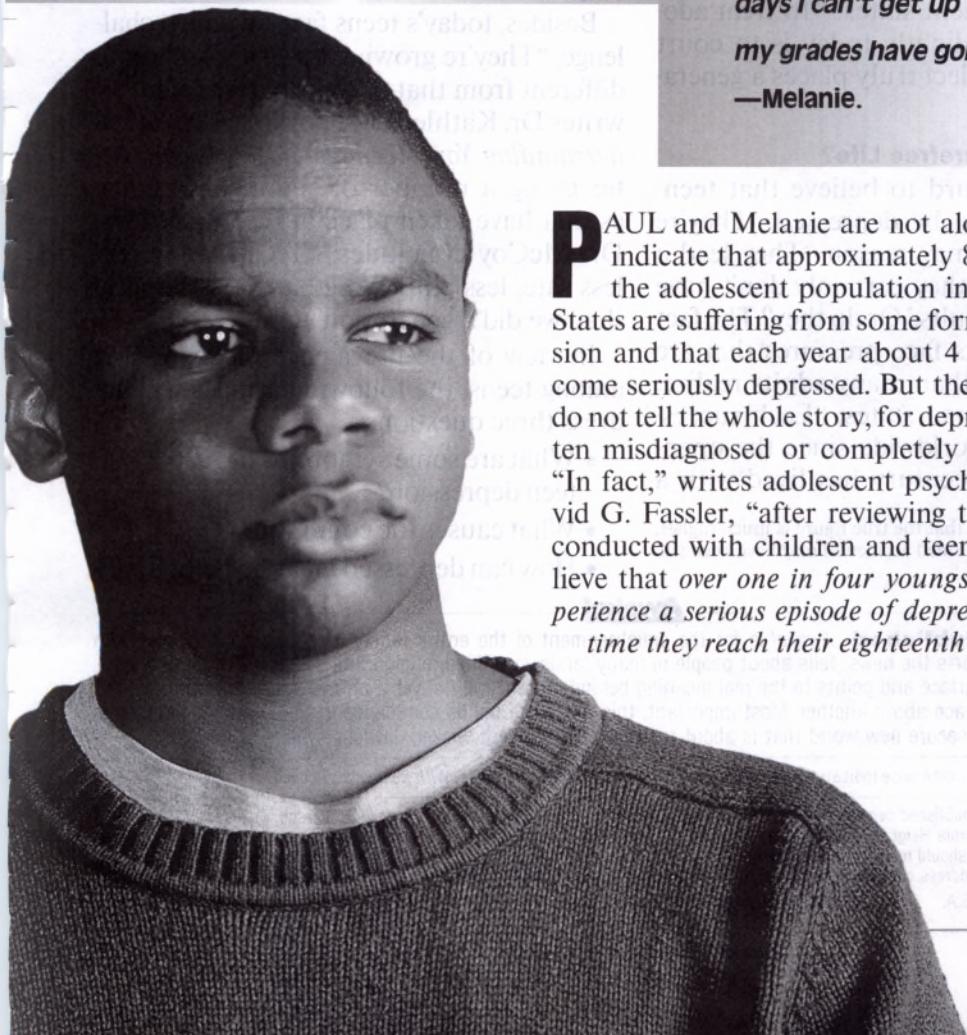
Slavery has caused horrendous suffering to millions. Does God approve of such human exploitation?



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A Generation at Risk

"Until two months ago, I was happy and active. Now every time I get a chance to do something, I'm too tired to. I'm feeling miserable and my temper is so short, I don't know how anyone can stand me. It's hard to say why I feel so bad all of a sudden."—Paul.



"I cry and hurt inside a lot. When I'm not hurting, I just feel dead. I don't enjoy anything. I don't like being with my friends anymore. I sleep a lot. Most days I can't get up to go to school and my grades have gone way down."

—Melanie.

PAUL and Melanie are not alone. Studies indicate that approximately 8 percent of the adolescent population in the United States are suffering from some form of depression and that each year about 4 percent become seriously depressed. But these statistics do not tell the whole story, for depression is often misdiagnosed or completely overlooked. "In fact," writes adolescent psychologist David G. Fassler, "after reviewing the research conducted with children and teenagers, I believe that over one in four youngsters will experience a serious episode of depression by the time they reach their eighteenth birthday."

Devastating Effects

Depression has devastating effects on teens. Indeed, experts believe that it plays a significant role in adolescent eating disorders, psychosomatic illnesses, difficulties at school, and instances of substance abuse.

More tragically, depression has been linked to teen suicide. According to the U.S. National Institute of Mental Health, as many as 7 percent of severely depressed youngsters take their life.* Even this does not reveal the full scope of the problem, since it is believed that for every youth who takes his or her life, many more attempt to do so. It is thus for good reason that a report by the Carnegie Council on Adolescent Development states: "To treat adolescent problems lightly today is to court disaster. Such neglect truly places a generation at risk."

A Carefree Life?

Some find it hard to believe that teenagers can actually be depressed. 'They're just kids,' adults may reason. 'They lead a carefree life, and they certainly don't have the anxieties of adults.' Or do they? The fact is that adolescents face pressures that are far more intense than many adults realize. Dr. Daniel Goleman states: "Each successive generation worldwide since the opening of the [20th] century has lived with a

* Some experts believe that the true figure is much higher, since a number of deaths ruled accidental may have been suicides.

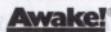
higher risk than their parents of suffering a major depression—not just sadness, but a paralyzing listlessness, dejection, and self-pity, and an overwhelming hopelessness—over the course of life. And those episodes are beginning at earlier and earlier ages."

Still, many parents might object: 'We made it through adolescence without becoming depressed. Why is our child overwhelmed with negative feelings?' But adults should not compare their adolescent experience with that of youths today. After all, individuals differ in the way they perceive the world around them and in how they react to it.

Besides, today's teens face an added challenge. "They're growing up in a world quite different from that of their parents' youth," writes Dr. Kathleen McCoy in her book *Understanding Your Teenager's Depression*. After citing a number of significant changes that have taken place in recent decades, Dr. McCoy concludes: "Teens today feel less safe, less empowered and less hopeful than we did a generation ago."

In view of the prevalence of depression among teens, the following articles will address three questions:

- What are some symptoms of teen depression?
- What causes the condition?
- How can depressed teens be helped?



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 that is about to replace the present wicked, lawless system of things.

Unless otherwise indicated, *New World Translation of the Holy Scriptures—With References* is used.

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Recognizing the Signs

"Sadness is a normal, healthy emotion; depression is a disease. The challenge lies in understanding and recognizing the difference." —Dr. David G. Fassler.

LIKE most other disorders, depression has telltale symptoms. But the signs are not all that easy to recognize. Why? Because nearly all teens get in a low mood now and then, as do adults. What is the difference between a mere case of the blues and depression? Much has to do with the intensity and duration of the condition.

Intensity involves the degree to which negative feelings afflict the youth. More severe than a minor bout with despair, depression is an all-consuming emotional illness that seriously impairs the teen's ability to function normally. Dr. Andrew Slaby describes the severity of the condition this way: "Imagine the worst physical pain you've ever had—a broken bone, a toothache, or labor pain—multiply it tenfold and take away the cause; then you can possibly approximate the pain of depression."

Duration refers to how long the listless

state continues. According to clinical professors Leon Cytryn and Donald H. McKnew, Jr., "a child who shows no signs of being comforted or of resuming a normal life within a week after falling into a low mood (for whatever reason)—or within six months after undergoing what is to him a severe loss—is at risk of developing a depressive disorder."

Common Symptoms

Depression is diagnosed only when a youth exhibits a number of symptoms every day, most of the day, for at least two weeks. A relatively brief bout is referred to as a depressive episode. Dysthymia, a more chronic form of mild or moderate depression, is diagnosed when symptoms persist for at least a year with no more than two months of relief. In either case, what are some common symptoms of depression?*

Sudden change in mood and behavior. The previously docile teen suddenly is confrontational. Rebellious behavior and even running away from home are common among depressed teens.

* The symptoms herein presented are intended to serve as an overview and not as criteria for making a diagnosis.

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Social isolation. The depressed adolescent withdraws from friends. Or it may be that friends withdraw from the depressed youth, noticing an undesirable change in his or her attitude and behavior.

Diminished interest in almost all activities. The teen is unusually passive. Hobbies that were just recently considered intriguing are now perceived as boring.

Notable change in eating habits. Many experts feel that disorders such as anorexia, bulimia, and compulsive overeating often coexist with (and may at times be caused by) depression.

Sleep problems. The teen sleeps either too little or too much. Some develop confused sleeping habits, being up all night and sleeping throughout the day.

Drop in academic performance. The depressed adolescent has problems getting along with teachers and peers, and grades begin to plummet. Soon the teen is reluctant to go to school at all.

Risky or self-destructive acts. Behaviors

that 'cheat death' may show that a youth has little interest in living. Self-mutilation (such as cutting the skin) may also be a symptom.

Feelings of worthlessness or inappropriate guilt. The teen becomes highly self-critical, feeling like a complete failure, even though the facts may indicate otherwise.

Psychosomatic problems. When no physical cause can be found, headaches, back pain, stomachaches, and similar problems may indicate underlying depression.

Recurring thoughts of death or suicide. A preoccupation with morbid themes can point to depression. So can suicidal threats.
—See box below.

Bipolar Disorder

Some of these same symptoms may be present in another baffling ailment—bipolar disorder. According to Drs. Barbara D. Ingersoll and Sam Goldstein, bipolar disorder (also known as manic-depressive disorder) is "a condition characterized by depressive episodes interspersed with periods in which mood and energy are excessively

WHEN A CHILD WANTS TO DIE

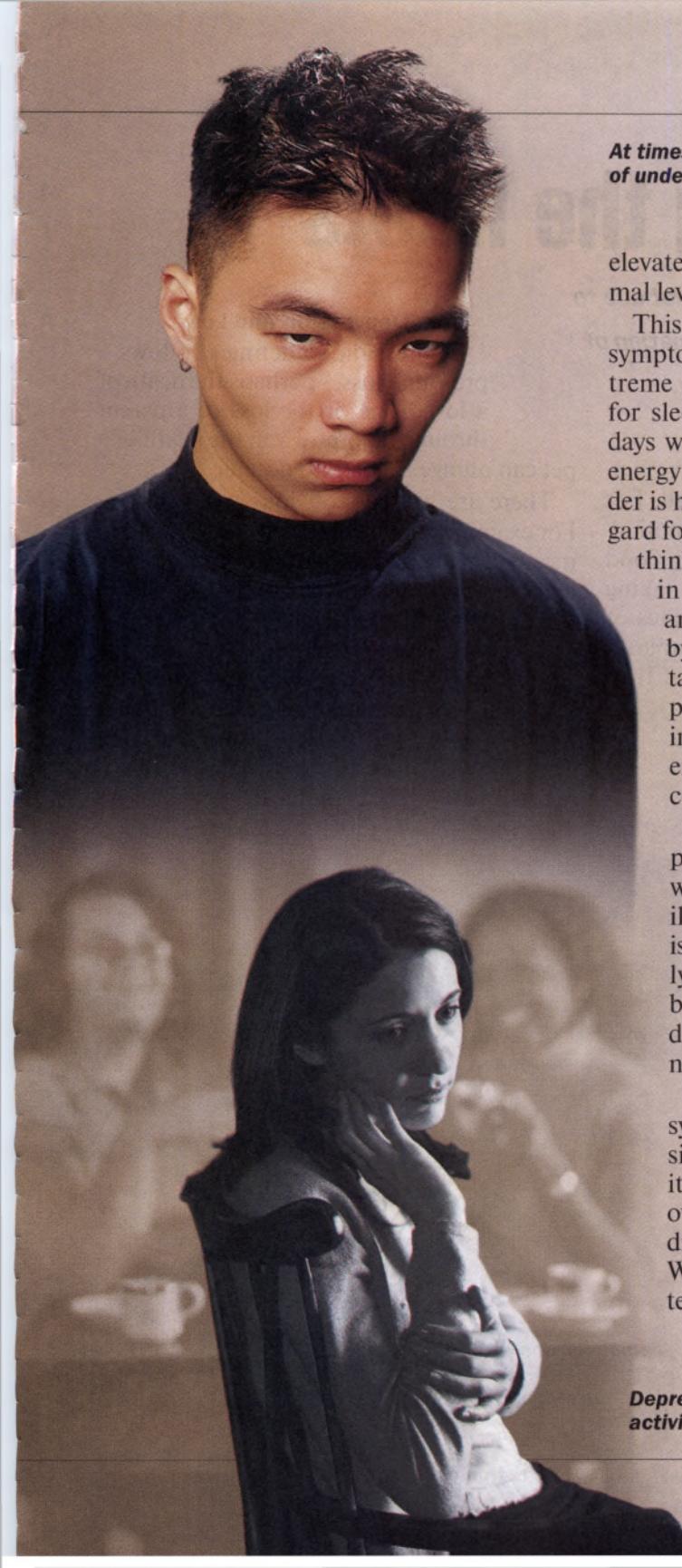
According to the U.S. Centers for Disease Control, in one recent year more young people in the United States died from suicide than from cancer, heart disease, AIDS, birth defects, stroke, pneumonia, influenza, and chronic lung disease *combined*. Another disturbing fact: There has been a dramatic increase in reported suicides among people between the ages of 10 and 14.

Can adolescent suicide be prevented? In some cases, yes. "Statistics show that many suicides are in fact preceded by attempts or verbal hints and warnings," writes Dr. Kathleen McCoy. "When your teenager even hints about suicidal thoughts, it's time to pay close attention and possibly seek professional help."

The prevalence of teen depression underscores

the need for parents and other adults to take seriously any indications that a young person gives of wanting to take his or her life. "In nearly every case of suicide I have reviewed, clues to the adolescent's plans were overlooked or downplayed," writes Dr. Andrew Slaby in his book *No One Saw My Pain*. "Family members and friends did not understand the enormity of the changes they were seeing. They focused on the consequences and not on the underlying problem, so that 'family problems' or 'drug use' or 'anorexia' became the diagnosis. Sometimes the anger, the confusion, and the irritability were treated but not the depression. The underlying problem remained, torturous and festering."

The message is clear: Take all clues of suicidal tendencies seriously!



At times, rebellious behavior is a sign of underlying depression

elevated—elevated, in fact, well beyond normal levels of a good mood.”

This elevated phase is called mania. Its symptoms may include racing thoughts, extreme talkativeness, and a decreased need for sleep. In fact, the sufferer may go for days without sleep with no evident loss of energy. Another symptom of bipolar disorder is highly impulsive behavior without regard for consequences. “Mania often affects thinking, judgment, and social behavior in ways that cause serious problems and embarrassment,” states a report by the U.S. National Institute of Mental Health. How long does the manic phase last? Sometimes just a few days; in other cases, mania lingers for several months before giving way to its counterpart, depression.

Those most at risk of developing bipolar disorder include individuals with family members who have the illness. The good news is that there is hope for sufferers. “Diagnosed early, and treated appropriately,” says the book *The Bipolar Child*, “these children and their families can live infinitely more stable lives.”

It is important to note that no single symptom on its own indicates depression or bipolar disorder. Most often, it is a cluster of symptoms manifested over a period of time that leads to a diagnosis. Still, the question remains, Why does this baffling disorder afflict teens?

Depressed teens often lose interest in activities that once fascinated them

Uncovering the Roots

"Usually, teenage depression is not due to one factor alone but to a combination of stressors."—Dr. Kathleen McCoy.

WHAT causes teen depression? A number of factors may be involved. For one thing, the physical and emotional changes brought on by puberty can flood youths with uncertainty and fear, making them especially prone to negative states of mind. Also, teens are often vulnerable to negative emotions when they feel that they have been rejected by their peers or by someone for whom they had developed romantic feelings. Then, too, as noted in our opening article, today's teens are growing up in a world that can be depressing in itself. We are indeed living in "critical times hard to deal with."

—2 Timothy 3:1.

Compounding the problem, youths are facing the pressures of life *for the very first time*, and they have neither the skills nor the experience of adults. Hence, teens often become like tourists navigating through unfamiliar territory—overwhelmed by their surroundings and, in many cases, not inclined to ask for help. These conditions can become fertile ground for the seeds of depression.

But there are a number of other factors that can contribute to teen depression. Let us consider just a few.

Depression and Loss

Depression sometimes follows a profound loss—perhaps the death of a loved one or the loss of a parent through divorce. Even the death of a pet can plunge a teen into despair.

There are also less obvious types of loss. For example, moving to a new neighborhood means leaving behind familiar surroundings and beloved friends. Even achieving a much-anticipated goal—such as graduating from school—can trigger feelings of loss. After all, embarking on a new phase of life implies losing the comfort and security of the past. Then there are youths who

Family tension is often a catalyst for depression

must endure some type of chronic illness. In such a circumstance, the pain of being different from one's peers—perhaps even being ignored by them—can make a teen feel as if he or she has lost a degree of normality.

Granted, many youngsters face such losses without becoming entirely overwhelmed. They get sad, they cry, they grieve, they mourn—but in time they adjust. Why is it, though, that while most teens take on the pressures of life with resiliency, others succumb to the throes of depression? There are no easy answers, for depression is a complex disorder. But some teens might be more vulnerable.

The Biochemical Connection

Many mental-health professionals believe that a biochemical imbalance in the brain plays a key role in depression.* The imbalance may be passed on genetically, for researchers have found that teens with a parent who suffers from depression are more likely to develop the condition themselves. "Depressed children more often than not have at least one parent who also suffers from depression," says the book *Lonely, Sad and Angry*.

This raises the question, Do children truly *inherit* depression, or do they simply *learn to* be depressed from living with an afflicted parent? The 'nature versus nurture question' is difficult to answer, for the brain is incredibly complex, as are the many other factors that may contribute to teen depression.

Depression and Family Environment

Depression has been called a family affair, and for good reason. As already noted, there may be a genetic component that passes on a tendency toward depression from one gen-

* Some suspect that while many sufferers are born with the imbalance, others start out healthy but become more susceptible to depression when a traumatic event alters brain chemistry.

eration to the next. But family environment might also play a part. "Children whose parents abuse them are at great risk for depression," writes Dr. Mark S. Gold. "So are kids whose parents are overly critical and who focus on their child's inadequacies." Depression can also result when parents are smothering and overprotective. Interestingly, however, one researcher found that children are even *more* prone to depression when parents simply show a lack of interest in them.

This does *not* mean, however, that all depressed teens are victims of bad parenting. Such a sweeping assertion would ignore the host of other factors that can contribute to the problem. Still, in some cases family environment is a crucial part of the equation. "Children living in homes in which there is persistent tension between the parents are at higher risk for depression than children in less troubled environments," writes Dr. David G. Fassler. "One reason is that the battling parents get so involved in their disputes that they neglect the needs of their kids. Another is that the parents often make children the focus of their arguments, which can make the youngsters feel guilty, angry, and resentful."

These are just some of the factors that can contribute to teen depression. There are others. For example, some experts say that environmental factors (such as poor nutrition, toxins, and substance abuse) can induce depression. Others point out that certain medications (such as some antihistamines and tranquilizers) can have a bearing. It seems, too, that children with learning disabilities are especially prone to depression, possibly because their self-esteem tends to wane as they realize that they cannot keep up with their classmates.

Regardless of the cause, however, it is vital to consider the question, How can depressed teens be helped?

How You Can Help

"Depressed kids need help. But kids

can't get that help on their own.

An adult first has to recognize the problem and take it seriously. That's the hard part."—Dr. Mark S. Gold.

the condition persists and seems to be more than a temporary slump, it might be best to consult a doctor. In this regard, it is good to keep in mind Jesus' words: "Persons in health do not need a physician, but the ailing do."—Matthew 9:12.

Openly provide your physician with any helpful information you can, including recent changes in the teen's life that might be contributing to his or her listlessness. Make sure that the doctor spends enough time listening to the symptoms before making a diagnosis. "It's impossible to gather all the information necessary to fully evaluate a child in a single, twenty-minute session," warns Dr. David G. Fassler.

Freely ask the physician any questions that you may have. For instance, if the doctor feels that your teen is clinically depressed, you might want to ask why he ruled out other diagnoses. If

* Reportedly, some medical conditions—including mononucleosis, diabetes, anemia, hypothyroidism, and hypoglycemia—can produce depressionlike symptoms.



Strive to show fellow feeling

If a teen's depressed mood persists, it is wise to consult a physician

you have doubts about the doctor's evaluation, tell him you would like to get a second opinion. Surely, no upright and sincere doctor would dissuade you from doing so.

Coming to Terms

If your teen is clinically depressed, do not be ashamed of the situation. The fact is, depression can overtake the finest of young people. Indeed, the Bible shows that painful emotions have afflicted some who strove their best to serve God, regardless of their age. Consider faithful Job, who felt abandoned by God and therefore expressed a loathing for life. (Job 10:1; 29:2, 4, 5) Hannah was a servant of God who became so "bitter of soul" that she could not eat. (1 Samuel 1:4-10) Then there was the godly man Jacob, who mourned for many days after the death of his son and 'refused to take comfort.' Why, Jacob even expressed the desire to join his son in the grave! (Genesis 37:33-35) Hence, emotional distress is not always rooted in some spiritual flaw.

Nevertheless, depression in a teen can exact a heavy toll on parents.

"I walk an emotional tightrope," says the mother of one depressed teen. "I'm concerned, scared, hostile, angry and exhausted." Another admits: "I would go out and see a mother shopping with her teenage daughter and my heart would break because I felt



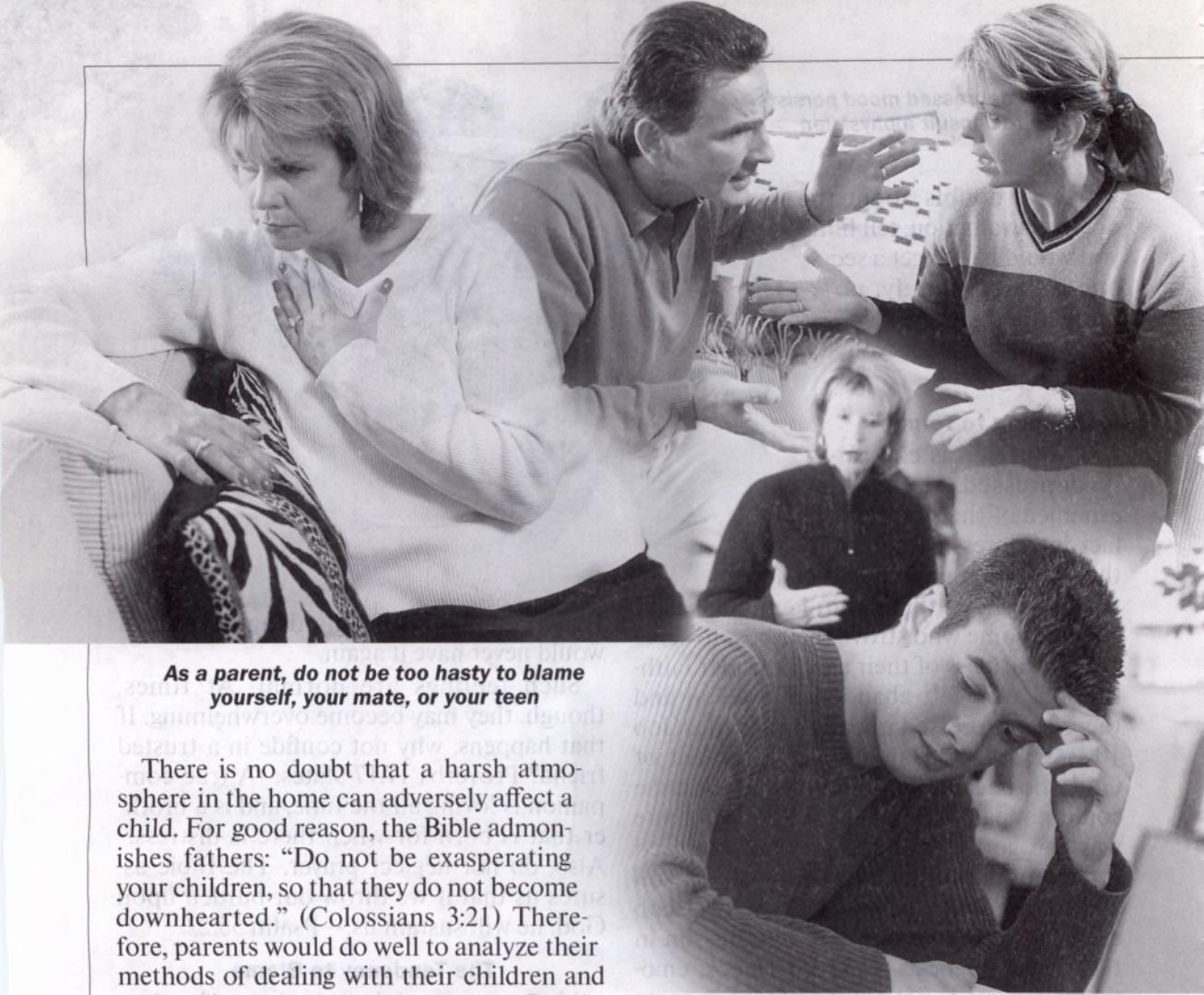
I had lost that with [my daughter] and I would never have it again."

Such feelings are normal. At times, though, they may become overwhelming. If that happens, why not confide in a trusted friend? Proverbs 17:17 states: "A true companion is loving all the time, and is a brother that is born for when there is distress." Also, do not neglect prayer. The Bible assures us that if we throw our burden upon God, he will sustain us.—Psalm 55:22.

The Tendency to Blame

Many parents of depressed teens become intensely discouraged and feel that they are somehow to blame for the situation. "When your child is depressed," admits one parent, "you do feel guilty and no one can tell you any different. You keep wondering, 'Where did we go wrong? Where was the turning point? How did I contribute to this?'" How can parents keep their thinking balanced in this regard?

**A person who
is genuinely
depressed really
hurts. The pain
is not imagined**



As a parent, do not be too hasty to blame yourself, your mate, or your teen

There is no doubt that a harsh atmosphere in the home can adversely affect a child. For good reason, the Bible admonishes fathers: "Do not be exasperating your children, so that they do not become downhearted." (Colossians 3:21) Therefore, parents would do well to analyze their methods of dealing with their children and make adjustments where necessary. But depression is not always the result of poor parenting. Indeed, the disorder can be found in the most loving of homes. Hence, parents who are doing all they can to help their children need not feel guilty.

It is equally important not to blame the depressed teen. After all, he or she likely has little control over the disorder. "I would never blame him for having chicken pox or pneumonia," says one mother. "But with depression," she admits, "that's what I did. I blamed my child for getting sick—which makes me feel awful." Viewing depression

as a sickness rather than a weakness will help parents and others focus on how they can support the sufferer.

Raising a depressed teen can put a palpable strain on the relationship between the parents. "We blamed each other," says one wife, "especially when we thought about the life we had expected to have and the life that we did have because of our son." Tim, whose daughter suffers from depression, admits: "It's easy to blame your mate. If parents have marital problems before the child starts showing signs of depression, the

IF YOU ARE A DEPRESSED TEEN

You are not alone, and your situation is by no means hopeless. Your depression may be linked to either (1) a biochemical imbalance or (2) circumstances in life over which you have little or no control. Either way, *you are not to blame* for your condition. Still, what can you do about it?

The Bible states that "there exists a friend sticking closer than a brother." (Proverbs 18:24) Why not find such a friend and pour out your feelings to that one? One of your parents or another mature adult can be

your greatest ally in the fight against depression.

If your parents suspect that you are suffering from clinical depression, they may take you to a physician who is experienced in treating the disorder. This is a wise step, for often depression can be greatly relieved with treatment, where this is available. For example, when a chemical imbalance is involved, an antidepressant might be prescribed. If this is true in your case, do not feel ashamed of taking medication. It simply restores your body

chemistry to its proper balance, and this can be the key to helping you regain a measure of joy and stability in your life.

Many sufferers of depression have gained comfort by reading the Bible and by drawing closer to God through prayer. The Bible assures us: "Jehovah is near to those that are broken at heart; and those who are crushed in spirit he saves."*—Psalm 34:18.

* For more information, see the article "Young People Ask . . . Should I Tell Someone That I'm Depressed?" which appeared in the October 22, 2000, issue of Awake!

child's puzzling behavior could be the last straw." Do not let a child's depression drive a wedge into your marriage! Really, little good is accomplished by pointing the finger—whether at yourself, your child, or your mate. The important thing is to provide support for the sufferer.

Providing Support

The Bible admonishes Christians: "Speak consolingly to the depressed souls." (1 Thessalonians 5:14) If the depressed youth is plagued with feelings of low self-worth, you can help. How? Certainly not by making judgmental statements like, "You shouldn't feel that way" or, "That's the wrong attitude to have." Instead, strive to be empathetic by showing "fellow feeling." (1 Peter 3:8) Paul admonished Christians to "weep with people who weep." (Romans 12:15) Remember, a person who is genuinely depressed really hurts. The pain is not imagined, nor is it

feigned simply to elicit attention. After listening, try to draw out the sufferer. Ask why he or she feels that way. Then, gently and patiently help the teen to see why such a low assessment of himself or herself is not warranted. Reassurance of God's love and mercy may help to alleviate the sufferer's anxieties.—1 Peter 5:6, 7.

There may be further practical steps you can take. For instance, you may need to make sure that your depressed teen is getting a proper amount of rest, nutrition, and exercise. (Ecclesiastes 4:6) If medication is prescribed, it would be wise to help the teen see the importance of taking it. Never give up in providing support, and never let up in showing love.

Admittedly, depression in a teen can be a harrowing experience, for the sufferer and for the rest of the family. In the end, patience, perseverance, and love will provide a foundation for helping depressed teens.

HELP AND HOPE FOR SUFFERERS

Since depression is a complex subject, not all aspects of the matter could be considered in this brief series of articles. Nevertheless, the publishers of *Awake!* are confident that the points presented can help teens and their parents to endure this debilitating disorder.

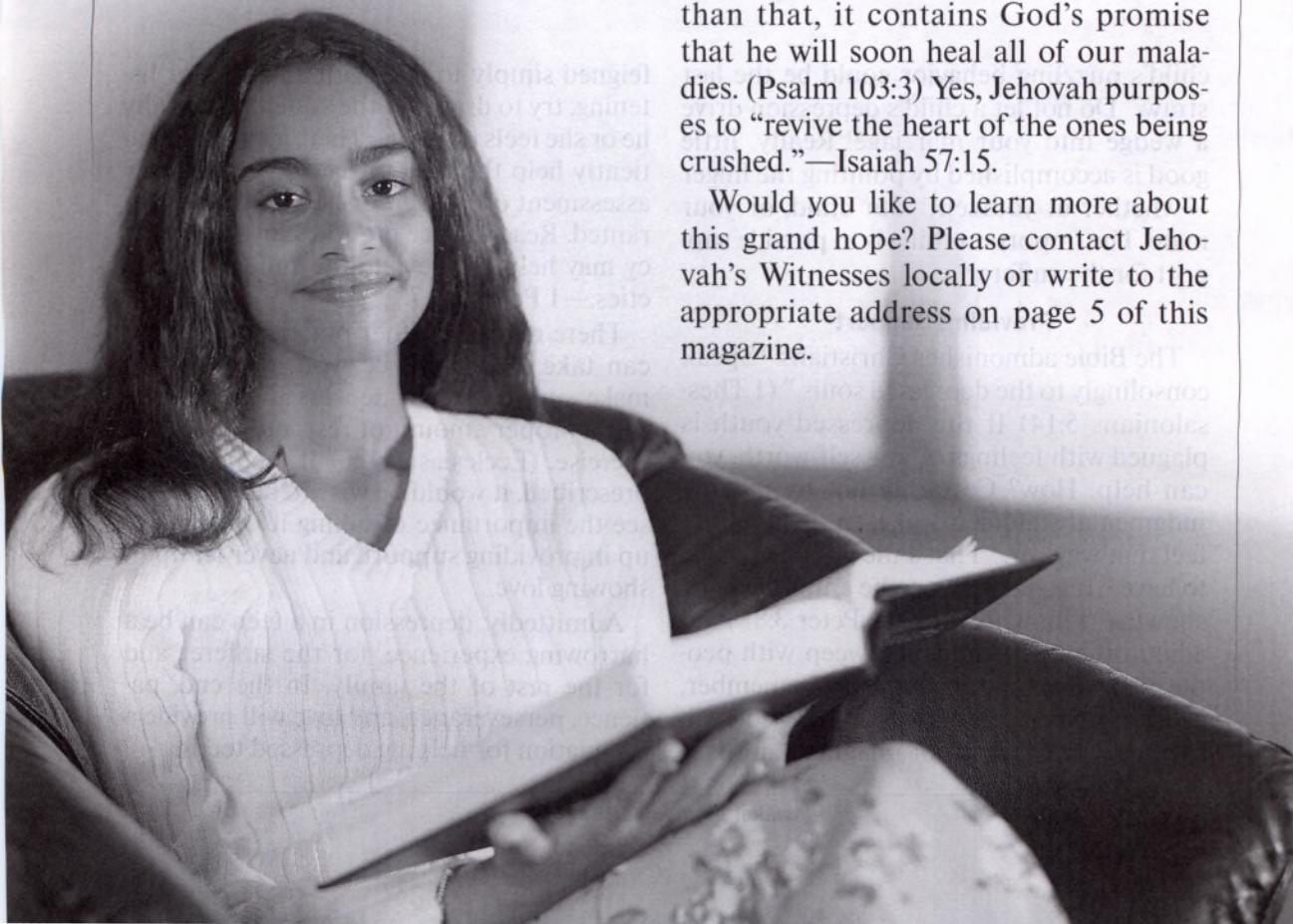
You may have noted that much of the guidance in the preceding article was based on the Bible. Granted, it is an ancient book. Yet, its counsel is as practical today as it was when it was penned. Why? Because although times have changed, human nature has not. We are

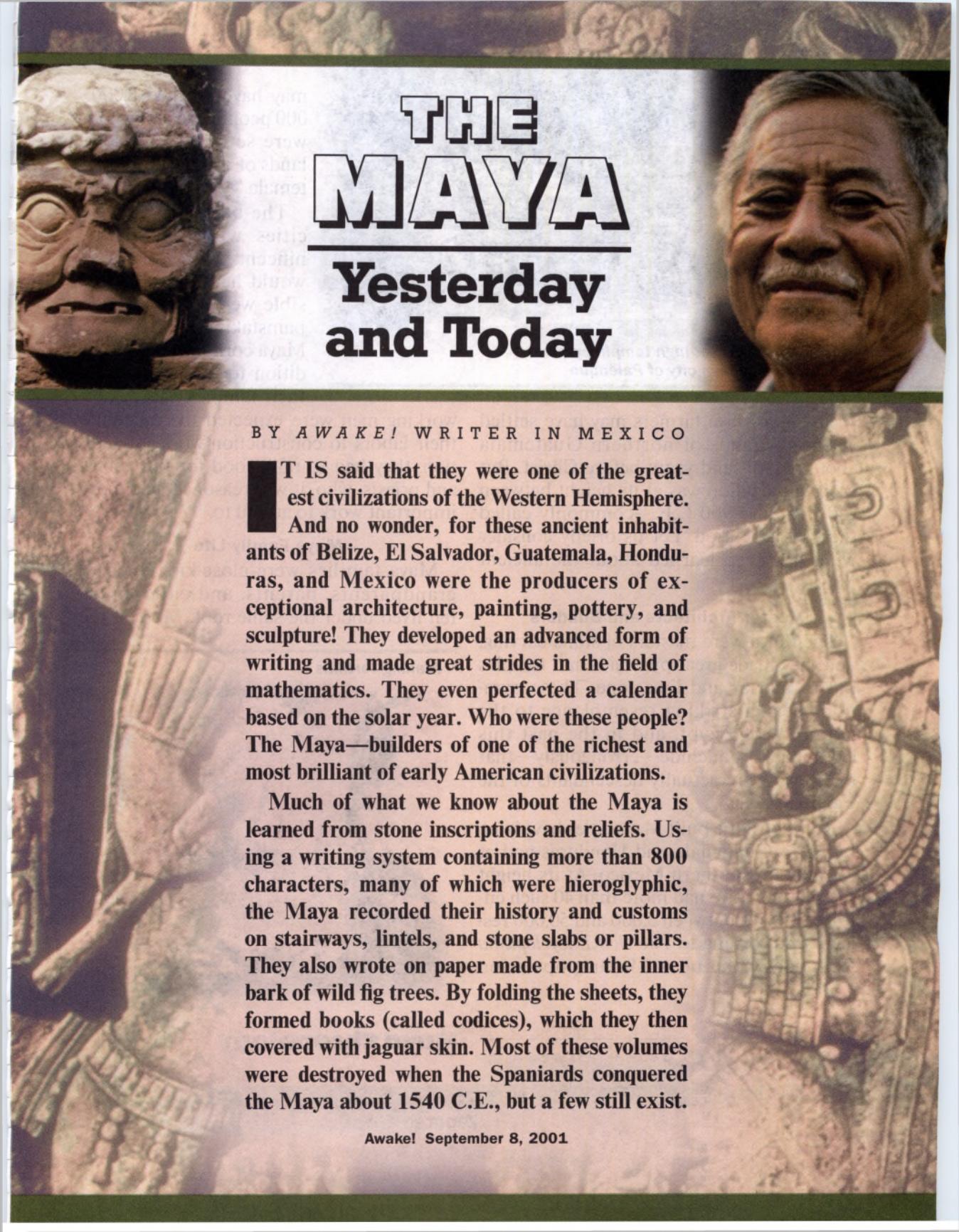
confronted with the same basic issues that faced previous generations. The difference is that today these problems are greater and more far-reaching.

There is another reason, though, why the Bible is highly practical: It is inspired by God. (2 Timothy 3:16) As our Creator, he knows what we need in order to get the most out of life.

Of course, the Bible is not a medical textbook. Hence, it does not eliminate the need for us to seek appropriate treatment for sicknesses, such as depression. Still, the Bible contains principles that can help us to comfort sufferers. More than that, it contains God's promise that he will soon heal all of our maladies. (Psalm 103:3) Yes, Jehovah purposed to "revive the heart of the ones being crushed."—Isaiah 57:15.

Would you like to learn more about this grand hope? Please contact Jehovah's Witnesses locally or write to the appropriate address on page 5 of this magazine.





THE MAYA

Yesterday and Today

BY AWAKE! WRITER IN MEXICO

IT IS said that they were one of the greatest civilizations of the Western Hemisphere. And no wonder, for these ancient inhabitants of Belize, El Salvador, Guatemala, Honduras, and Mexico were the producers of exceptional architecture, painting, pottery, and sculpture! They developed an advanced form of writing and made great strides in the field of mathematics. They even perfected a calendar based on the solar year. Who were these people? The Maya—builders of one of the richest and most brilliant of early American civilizations.

Much of what we know about the Maya is learned from stone inscriptions and reliefs. Using a writing system containing more than 800 characters, many of which were hieroglyphic, the Maya recorded their history and customs on stairways, lintels, and stone slabs or pillars. They also wrote on paper made from the inner bark of wild fig trees. By folding the sheets, they formed books (called codices), which they then covered with jaguar skin. Most of these volumes were destroyed when the Spaniards conquered the Maya about 1540 C.E., but a few still exist.



Remains of a 75-foot-high temple pyramid in the ancient Maya city of Palenque

The first Maya farmers may have settled in the lowlands of northern Guatemala about a thousand years before Christ. But Maya civilization was at its height between 250 C.E. and 900 C.E.—commonly called the Classic Period. Let us briefly consider what has been learned about the ancient Maya.

Master Architects and Builders

The Maya were masters of stone carving, and they made great pyramids and temples out of mortar and limestone. These pyramids bear a striking resemblance to the pyramids of Egypt, and in the past this led some to conclude—erroneously—that the Maya were actually descendants of the Egyptians.

Ruins of stone-built Maya cities have been found in Guatemala and Honduras and at Yucatán, in southern Mexico. At its height the Maya empire had more than 40 such cities, each with between 5,000 and 50,000 residents. According to *The New Encyclopædia Britannica*, “the peak Mayan population

may have reached 2,000,000 people, most of whom were settled in the lowlands of what is now Guatemala.”

The building of these cities with their magnificent stone structures would have been impossible were it not for the painstaking efforts of the Maya corn farmers. In addition to raising food for their families, these hard-

working men were expected to contribute their labors to construction work. In addition, they had to raise food for the nobles and priests, who, it was reasoned, had more important work to attend to.

Maya Family Life

Maya families were close-knit. Indeed, grandparents, parents, and children often lived under the same roof. Most of the

Making tortillas



▲ Map: Mountain High Maps® Copyright © 1997 Digital Wisdom, Inc. ▼

Maya Chronology

Olmec

1000 B.C.E.

500 B.C.E.

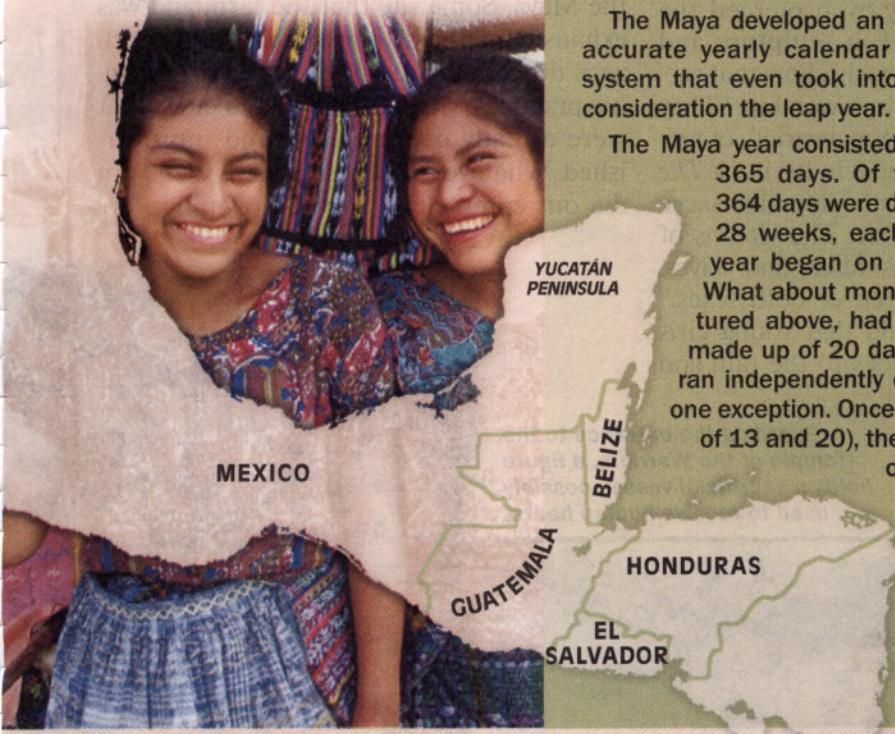
Zapotec

Teotihuacan

B.C.E. | C.E.

farm work was performed by the men and the older boys. Girls learned to cook, make clothes, and raise their younger siblings.

Maya farmers grew avocados, chili peppers, and sweet potatoes. But the principal food of the Maya was corn. The women and girls prepared it in a variety of ways. There was the flat cake, or what we know today as the tortilla. Even the alcoholic drink called balche had corn as one of its principal ingredients. It is estimated that today about 75 percent of Maya food contains corn in some form, and the proportion may have been even higher in past times.



A Multitude of Gods and Goddesses

Religion played a prominent role in the life of the Maya. They worshiped a multitude of deities, 160 of them being mentioned in one document. To name just a few, there was a creator god, a corn god, a rain god, and a sun-god. Women made pilgrimages to the temple of the goddess Ixchel on the island of Cozumel to pray for fertility or, if they were already pregnant, to plead for a successful birth.

The Maya Calendar

The Maya developed an accurate yearly calendar system that even took into consideration the leap year.

The Maya year consisted of 365 days. Of these, 364 days were divided into 28 weeks, each having 13 days. The new year began on the 365th day, on July 16. What about months? The Maya calendar, pictured above, had 18, and each of these was made up of 20 days. Thus, weeks and months ran independently of one another—that is, with one exception. Once every 260 days (the multiple of 13 and 20), the week and the month began on the same day. According to one reference work, “the Mayan calendar, although highly complex, was the most accurate known to man until the introduction of the Gregorian calendar.”

—Funk & Wagnalls New Encyclopedia.



500 C.E.

Toltec

1000 C.E.

Aztec

1500 C.E.

To the Maya, each day had religious importance, and each month on the Maya calendar had its own festival. Special ceremonies were also held in connection with the burial of the dead. After being painted red, corpses along with some of their personal belongings were wrapped in straw mats. Then they were buried under the floor of the house in which they had lived. It was somewhat different for the rulers, for they were laid to rest in the pyramids, underneath the temples. Their servants were killed and then buried with them, along with various utensils that the Maya believed would be useful in the next life.

As part of their religious observance, the Maya sometimes pierced the earlobes or the lower extremities. They even pierced the tongue. Scenes depicted in sculpture and murals and on pottery clearly show that sacrifice was also a part of Maya worship. "They frequently practiced it upon a variety of animals," writes Dr. Max Shein in his book *The Precolumbian Child*, "but the supreme sacrifice was that of human life. The victims of these rites were enemy soldiers and slaves, but also free-born children of both sexes." Some historians have said that young girls were once offered as brides to the rain god

by being thrown alive into a sacred pool at Chichén Itzá. If a girl survived until sundown, this was interpreted to mean that the rain god was content with the bride that had previously been offered. Hence, the girl would be pulled out of the water.

The Maya Today

After 900 C.E., says *The New Encyclopædia Britannica*, "the classical Mayan civilization declined precipitously, leaving the great cities and ceremonial centres vacant and overgrown with jungle vegetation." No one knows precisely what caused the demise of the Maya. Some say that the farmland was exhausted. Others suggest that food shortages drove peasants into destructive farming practices, while others fled to cities that were already overcrowded and impoverished. Whatever the cause, the Maya did not die out completely. Some two million are

Chichén Itzá

Kukulcán temple



Guarding the entrance to the Temple of the Warriors, a figure holds a sacrificial vessel, possibly used to receive human hearts



alive today, principally in the northern part of Yucatán and in Guatemala.

The predominant religion of the modern-day Maya is nominally Catholic, and the church has made great efforts to win the favor of the native population. For example, an Associated Press report states that "in 1992—the 500th anniversary of the Spanish conquest of Guatemala—the Guatemalan Catholic Church issued a public apology for abuses committed against the Indians during its evangelization of Guatemala."

But the acceptance of Catholicism does not mean that the Maya have abandoned the religion of their ancestors. On the contrary, many Catholic priests accept the blending of church practices and teachings with native rituals. For example, the Maya have long subscribed to animism, the belief that objects—whether animate or inanimate—contain a life force. This concept has been accepted by the church, though veiled in a cloak of Catholicism, causing some church leaders to wonder how much paganism the church can tolerate and yet still call itself Christian.*

The Maya and Jehovah's Witnesses

Jehovah's Witnesses are teaching the pure truths of the Bible in the lands where the Maya are prevalent. Many are responding favorably. Consider just two examples.

"I enjoyed honor and a certain prominence within the indigenous circle in which I grew up," says Caridad, "although that did not keep me from living a wasteful life characterized by drinking sprees." Like many of the Maya, Caridad practiced Catholicism combined with spirit-

* It is common to see the Maya cross themselves in Catholic fashion after walking miles to visit the shrine of San Simón, a wooden idol whose origin is unclear.

ism. "When I got sick," he says, "I would go to a witch doctor." Caridad's daughters began studying the Bible with Jehovah's Witnesses. "Little by little, I became interested," Caridad admits, "especially when I saw how the conduct of my daughters had changed. Soon I began studying too." The result? "The truth has helped me to know and love Jehovah," Caridad says. "I have abandoned all practices and customs that displease Jehovah, and I have been freed from fear and superstition."

Paula, a Maya from Guatemala, was grieved over the death of her two sons. "I would always put up altars for them," she relates. "I had a Bible that a Catholic nun gave me, and I read it for two hours each night to find the answer to my question, 'Where are my dead sons?'" Soon Paula began studying the Bible with Jehovah's Witnesses, and she immediately began attending their meetings. "They explained God's Word to me clearly," she states. "I am glad to know that God's Kingdom will take away sickness and death. I always think about the resurrection hope." (John 5:28, 29) Now Paula shares the good news of God's Kingdom with others. "There are many who still need help," she says.

Caridad with his wife and daughters



THE BIBLE'S VIEWPOINT

Did God Condone the Slave Trade?

DARK sweating bodies bent almost in two shuffle up gangplanks under the crushing burdens of enormous bales of cotton. Ruthless overseers drive them on with rawhide whips. Screaming children are torn from the arms of weeping mothers and sold to the highest bidder in auctions. These are likely the stark, brutal images that come to mind when you think of slavery.

Ironically, it is said that many slave traders and slave owners were deeply religious individuals. Historian James Walvin wrote: "There were hundreds of such men, Europeans and Americans, who praised the Lord for his blessing, giving thanks for profitable and safe business in Africa as they turned their

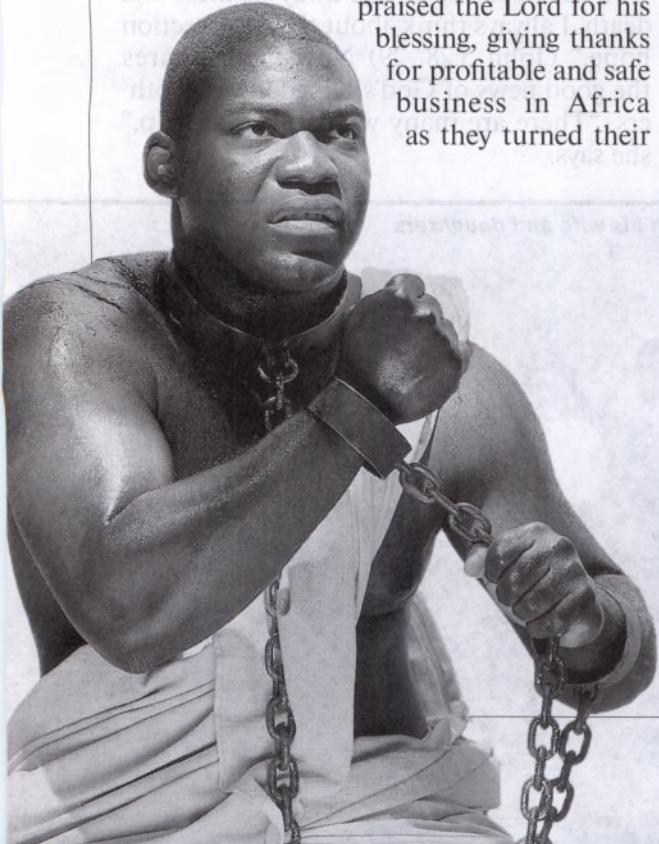
slave ships into the trade winds and headed for the New World."

Some people have even asserted that God condoned the slave trade. For example, in a speech to the General Conference of the Methodist Protestant Church in 1842, Alexander McCaine stated that the institution of slavery was "ordained by God Himself." Was McCaine correct? Did God approve of the kidnapping and raping of girls, the heartless separating of families, and the cruel beatings that were part and parcel of the slave trade of McCaine's day? And what of the millions who are forced to live and work as slaves under brutal conditions today? Does God condone such inhumane treatment?

Slavery and the Israelites

The Bible states that "man has dominated man to his injury." (Ecclesiastes 8:9) This is perhaps nowhere more evident than in the oppressive forms of slavery that have been devised by man. Jehovah God is not indifferent to the suffering that slavery has wrought.

For example, consider a situation that developed with the Israelites. The Bible tells us that the Egyptians "kept making their life bitter with hard slavery at clay mortar and bricks and with every form of slavery in the field, yes, every form of slavery of theirs in which they used them as slaves under tyranny." The Israelites "continued to sigh because of the slavery and to cry out in complaint, and their cry for help kept going up to the true God." Was Jehovah indifferent to their plight? On the contrary, "God



heard their groaning and God remembered his covenant with Abraham, Isaac and Jacob." Furthermore, Jehovah told his people: "I shall certainly bring you out from under the burdens of the Egyptians and deliver you from their slavery."—Exodus 1:14; 2:23, 24; 6:6-8.

Clearly, Jehovah did not approve of 'man dominating man' through abusive slavery. But did not God later allow slavery among his people? Yes, he did. However, the slavery that existed in Israel was vastly different from the tyrannical forms of slavery that have existed throughout history.

God's Law stated that kidnapping and selling a human was punishable by death. Furthermore, Jehovah provided guidelines to protect slaves. For example, a slave who was maimed by his master would be set free. If a slave died because his master beat him, the master could be punished with death. Women captives could become slaves, or they could be taken as wives. But they were not to be used for mere sexual gratification. The gist of the Law must have led right-hearted Israelites to treat slaves with respect and kindness, as if these were hired laborers.

—Exodus 20:10; 21:12, 16, 26, 27; Leviticus 22:10, 11; Deuteronomy 21:10-14.

Some Jews voluntarily became slaves to their fellow Jews in order to repay debts. This practice protected people from starvation and actually allowed many to recover from poverty. Furthermore, at key junctures in the Jewish calendar, slaves were to be released if they so desired.* (Exodus 21:2; Leviticus 25:10; Deuteronomy 15:12) Commenting on these laws regarding slaves, Jewish scholar Moses Mielziner stated that a "slave could never cease to be a *man*, he was looked upon as a *person* possessing certain

* The fact that provision was made to allow some to remain with their master clearly indicates that Israelite slavery was not abusive.

natural human rights, with which the master even could not with impunity interfere." What a stark contrast to the abusive systems of slavery that mar the annals of history!

Slavery and Christians

Slavery was part of the economic system of the Roman Empire, under which first-century Christians lived. Hence, some Christians were slaves, and others had slaves. (1 Corinthians 7:21, 22) But does this mean that disciples of Jesus were abusive slave owners? Hardly! Regardless of what Roman law permitted, we can be confident that Christians did not mistreat those under their authority. The apostle Paul even encouraged Philemon to treat his slave Onesimus, who had become a Christian, as "a brother."**—Philemon 10-17.

The Bible gives no indication that the enslavement of humans by other humans was part of God's original purpose for mankind. Furthermore, no Bible prophecies allude to humans owning fellow humans through slavery in God's new world. Rather, in that coming Paradise, righteous ones "will actually sit, each one under his vine and under his fig tree, and there will be no one making them tremble."—Micah 4:4.

Clearly, the Bible does not condone the ill-treatment of others in any form. On the contrary, it encourages respect and equality among men. (Acts 10:34, 35) It exhorts humans to treat others the way that they would like to be treated. (Luke 6:31) Moreover, the Bible encourages Christians humbly to view others as superior, regardless of their social standing. (Philippians 2:3) These principles are totally incongruous with abusive forms of slavery practiced by many nations, especially in recent centuries.

* Similarly, some Christians today are employers; others are employees. Just as a Christian employer would not abuse those working under him, disciples of Jesus in the first century would have treated servants according to Christian principles.—Matthew 7:12.

A HARD WORKER With a SOFT TOUCH

BY MEANS of it, pianos produce music, jets produce sonic booms, watches tick, motors hum, skyscrapers reach the sky, and suspension bridges stay suspended. What is it?

It is steel. Steel is at the heart of large-scale construction. Colossal ships made of it traverse the seven seas. Pipelines made of it bring oil and gas hundreds of miles from distant wells. But this versatile substance is woven far more deeply into the fabric of daily living. Consider, for example, the steel-belted tires on the bus you take to work or the steel rope that lifts and lowers the elevator in your apartment building. What about the steel hinges of your eyeglasses and the steel spoon with which you stir your cup of tea? Thousands of uses exist for this durable yet delicate metal. How is it made, and what makes it so useful?

Carbon and Crystals

Steel is an alloy, or a mixture, of two unlikely collaborators—iron and carbon. Pure iron is soft, as metals go, and is therefore unsuited for harsh applications. Carbon is nonmetallic. Diamonds and chimney soot are simply different forms of this particular element. But if a small amount of carbon is mixed with molten iron, the result is a material very different from carbon and far stronger than iron.

The key to steelmaking is something called a crystal. Did you know that iron is composed of crystals?* Actually, all solid metals are, and

it is this crystalline makeup that gives them workability, luster, and other traits. But iron crystals go a step further.

The Effect on Steel

When steel is being made, molten iron is mixed with other elements. As this mixture solidifies, iron dissolves the other materials, in effect absorbing them and holding them inside its crystal structures. Other metals behave the same way. What is so special about iron?

Iron is unusual because its crystal structure can be changed with heat while it is still a solid. This characteristic allows iron crystals to be changed from a relatively closed form to a more open form and then back again. Imagine a well-built house in which the walls move sideways and the floor up and down while you sit in the living room. Something like that happens inside iron crystals when the metal is brought to a high temperature without being melted and is then cooled.

If carbon is present when these changes occur, a hard alloy can become soft or a soft one hard. Steel producers take advantage of this and adjust the hardness of their product with heat treatments like quenching, tempering, and annealing.* But there is more.

When other elements—such as manganese, molybdenum, nickel, vanadium, silicon, lead, chromium, boron, tungsten, or sulfur—are mixed in, steel becomes not just hard or soft

* A crystal is a unit of an element or a compound in its solid state that has a regularly repeating arrangement of atoms.

* Quenching is rapid cooling from high temperatures. Tempering and annealing involve gradual cooling.



but strong, tough, ductile, corrosion resistant, machinable, flexible, magnetic, nonmagnetic—and the list goes on. Just as a baker adjusts his ingredients and oven settings to make different kinds of bread, metal producers vary alloys and heat treatments to make thousands of different steels unmatched in versatility. Steel rails safely carry 12,000-ton freight trains, and yet steel bearings the size of a pinhead support a watch's balance wheel.

Steelmaking—Old and New

Centuries ago metalworkers formed iron into utensils and weapons. They discovered that smelted iron (iron separated from mineral-bearing rocks called ore) had impurities that gave the metal strength and hardness. They also learned that quenching an iron tool in water made it even harder. Today huge furnaces have replaced the blacksmith's hearth; and gigantic rolling mills, his hammer and anvil. But modern processors follow the same basic steps as did the brawny forgers of old. They (1) melt iron, (2) mix in alloying materials, (3) let the steel cool, and (4) form and heat-treat it.

Note the quantities in the adjacent box. Impressive as they are, a steel mill can devour all of that in a single day. The plant covers a vast area, on which stand mountains of the minerals that feed its insatiable appetite.

A Marvelous Metal Takes Many Forms

The usefulness of steel shows up in many out-of-the-way places. You will find some under the lid of a grand piano. The wire there, one of the strongest steels made, produces

beautiful music. Hadfield manganese steel is used in making giant rock crushers, and the harder it works smashing boulders, the tougher the steel gets. Stainless steel is formed into surgeon's scalpels, wine vats, and ice cream machines. Like the hairs on your head, the uses of steel are more than you care to count.

Each year, almost 800,000,000 tons of steel are produced throughout the world. Not an ounce of it would exist without iron, which just happens to be one of the most plentiful elements on earth. Since coal and limestone are also in good supply, it appears that steel will be available well into the future.

So the next time you sew with a metal needle or cast a hook with a rod and reel, or the next time you use an adjustable wrench or open the gate on a chain link fence, or the next time you travel in an automobile or plow straight furrows in a field, think of the extraordinary blend of iron and carbon that makes it possible.

Materials required to make 10,000 tons of steel

6,500 tons of coal
13,000 tons of ore
2,000 tons of limestone
2,500 tons of steel scrap
400,000,000 gallons of water
80,000 tons of air

HOW STEEL IS MADE

Some details are omitted for visual simplicity

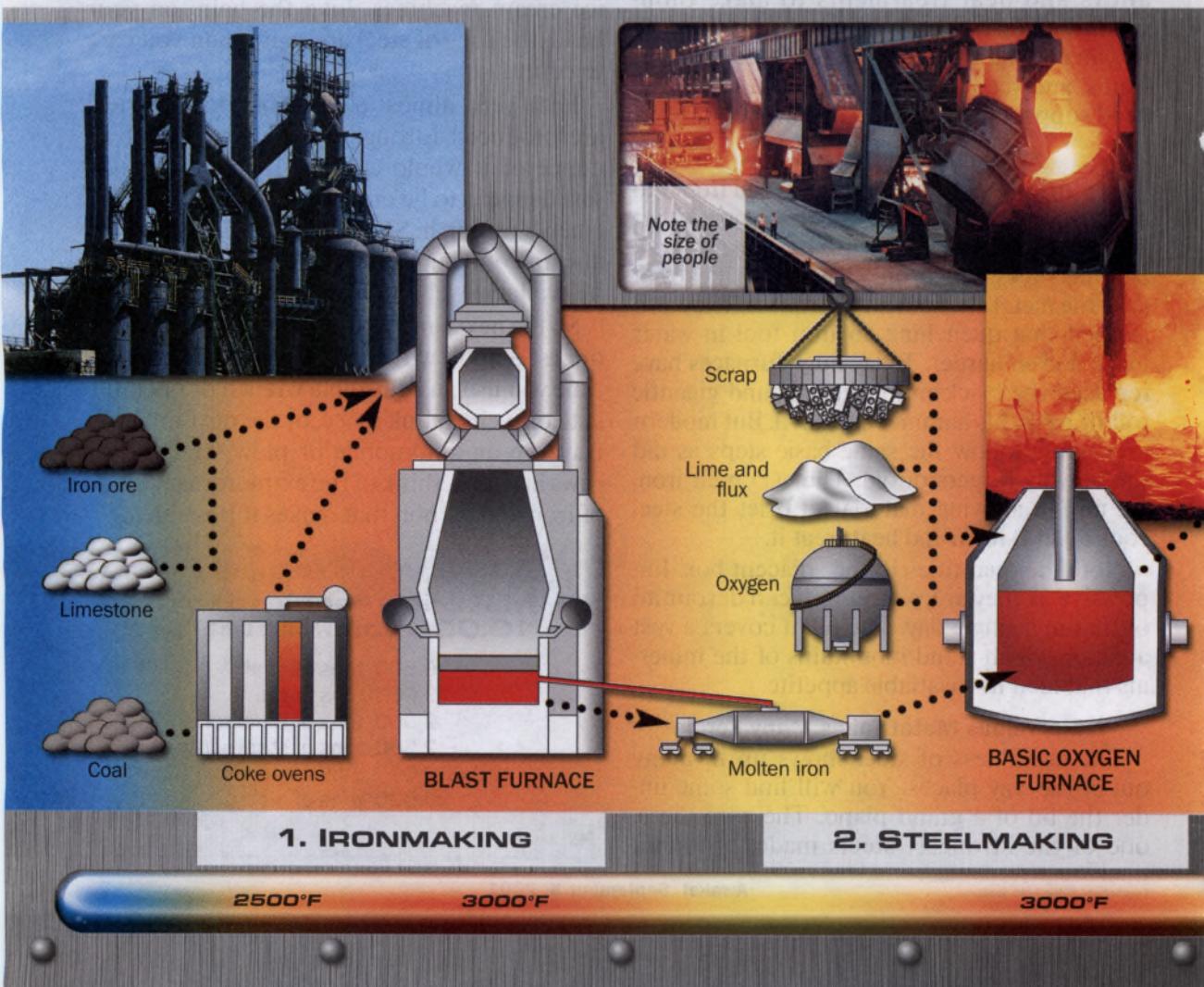
Steelmaking requires heat. With a thermometer as our signpost, let's follow the road to finished steel.

■ **2500°F.** Huge ovens are baking coal in airtight chambers, vaporizing undesired matter without consuming the pieces. The resulting sooty chunks are called coke, which supplies heat and carbon needed further along the line.

■ **3000°F.** Coke, iron ore, and limestone cascade into a blast furnace and meet a wall of flame and superheated air. The coke burns,

and in the blistering heat, unwanted material in the ore combines with the limestone, forming a by-product called slag. The materials liquefy and settle to the bottom of the furnace. The slag, floating on the iron, is drawn off in a container for removal. The liquid iron flows into bottle cars that roll their scalding cargo to the next station.

■ **3000°F.** Ninety tons of carefully sorted scrap metal are dumped into a 30-foot-tall pear-shaped vessel known as the basic oxygen fur-

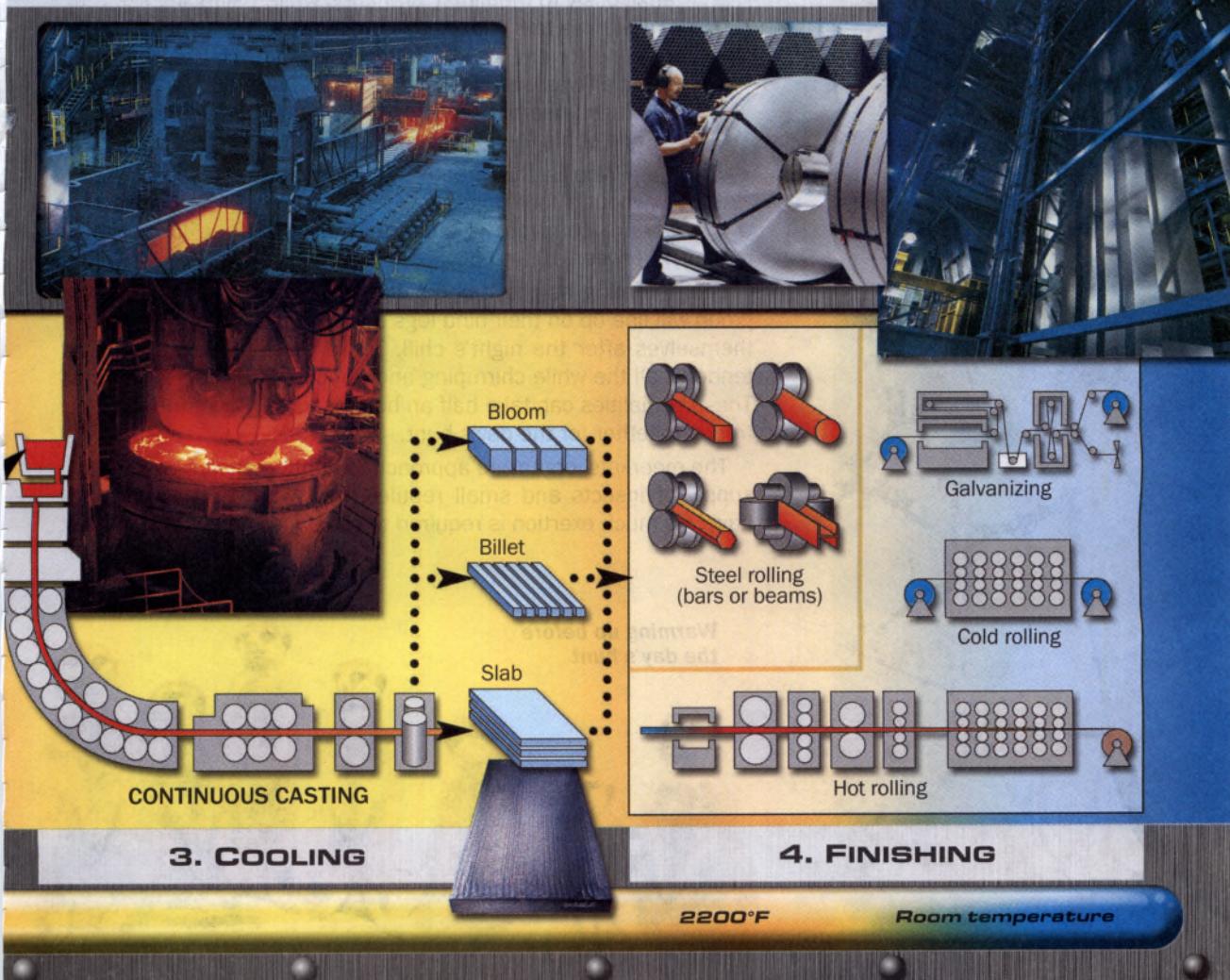


nace. A huge ladle pours searing fluid iron onto the scrap metal, igniting a burst of sparks as a water-cooled tube called a lance is lowered into the vessel. From the lance roars a supersonic jet of pure oxygen, which soon has the metal boiling like soup on a hot stove. Chemical reactions take place. In less than an hour, the furnace has done its job, and a 300-ton batch of liquid steel, called a heat, pours into transport ladles. Alloys are added. The fiery flow surges into casting machines. The steel begins to take shape.

■ 2200°F. Red-hot steel is squeezed ever tighter between rollers until the desired thickness is attained. This grueling workout makes the metal hard, so hard that it resists further forming.

■ Room temperature. The steel has been cast, cut, hot-rolled, cold-rolled, and even pickled (cleaned in an acid bath). It has been re-heated time and again. Finally, the thermometer drops for good. The liquid steel, or heat, has become stacks of sheet steel. A metal shop soon shapes it into ductwork for an office complex.

Since the major parts of a steel mill are made of that same metal, why don't they melt while they are doing their work? The inside surfaces of furnaces, bottle cars and ladles are lined with bricks made of a refractory, or heat-resisting, material. A three-foot-thick lining of this protects the basic oxygen furnace. But those bricks also suffer from the outrageous heat and must be replaced regularly.



Those Entertaining Little Hunters

*The sentry
on duty*



Routing the enemy

All photos: © Nigel J. Dennis

BY AWAKE! WRITER IN SOUTH AFRICA

THERE he stood on his hind legs in the scorching sun, clinging tenaciously to the flimsy branches while balancing like a tripod with his tail. With intense concentration, he scanned the sky and ground for any sign of danger. His companions were reassured that all was well by his periodic little *brrp* and *peep* as they foraged nearby. He would remain on duty until relieved by one of his friends—even if it took another hour!

Who is this creature? The meerkat. Measuring only about a foot from its nose to the tip of its tail, this miniature carnivore is quite sociable and lives in close-knit teams of between 10 and 30.

Each morning as the meerkats emerge from their burrow, the group will line up on their hind legs and face the rising sun to warm themselves after the night's chill. There they groom one another tenderly, all the while chirruping and peeping in a friendly manner. These genialities can take half an hour or more. Soon, though, they trot off together for the day's hunt.

The meerkats' organized approach to hunting ensures a constant supply of insects and small reptiles. And what an appetite they have! So much exertion is required to satisfy it that by midday most

*Warming up before
the day's hunt*



of them will take a nap in the shade of a bush or tree, some digging out a heap of cool sand to sprawl on.

But why the need for a sentry? Because these hunters are also choice prey. As the meerkat energetically digs through the hard ground—on occasion moving several times its own weight for just one grub—it is a tempting target for watchful jackals or birds of prey.

What if the sentry senses danger? His sudden strangled cry brings immediate response—a mad dash for the nearest hole. However, if the sentry's warning cry signals the approach of a rival team of meerkats, the home team will not bolt. Instead, they will stand together, hunchbacked and bristling, tails erect like antennae. The group will chitter as they advance toward the intruders, some of them jumping up and down stiff-leggedly as if engaged in a war dance. This united front is frequently enough to rout the rivals.

A Cooperative Effort

Meerkats often cooperate with one another. This is especially evident in the way they look after their kittens. In the first couple of weeks after their birth, these newcomers are the center of attention. The rest of the clan constantly visit the mother and offspring. And what a welcome is given when she brings them out of the burrow for the first time! The whole clan comes to nibble her neck affectionately, squealing with delight, and to rub tenderly against the newcomers.

For a few weeks, the whole team will help to care for the little ones. Most will eagerly take turns baby-sitting while the rest go hunting. Some females who have no kittens of their own will spontaneously produce milk in order to share the nursing duties—thus reducing the stress on the mother. All this diligence leaves little time for the baby-sitter to forage. As a result, some have lost 10 percent of their weight while helping to care for a litter!

When the kittens are old enough to leave the burrow and join in the daily hunt, willing adults take turns patiently teaching each youngster the art of hunting. Often, the choice catch is surrendered to youngsters, even if it means that the adults go a little hungry that day. If a sentry's warning cry signals the meerkats to scurry

to their holes, at least one of them will make quite sure that the kittens get there safely too.

Well Worth Watching

Meerkats tame easily and are affectionate. "All in all," observes Maberly's *Mammals of Southern Africa*, "these interesting little animals must certainly be amongst the most appealing, charming and endearing mammals in southern Africa and are always well worth spending some time watching."

Alain, who has filmed meerkats for years, agrees. He recalls the occasion when a female came out of the burrow carrying her four-day-old baby in her mouth and, whimpering at him, laid it at his feet. He thought it was dead. "But when I picked it up gently," he said, "I realised it was alive, and she simply wanted to introduce it to me first, before the other meerkats rushed over to congratulate her. I was so overcome I never even thought of taking pictures."

Sylvie, who has also observed meerkats in the wild for years, fondly remembers the early morning that she was prone on the ground next to the burrow when the meerkats emerged. They lined up in their usual manner a few inches from her and began their ritual of grooming and cuddling. When she spoke to them, they chirruped in reply. Sylvie gently raised her finger toward the first one, a female, and started caressing her—right up to her ear. She wriggled with pleasure and began to groom the next one in line. "I am accepted in their cuddling ceremony," exclaimed Sylvie. "What a privilege!"

Many are the anecdotes of those who have spent time with meerkats. Truly, these are entertaining little hunters!

IN OUR NEXT ISSUE

Can We Grow Enough Food?

How Can I Stop Worrying So Much?

Leif Eriksson—Discoverer of America?

WATCHING THE WORLD

Taiwan Grants Amnesty to "Prisoners of Conscience"

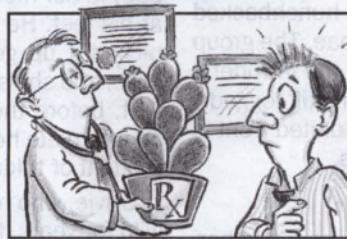
"President Chen Shui-bian [of Taiwan] pardoned 21 convicts . . . , including 19 'prisoners of conscience' who were jailed for resisting conscription," reports *The China Post*. "The pardon, effective on International Human Rights Day [December 10, 2000], will clear the names of 19 Jehovah's Witnesses, convicted for refusing to take the mandatory military service for religious reasons." Of the 19, 14 had already been released on parole. The special pardon was the first in ten years. Attorney Nigel Li, whose law firm handled the case for the Witnesses, stated: "I was moved and touched by the Witnesses and their peace-seeking mission. . . . Their choice for peace reflects a high human value. It requires that we give them special respect."

"Overpopulation" a Myth?

"Amazing as it may seem, the entire population of the world can be housed in the U.S. state of Texas," reports *Vitality* magazine. According to the article, the current United Nations estimate of the world's population is about six billion people, and Texas has a land area of some 262,000 square miles. The amount of living space per person would therefore be more than 1,217 square feet. "A family of 5 would thus occupy more than 6,085

square feet of living space. Even in Texas, that's a mansion," says *Vitality*. "Meanwhile, the rest of the world would be completely empty, available for all of mankind's agricultural, manufacturing, educational, and recreational activities!"

The Versatile Nopal —A Boon to Diabetics?



Many people think of the nopal as just another desert plant that grows in the wild. However, as reported in *The News* of Mexico City, the versatile nopal may be of special interest to diabetics. Why? Scientists have found that foods prepared with flour made from dehydrated nopal can be consumed by diabetics without raising their blood-sugar levels. It seems that by strengthening the liver and pancreas, nopal increases the body's sensitivity to insulin.

Air Pollution Over the Indian Ocean

Large areas of the northern Indian Ocean suffer from an unexpectedly high level of air pollution, reports the newsletter *MorgenWelt Nachrichten*. Researchers from six countries found that during the

winter, monsoon winds carry soot, fly ash, organic particles, mineral dust, nitrates, and sulfates from southern and southeastern Asia to the Indian Ocean. From January through March 1999, a layer of haze, measuring nearly two miles high, covered an area of nearly four million square miles, which is greater than the landmass of Canada. "According to the scientists, the increasing levels of pollutants in Asia cause an extensive decline in the quality of the air, which has both regional and global impact," says the paper.

Chocolate—Good for Health?

Chocolate is said by some to be good for your health, states the newspaper *Nihon Keizai Shimbun* of Japan. Why? Because chocolate contains cocoa polyphenol, which helps to inhibit arteriosclerosis and cancer. Additionally, chocolate is said to be effective in balancing the immune system and helping the body to recover from stress. Professor Hiroshige Itakura of Ibaraki Christian University says: "High quality chocolate that uses plenty of cocoa beans and very little sugar and oil is the most effective." However, the professor also stressed the importance of eating "green and yellow vegetables and proteins containing the different kinds of polyphenol" that the body needs.

Life Expectancy

While futurists hope that life expectancy will rise to 100, it is difficult to increase it beyond 80. According to *The Globe and Mail* of Canada, experts say "no quantum leap in life expectancy can occur unless biomedical researchers find a way to modify the aging process and make it widely available at low cost. Until that happens, regardless of how many lifestyle improvements we make, how many vitamins we ingest and how many hormones we inject, the number will not change markedly." With regard to life expectancy, Canada was ranked 12th among 191 countries by the World Health Organization last year. The number of healthy years before sickness was calculated at 70 for men and 74 for women. In Japan, deemed to be the healthiest nation, a citizen can expect to live almost 75 illness-free years, the report states.

Graveyard of Giant Oysters

Over 500 fossilized giant oysters, some with a circumference of up to 11 feet and weighing up to 650 pounds, were found in Acostambo, Peru, at an elevation of 12,300 feet above sea level, reports the newspaper *El Comercio*. Paleontologist Arturo Vildozola found the oyster bed just a few meters from a highway that runs between the towns of Pampas and Colcabamba. Apparently, the oysters had not caught

anyone's attention in the past, despite being scattered on the ground for many years. This find of giant oysters reinforces the idea that at one time the ocean covered the Andes mountain range.

"New Car" Smell



Chemicals emanating from interior finishes in buildings can cause the health problems sometimes referred to in Japan as "sick-house syndrome." But high concentrations of toxic chemicals are also released by materials in new cars, reports the newspaper *The Daily Yomiuri*. In testing one new vehicle, researchers at the Osaka Prefectural Institute of Public Health found the concentration of harmful substances to be about 34 times the limit set for houses by the Health and Welfare Ministry. Even after a year of vehicle use, the chemical level remained above the provisional limit. Notes Iwao Uchiyama of the National Public Health Institute: "When one is in the close confines of an automobile for extended periods, it would be good to be careful." How? He comments: "If outside air is brought in, a car can be aired out more quickly than a house."

Teen Pregnancy in the United States

"The United States leads the developed world in teen pregnancy," says the magazine *U.S. News & World Report*. It is estimated that every year, one million teenagers in the United States become pregnant and that 25 percent of these will have a second child within two years of the first. The figures from 1997 show that Mississippi had the highest percentage of births to teenagers (20 percent), while Massachusetts had the lowest (7.2 percent). Overall, the highest teen pregnancy rates occurred in the so-called Bible Belt, located in the southern part of the United States.

Domestic Violence Against the Aged

"Property disputes are becoming a common cause of domestic violence against the aged," reports *O Estado de S. Paulo*. A study of complaints filed with police in São Paulo, Brazil, between 1991 and 1998 showed that relatives—children, grandchildren, their spouses, and others—were involved in 47 percent of the cases. "Physical and psychological violence usually result from an attempt to force the elderly one to transfer property or divide up his belongings among relatives while he is still alive," said prosecutor João Estêvão da Silva. Heartless abandonment in State hospitals and rest homes is also sometimes financially motivated. "Because of poverty, older ones become a burden, and this causes family tension," explained Silva.

FROM OUR READERS

Loveless Marriages My marriage had lost its sense of direction. It seemed that my husband and I did not love each other but only put up with each other. Sometimes I thought of getting a divorce. But thanks to the series "Can We Save Our Marriage?" (January 8, 2001), our love has been resurrected.

E. R., Spain

I am a Christian wife, but this past year my marriage has been miserable. Because my husband and I had hurt each other so very much, it seemed impossible to restore our relationship. But when I read these articles, it was as if Jehovah were saying, 'Don't give up!' I was motivated to take positive steps myself to rekindle the warm love we once had for each other. I have already begun sensing a response. I will read these articles over and over again.

N. H., Japan

I was recently baptized and have had opposition from my unbelieving wife. Your articles have helped me to see how I can turn my marriage around. They could not have come at a better time.

W. S., Australia

Since I have a happy marriage, I began reading these articles with the thought that they would be useful in helping others. But from its very first lines, the series contained practical points that could strengthen my own marriage bonds.

M. D., Italy

A Christian sister in my congregation told me that she had had a conflict with her unbelieving husband and that they had separated. Some time later she told me that things had become much better. She had "devoured" these articles, and they had greatly helped her to resolve the problem. She said that the com-

ments on communication were particularly useful. She and her husband are back together.

N. S., Canada

Ventriloquism I was confused by the article "Who's Talking?" (January 8, 2001) Isn't this the means Satan used to deceive Eve? Deception and trickery should not be part of a Christian's life.

B. H., United States

However Satan deceived Eve, it could not have been a true form of ventriloquism, since that skill involves specific breathing and vocalizing techniques and Satan is a spirit creature. There is no Scriptural objection to using ventriloquism as a form of entertainment. Naturally, it would be wrong to use such a skill to deceive someone maliciously or to promote spiritistic practices, as some may have done in Bible times. (Isaiah 8:19)—ED.

I too enjoy practicing the art of ventriloquism and have performed it at many Christian gatherings. As the article pointed out, the human ear is a very poor locator of the direction of sounds. Amazingly, though, you can't fool an animal in this regard. If I use my doll to talk to my dog, he will look, not at the doll, but at me. Jehovah gave animals very keen ears.

L. R., United States

Bald Dog I have a rule—I always read the articles in which I have the least interest first. Since I really do not like dogs, the first article I read in the January 8 issue was "Have You Met a Xoloitzcuintli?" By the time I finished reading the article, I almost wanted one of those dogs! Of course, I soon came to my senses. Anyway, I have to say that in 40 years of reading your magazines, I have never been disappointed. Often I end up enjoying the very articles I thought I would not like.

D. W., United States

A Young Girl With a Bright Hope

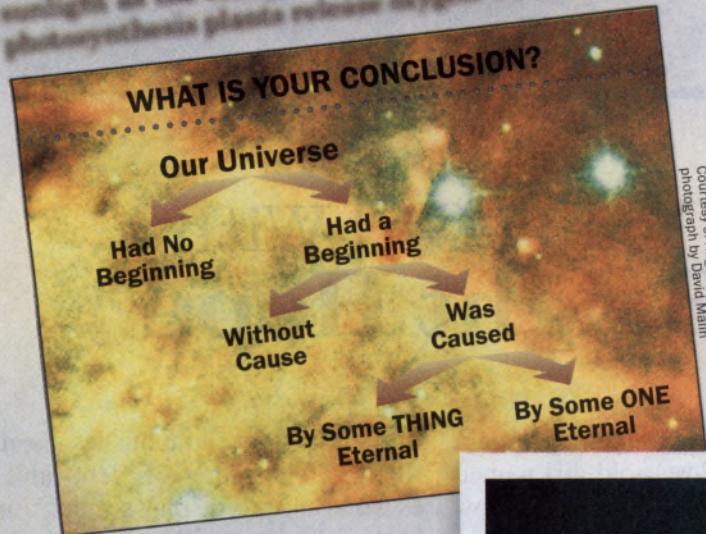
THE publishers of *Awake!* received a letter from a 12-year-old girl named Stephanie. "I want to tell you how much the publications have helped me in school," she wrote. "Recently, we were assigned a project with the theme 'Cultural Diversity.' My family and I went through the publications, cutting out text and pictures that fit the theme. Then I glued the items we found to a poster board." Stephanie's teacher instructed the class to choose which they felt were the best five projects. "The next day," Stephanie writes, "I found out that mine was in the top five."

One of the sources Stephanie chose was the October 22, 1998, *Awake!* with the cover title "Will All People Ever Love One Another?" As one of Jehovah's Witnesses, Stephanie firmly believes that people of diverse cultures *can* live together peacefully. Indeed, she is part of an international brotherhood in which former enemies—including Tutsi and Hutu, Germans and Russians, Armenians and Turks, Japanese and Americans—have been united by Bible truth. Together they strive to imitate their Creator. In what way? One of the Bible texts that Stephanie used in her project provides the answer: "God is not partial, but in every nation the man that fears

him and works righteousness is acceptable to him." (Acts 10:34, 35) Jehovah's Witnesses work hard to display similar impartiality in their dealings with others.

Stephanie looks forward to the fulfillment of the Bible's promise that soon God's Kingdom will bring righteous conditions to our earth. (Revelation 21:3, 4) In a world where many youths face the future with fear and uncertainty, she stands out as one who has a bright hope.





Courtesy of Anglo-Australian Observatory.
photograph by David Malin

"I Have Never Before Read Such a Book"

Young Łukasz, who lives near Szczecinek in northern Poland, was fascinated with the book *Is There a Creator Who Cares About You?* So he decided to take it to school and give it to his physics teacher. He drew her attention to information regarding the universe. He showed her the illustration on page 78 (reproduced here). It highlights alternatives concerning the origin of the universe, which you too can contemplate.

Later the teacher told Łukasz: "I have never before read such a book. It explains complex scientific information so briefly and in such a simple and logical way! If I had received the book earlier, I would



not have bought the newest manual on physics for the high school. I will certainly use it in my classes."

As a result of reading *Is There a Creator Who Cares About You?* many have been moved to think more deeply about the origin and the purpose of life as well as about how we got here. And, more important, many have been helped to reach informed conclusions.



Is There a
Creator
Who Cares About You?

"Pillars of Creation" on cover of book: J. Hester and P. Scowen (AZ State Univ.), NASA