

SEPTEMBER 8, 1981

Awake!



You Can Fight DEPRESSION!

FEATURE ARTICLES

Nearly everyone has periods when he feels "blue." But millions of persons suffer from more serious depression. What is responsible? If you suffer from such depression, is there anything that you personally can do to get relief? How can your family help? These articles take a fresh and positive look at the subject

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WHY THIS MAGAZINE IS PUBLISHED

"Awake!" is for the enlightenment of the entire family. 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 stays politically neutral and does not exalt one race above another. It also shows how to cope with today's problems. Most importantly, "Awake!" builds confidence in the Creator's promise of a peaceful and secure new order within our generation.

The Bible translation used in "Awake!" is the modern-language "New World Translation of the Holy Scriptures," unless otherwise indicated.

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Mental depression —"the power of the disease"



A MAN suffering from depression visited a doctor for help. The story goes that after a careful examination the doctor said: "You need amusement; go and hear the comedian Grimaldi; he will make you laugh, and that will be better for you than any drugs." Looking even more dejected, the man replied, "I am Grimaldi!"

Yes, no one is immune to depression! And anyone who has suffered from it knows that it is no laughing matter. We all go through periods when we feel emotionally low, perhaps because of grief, dis-

appointment or fatigue. But usually in a short time we bounce back. However, at times the depression lingers. It may even become destructive.

For instance, Irene battled for three years with this disorder said to cause "more suffering than any other disease." In a moment of total hopelessness she killed her children and then herself. In trying to explain what happened to this previously devoted mother, at her funeral a rabbi said: "It was the illness which overwhelmed her and her life." He then asked a bone-chilling question: "Who can comprehend the power of the disease?"

What she suffered was *major depression*—an unrelenting, destructive mood that also produces physical symptoms. Dr. Leonard Cammer reports:

"Depression can strike anyone—a housewife, cabdriver, businessman, schoolteacher, gambler, actress, bricklayer, saleswoman . . . and so on. And it appears in stable and mature persons, neurotics, and children. Moreover, it can occur at any level of the economic, social or intellectual scale, and in every kind of personality."—*"Up from Depression."*

Could it affect you or your loved ones? Estimates are that each year one out of 10 people will experience a clinically depressed mood. During today's "critical times hard to deal with," a World Health Organization survey found 200 million persons worldwide suffering from the "disease."—2 Tim. 3:1.

Though the vast majority of sufferers never go as far as Irene, many agree with one previous sufferer who explains how she felt before she found relief: "Nothing was enjoyable. I felt trapped in a terrible nightmare with no hope of change. I felt as if I was hanging on for dear life every minute of every day. I didn't want to die, but I didn't want to live under these conditions either."

What causes such suffering? Is it just in the mind?

Is it all in the mind?

THE medical doctor listened intently as the depressed woman described her symptoms—constant headaches, irritability, constipation, loss of appetite, insomnia and incessant tiredness. She would burst into tears and, at times, wanted to die. "It's all in your head," said the doctor. "Until you find yourself, there is nothing I can do. I strongly urge you to see a psychiatrist."

Though well meaning, this doctor reflected a common view. Yet, like this woman suffering major depression, many are crushed when someone tells them that their agony is a result solely of their own thinking. True, our thoughts can affect our body—for good or for bad. Yet there is

also increasing evidence that a sick body can affect our thinking processes.

But before considering this evidence we need to realize that the term "depression" covers a wide range of emotions (see box).

How Can You Tell?

"In the kind of depression that results from, let's say, the death of someone in the family, there is some relief from it," reported Dr. Nathan S. Kline, director, Rockland Research Institute Department of Mental Hygiene of New York State, in a recent interview with an *Awake!* staff

* Designations used in the box below are based, in part, on *Diagnostic & Statistical Manual of Mental Disorders* (3rd edition, 1980).

THE VARIED FACES OF DEPRESSION



Demoralization and Grief

A low feeling because of some upsetting event such as a death, divorce, loss of job, medical problems or other stressful situation.



Low-Grade Chronic Depression (Depressive Neurosis)

The "blues" continue. There is a general negative feeling and dissatisfaction. One feels fatigued and loses interest in family and friends. Often there are feelings of worthlessness, anxiety and anger.



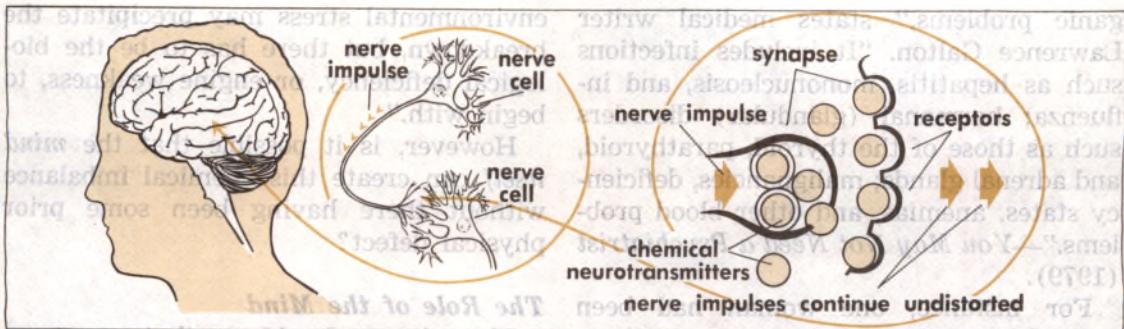
Major Depression

"You feel like you are in the pits of the earth," said one sufferer. There is no relief. Sleeping habits change; there is loss of appetite. The person feels full of guilt and may wish he were dead. Overwhelming feelings of dread, anxiety and lack of ability to concentrate. This may in some cases alternate with periods of normal behavior.

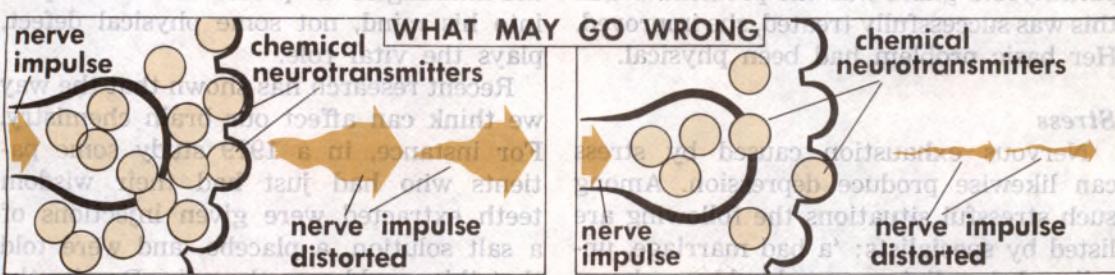


Manic Depression

Periods of high elation—wild spending sprees, working around the clock, constant action—followed by deep depression.



Our thoughts flow from one nerve cell to the next in the form of electrochemical impulses. A proper mood depends on their undistorted flow. The ends of the nerves do not touch. The nerve impulse stimulates the production of chemical neurotransmitters that bridge the gap and our thought continues undistorted. The chemical balance in this area called the synapse is vital.



An abundance of certain neurotransmitters distorts nerve impulse, causing overstimulation, perhaps producing mania.

Low levels of certain neurotransmitters distort nerve impulse, perhaps resulting in depression.

writer. "If there's a good meal, beautiful moon or something else, there's some relief. In major depression, there is no relief. You could win money or be elected president; it doesn't bring any particular pleasure. The future looks hopeless."

What are the symptoms of manic depression? Dr. Ronald Fieve, professor of Clinical Psychiatry at Columbia University College of Physicians and Surgeons, told *Awake!*: "There must be a history of the high that comes out of the blue. The person has an abnormal state of optimism where he is overactive, overtalkative, sleeping less and has an enormous amount of energy that he's never had

before. This sudden change may last from two weeks to usually one or two months. Then the person switches to a severe depression."

Many scientists now feel that specific chemical changes in the brain accompany some forms of severe depression and may bring it about. (The accompanying diagrams explain.) The process is complex and regarding it scientists disagree. But what can cause such a chemical mix-up? Many different factors.

The Disease/Depression Connection
Depression can stem from clear-cut—or, more accurately, clearly defined—or

ganic problems," states medical writer Lawrence Galton. "It includes infections such as hepatitis, mononucleosis, and influenza; hormonal (glandular) disorders such as those of the thyroid, parathyroid, and adrenal glands; malignancies, deficiency states, anemias, and other blood problems."—*You May Not Need a Psychiatrist* (1979).

For instance, one woman had been treated for 15 years for severe, sometimes suicidal, depression. She received antidepressant drugs and even electroshock therapy, but nothing gave her lasting relief. Finally, it was discovered that a diseased parathyroid gland was the problem. When this was successfully treated, she improved. Her basic problem had been physical.

Stress

Nervous exhaustion caused by stress can likewise produce depression. Among such stressful situations the following are listed by specialists: 'a bad marriage, unrelieved slum living, an unkind boss, chronic warfare,' and trying to follow a daily routine "that is clearly beyond one's mental, emotional, and physical resources." An environment void of love, wherein one feels lonely, dejected and hopeless, can also bring depression. Many persons find themselves in such situations.

A specific stressful event such as a death or a divorce can cause major depression. Yet one recent study found that, out of 185 clinically depressed individuals, only one fourth had a discernible stressful event preceding their depression. Psychiatrist Dr. Fieve feels that the stressful life event "is simply the tip of the iceberg."

Comparing a depressed person to a car that breaks down while climbing a steep hill, Dr. Kline says this of his belief: "Now, in one sense it was the fact that you went up the hill. On the other hand, if the engine was in good condition, you would not have had the trouble. So the

environmental stress may precipitate the breakdown, but there has to be the biological deficiency, or engine weakness, to begin with."

However, is it possible that the *mind itself* can create this chemical imbalance without there having been some prior physical defect?

The Role of the Mind

There is sound evidence that many persons are relieved even of major depression by having their thinking adjusted by trained counselors. This would indicate that in *some* types of major depression the thinking of the person or what he puts into his mind, not some physical defect, plays the vital role.

Recent research has shown that the way we think can affect our brain chemistry. For instance, in a 1979 study some patients who had just had their wisdom teeth extracted were given injections of a salt solution, a placebo, and were told that this would ease the pain. Despite the fact that this injection had no pain-killing ability, reportedly one third "soon found that their pain was dramatically subsiding." It was felt that naturally occurring brain "pain-killer" chemicals (endorphins) were put to work by the person's thoughts. This was verified when another drug was given that blocks the effects of the brain's natural "pain killers." The pain returned.

The power of the mind to respond to love has been seen in numerous cases. Conversely, anger, hatred, jealousy and other negative emotions also have been found to produce biochemical changes in the body.

The Bible recognizes the important role of our inner feelings and attitudes. It states: "The spirit [the inner feelings and thoughts] of a man can put up with his malady [disease]; but as for a stricken spirit, who can bear it?" (Prov. 18:14) If the "spirit of a man" is "stricken" by

faulty thinking (discussed on pages 8-10); if it is crushed by jealousy, resentment or a bad conscience, then the bad situation becomes unbearable. Major depression may follow.

Also, if a person feeds his mind on depressing thoughts—perhaps through television, motion pictures or pornographic literature—this will color his moods and breed depression. Especially if a person regularly spends much time in front of a TV set, this can adversely affect his outlook. But for other persons something else might be at the root of the problem.

Other Possible Causes

"The brain is much more sensitive than other organs to changes in [blood] plasma concentrations of certain nutrients," stated two Massachusetts Institute of Technology researchers. In *Nutrition and the Brain* (Vol. 3, 1979), these doctors, Wortman and Wortman, published material that shows the effect of what we eat on our mood and how certain nutritional deficiencies can alter the chemical balance in the brain and produce depression.

Even when regularly eating balanced meals—keeping "junk food" to a minimum—one may still have nutritional deficiencies leading to depression. Some medications, oral contraceptives, such strains on the body as pregnancy, pollution and exceptional stress—all can create nutritional deficiencies.

Allergy to certain foods or to chemical fumes and the hormonal changes in women have brought on depression. Also, one study of 1,100 patients treated for hypoglycemia (low blood sugar) found that 77 percent of these complained of depression.

So there are many causes of depression besides just having a wrong attitude. A seriously depressed person may suffer from any one of a combination of factors. An individual's heredity and childhood experiences also play a role. All these influences can affect how one responds to a stressful event or environment.

While trying to understand the possible causes of depression is helpful, an even more persistent question of sufferers is: What can I do to overcome it?

How you can fight depression

"IF YOU could get all the people who are depressed just to exercise," said Armand DiMele of the DiMele Center for Psychotherapy, "three-quarters of them would find their mood lifted." Others agree when it pertains to a person's having the

"blues" and not major depression.* Proper rest and sleep also are vital.

Some mildly depressed persons are

* A future issue of *Awake!* will describe various modes of treatment that helped people who had major depression.

THOUGHTS THAT CAN INCLINE ONE TO DEPRESSION

- In order to be happy, I have to be successful in whatever I undertake. If I'm not on top, I'm a flop.
- To be happy, I must be accepted by all people at all times.
- My value as a person depends on what others think of me.
- I can't live without love. If my spouse (sweetheart, parent, child) doesn't love me, I'm worthless.
- If somebody disagrees with me, it means he doesn't like me.

- I should be the perfect friend, parent, teacher, student, spouse.
- I should be able to endure any hardship with a calm disposition.
- I should be able to find a quick solution to every problem.
- I should never feel hurt; I should always be happy and serene.
- I should never be tired or get sick, but always be at peak efficiency.

Based, in part, on "Cognitive Therapy and the Emotional Disorders,"
by A. T. Beck, M.D.

helped by setting aside some time for activities they especially enjoy. One woman who loves to make clothes said: "It's hard to be depressed when you're being creative." At times, all that is needed is a change of pace—perhaps eating in a restaurant one evening or a short vacation.

Pouring out one's heart to a trusted friend is a big help. But, be careful of your associates—either in person or through the TV/movie screen. Avoid like the plague gloomy complainers and shows that can corrupt a person's morals or defile his conscience.—Prov. 17:17; 1 Cor. 15:33.

Yet, what if the depressed mood lingers?

Is It Your Food?

Take a careful look at your diet. The chief probation officer in Cuyahoga Falls, Ohio, Barbara Reed, explained to an *Awake!* staff writer that many of the offenders assigned to her office

complained of depression. She examined their diet. Many lived on "junk food" and ate no breakfast, and some went for weeks

without eating green vegetables. A better diet—regular balanced meals—and exercise helped many to have an improved mood. "One depressed 20-year-old with a deep lack of self-worth, arrested for criminal damage, lived on 'junk food,'" reported Mrs. Reed. But with an improved diet and proper counseling his depressed mood lifted and his behavior improved.

Authorities disagree as to whether a person's diet causes depression. Even with the finest of food some still get depressed. Others are not helped by an improved diet. Each person is different, and some are more sensitive to substances like sugar and caffeine than others. But eating balanced meals, coupled with moderation when it comes to consuming such things as pies, pastry, chocolate, candy and soda pop will often pay dividends for depressed persons.

Because severe depression could be a symptom of physical disorders it is also important to get a complete medical checkup.

Are You Thinking Correctly?

While not all cases of depression result from a wrong outlook, a recent 10-year study showed that depressed persons of-



ten interpret situations incorrectly. "The depressed person feels sad and lonely because he erroneously thinks he is inadequate and deserted," explains researcher and psychiatrist A. T. Beck. The Bible also shows that how you feel at heart can color your thinking about external matters. It states: "All the days of the afflicted one are bad; but the one that is good at heart [in a cheerful frame of mind] has a feast constantly." Whether a person has 'all bad days' or 'every day like a feast' depends in large measure on his frame of mind.—Prov. 15: 15.

So depressed individuals must work hard to correct their thinking and guard what they ponder on. This can be far easier to say than to do! Some damaging thoughts common to many depressed persons are listed in the box. Each one is faulty. When these come into mind, quickly dismiss them. Dwelling on them will lead to low self-esteem and deeper depression.

Excessive guilt feelings usually accompany depression. But realize that everyone makes mistakes. "If errors were what you watch, O Jah, O Jehovah," said the psalmist, "who could stand?" Nobody! Yet genuine forgiveness for our blunders and sins can be found with Jehovah God.—Ps. 130: 3, 4.

The Value of Accomplishment

Grieved over her husband's death and disappointed with others' unfulfilled promises to repair her home, one widow be-



came deeply depressed. But then she thought, 'The repairs couldn't be that hard.' She got busy and soon retiled her kitchen floor. Though it was not a perfect job, she was pleased. Her self-esteem soared; her depression melted away.

Not everyone could do this, but one research study showed that while some severely depressed patients felt that they could not accomplish certain tasks, they actually performed these as well as the nondepressed participants.

The accomplishments a depressed one could reach out for might involve more than just housework. For instance, they might include cheering up someone by a visit or a phone call, or doing something nice for one's family.

One depressed Christian woman visited a young woman who had just been viciously beaten, raped and stabbed. The Christian, though depressed, tried hard each week to visit and comfort her. The result? "Gradually I no longer felt depressed," reported the Christian. "Trying to encourage her in time made me forget my own problems." She found true what Jesus said: "There is more happiness in giving than there is in receiving."—Acts 20:35.

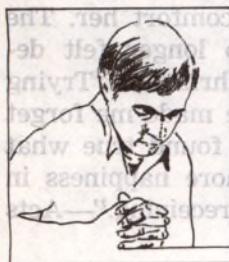
"Be Angry Without Doing Wrong"

Another factor in depression is coping with anger, says psychologist DiMele. "What usually happens is that a person feels anger toward some person, probably for some seemingly irrational reason. Yet the person believes the anger is not good because he's been taught 'Anger is bad.' So you start blaming yourself for feeling angry and you get angry at yourself. This, combined with a sense of helplessness, brings depression."



However, to vent anger uncontrollably on others not only is dangerous but, as studies have shown, does not relieve the depression either. The Bible cautions: "Be angry without doing wrong; let not the sun go down on your wrath [or, "with you in a provoked state"]." (Eph. 4:26, *The Bible in Basic English*; compare *New World Translation*.) By being willing, not afraid, to express their feelings and being candid but kind, depressed ones can communicate their feelings in a way that promotes peace. Especially is such open communication vital between marriage mates.

However, something excels all these suggestions. Because the suicide rate among depressives is 25 times as great as it is among the general population, this can make the difference between life and death. What is it?



Prayer and a Relationship with God

"The only thing that kept me from pulling the trigger and ending it all," confessed one mother suffering with major depression, "was the relationship

I had with God. I had the gun in my hand, and at that moment Jehovah God really helped me to put it away." Yes, this woman found strength "beyond what is normal" to endure until her condition responded to medical treatment. She had developed real faith through her study of the Bible and attendance at Christian meetings where she found real friends. This faith saved her life.—2 Cor. 4:7, 8; Phil. 4:13.

One of the ways that God helps is by providing his Word, the Bible, which shows how to make one's family life better; how to get along with others; how to avoid conduct that can create anxiety

and guilt; and how to choose worthwhile works and goals in life. Following this information can help relieve many stressful situations that bring depression.—Col. 3:5-14, 18-21; 1 Tim. 6:9, 10, 17-19.

Even with strong faith one who is suffering from depression may have doubts, perhaps feeling that God has abandoned him. But never stop praying! "I prayed daily—five and six times intensely," said one mother who was so depressed that she could barely get out of bed for months. "I begged and begged for help. I pleaded that Jehovah God would give me the proper direction to find a doctor that knew what was wrong and could help me. I prayed for strength just to keep going and keep things straight enough so I wouldn't do any more damage to my family." Such persistence paid off. She endured until appropriate medication relieved her major depression.

"Prevent It"

"The most important advice I can give is, 'Prevent it,'" said one sufferer. But how? There are no easy or sure answers. Some authorities suggest:

1. Don't build your sense of worth on love, money, social position, power or drugs. The failure of these could be devastating if you do.
2. Set realistic expectations. Aim to do the best you can, but not to be a perfectionist.
3. Recognize the early symptoms (anxiety, panic, inability to concentrate). Check to see if your daily schedule is reasonable. If not, adjust it. Learn to say "No" when necessary.

However, millions of persons, despite many personal pressures, have found one of the greatest helps in preventing depression to be the gaining of an accurate knowledge of the will and purposes of "the Father of tender mercies and the God of all comfort."—2 Cor. 1:3.

How others can help

IT IS vital for others to show empathy to the depressed—to put themselves in the other person's place. What this means was demonstrated in the following case. The depressed father, after lashing out at his wife, sobbed: "I don't mean to be this way!" He was deeply moved by his wife's simple, understanding reply: "I know you don't, honey."

Dr. Ari Kiev, a clinical associate professor of psychiatry, warned: "When families see the depression as a result of willfulness, an unwillingness to fight it off, then that tends to increase the patient's frustration. . . . And one would see suicidal acts." However, he adds: "People could ride out the depression better if they and their families accepted it as an illness that runs a self-limited course and eventually will pass." Such advice is good for both family and friends.

"Speak Consolingly"

Some who suffered major depression were asked what comments from others helped the most. They said: "I understand," "We love you," "I know you'll soon be your old self again," "You look a lot better today" and "I don't know exactly how you feel, but we're behind you." One mother wrote: "Just to hear my children say, 'We need you,' was like a shot in the arm." But she added: "Undue criticism to a person already depressed is like a bullet of death." How practical the Bible's inspired counsel! It

urges: "Speak consolingly to the depressed souls, support the weak, be long-suffering toward all."—1 Thess. 5:14.

What did others say that hurt? Some of the replies were: "I'm sorry for you," "She just wants attention" and "Don't pity yourself; there are other people sicker than you are who don't cry and complain." Just imagine how these remarks made these persons feel! "There exists the one speaking thoughtlessly as with the stabs of a sword, but the tongue of the wise ones is a healing." (Prov. 12:18) It is not that persons intended to hurt or 'stab' the depressives, but often they simply *did not think* before they spoke.

"The depressed person is already angry with himself, so don't add to his guilt by constantly correcting what he does," advises a psychologist who has worked with mentally disturbed individuals for over 20 years. "Rather than tell him, 'Why don't you just shake it off,' perhaps you could say, 'It seems to be a real problem for you, and I don't fully understand it, but I would like to understand what you're feeling. I would like to help.' Be sincerely interested. A person can tell if you are not."

Look for opportunities to give genuine praise. Be specific: "Look what a good job you did rearing your children," "You have a real knack for making others comfortable," and so forth. Help the person to restore his self-esteem. But above all else . . .

Be a Good Listener

Usually, a depressed person has much to say but often feels unworthy to express it. He may feel that nobody really is interested in hearing about his problems or feelings. Said one 27-year-old woman who suffered for several years with bouts of depression: "I needed someone to listen, not someone to lecture me and make me feel that I was being this way on purpose. My problems were real!"

This young woman, who wanted to die, added: "I had a couple of friends that I could really pour my heart out to. Even though I couldn't fully understand my own feelings, this conversation really helped." So let the depressed person "unload" his feelings. There is no need to judge everything he says. He may make some statements that seem extreme. Often, he really does not mean what he says. However, if you are a good listener and gain the person's confidence, it may be that by gentle reasoning, step by step, you can correct his thinking.—Matt. 7:1.

"Support the Weak"

"Friends help; others pity" is an old saying. Certainly genuine friends and family members whose circumstances allow will take steps to support those who are close to them and are depressed. Within the congregations of Jehovah's Witnesses are spiritually qualified men who often have been of much help to depressed persons. Depressives are invited to seek their empathetic, loving aid. One sufferer confessed: "I was not too proud to call for help."—Jas. 5:14, 15.

Depending on circumstances, there are many things that persons can do. If the sufferer cannot sleep, stay up with him. If he will not eat, do not pressure him, but tempt him with small amounts of nutritious food, deliciously prepared. If he will not exercise, then take him out for a walk, or engage with him in some form

of vigorous physical activity. Helping the sufferer in such ways may not be easy.

One bighearted woman has assisted several severe depressives. One of these whom she invited to live with her until she improved was having a hard time. Very warmly, Doreen said to this young woman: "Put your coat, hat and boots on." But she responded: "I don't want to go for a walk." "I told her kindly, but firmly, 'Yes, you're going. Put them on,'" explained Doreen. "She did. We walked for four miles. When we returned she was tired, but she felt better. Nobody believes how helpful strenuous exercise is until you make them do it. Then they see it."

Support may also mean helping the seriously depressed person to find proper professional help. With major depression, one may need help from persons especially trained in dealing with the sickness. There is a variety of treatment currently available:

Other helpful acts reported by depressives were: "Don't invite so many visitors over; prevent others from making unnecessary noise—like loud music." "Short visits of honest concern from others are nice." "My family watched over me, calling me regularly on the phone, taking me out, even helping me to get dressed at times."

Often it is simply being close at hand and *showing love*. One previously depressed woman related what got her through nine months of being "trapped in a terrible nightmare." At one point she sobbed to her husband: "I can't stand it anymore! I'm not getting better. I'm going down the drain!" He tenderly replied: "If you go down the drain, I'm going right down there with you!" Reflecting on this, the woman said: "Simply put—he was always there for me."

Yes, genuine support, coupled with consoling words, and a listening ear are the finest assistance others can give to "depressed souls."

A complete solution —is it possible?

"IMPOSSIBLE!" say some. "Why, to rid the earth of depression completely would call for sweeping changes. We've had depression for thousands of years and the future looks as if it will be here for a long time to come."

Just think of a few conditions that contribute to depression—an oppressive environment, friction in our relations with others, bad living conditions, inner weaknesses and guilts and sickness. To correct all of these seems hopeless.

Heartwarming Promises

The Bible promises that God will use his glorified Son, Jesus Christ, as a heavenly king to remove today's depression-causing environment. Prophetically the Bible states: "Let him [God's king] crush the defrauder. For he will deliver the poor one crying for help, also the afflicted one and *whoever has no helper*. He will feel sorry for the lowly one and the poor one, . . . From oppression and from violence he will redeem their soul."—Ps. 72:4, 12-14.

Gone forever will be a wicked system that has fostered harshness, insensitivity and oppression. Imagine the relief! But the Bible also promises relief from *internal* pressures. The effects of sin and imperfection will fade away. (Rom. 8:20-22; Rev. 21:3, 4) Disease and sickness—including depression—will vanish. Guilt and feelings of worthlessness will give way to self-esteem, as persons will then be able

to measure up perfectly to God's standards of how to live. Relations with other people will reflect perfect understanding and love.

Other promises of the Bible have already been accurately fulfilled. Current events are fulfilling Bible prophecies written nearly 2,000 years ago. (Matt. 24:3, 7-14; 2 Tim. 3:1-5) The practicalness of the Bible passages referred to earlier in this series of articles shows evidence of great wisdom. Does it not seem logical to you that they originated with a Source that really knows our makeup—emotionally and physically—namely, God?

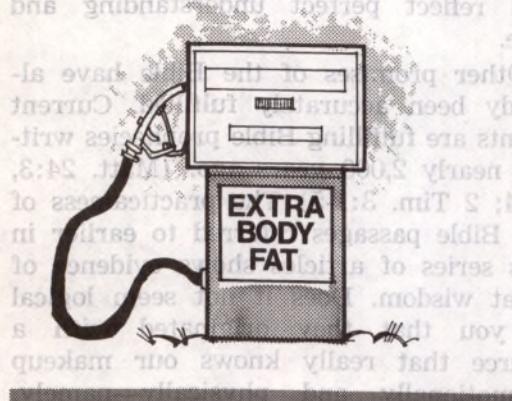
Millions of persons in over 200 lands are convinced that all these promises of God will soon be realized. This hope sustains them even during severe depression. "Knowing that these problems will one day soon cease, and thinking of the wonderful conditions that will prevail in the 'new earth,' kept me going," said one who had endured a long struggle with depression.—2 Pet. 3:13.

This confidence, coupled with earnest effort to apply what the Bible says about our conduct, brings lasting happiness. Jehovah's Witnesses are more than willing to help you to build such conviction. They will help you to get even closer to the God who is described as able "to revive the spirit of the humble, and to revive the heart of those who are in pain."—Isa. 57:15, Lamsa.

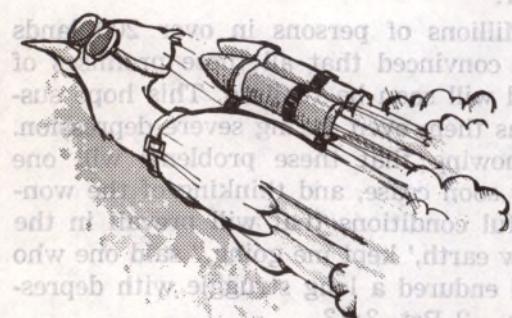
Astonishing facts about migrating birds



THE complete story of how and why migrating birds make their annual trips still remains unknown. But what scientists are finding out about them is nothing less than astonishing. Here are some fascinating facts about these amazing travelers:



FUEL: How do the migrating birds keep themselves going on their long, nonstop journeys? Most species prepare for their trips by building up a fuel reserve in the form of extra fat stored in the body. The New England blackpoll, for example, nearly doubles its body weight before taking off. In 105 to 115 hours it arrives in South America, often completely exhausted and even about to die. For you to match that feat, you would have to run four-minute miles for 80 consecutive hours without any intake of food or drink!



SPEED: How fast do they fly on their migratory path? Most smaller birds move along at 25 to 30 miles an hour (40 to 48 km/h). Even the tiny hummingbird can do better than 20 miles an hour (32 km/h) on such journeys. Larger birds, such as geese and sandpipers, can travel at speeds exceeding a mile a minute. To generate and maintain that kind of speed, the bird's heart must be the most powerful motor of its size in the world.



ALTITUDE: On their migratory journeys most birds fly at relatively low levels, some barely hugging the crest of ocean waves. But mountain-eers in the Himalayas have been amazed to observe geese flying high over their heads, at a record height of 29,500 feet (9,000 m) above sea level. To find favorable winds, even small birds can fly as high as 21,000 feet (6,400 m), up where the air is cold and rarefied. In compar-

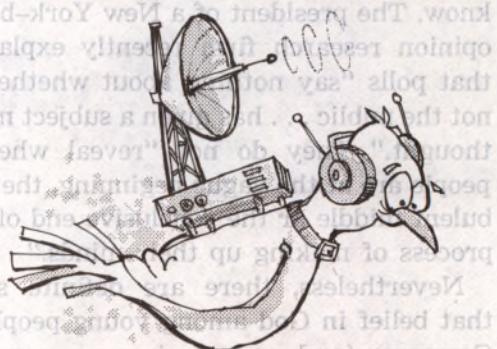
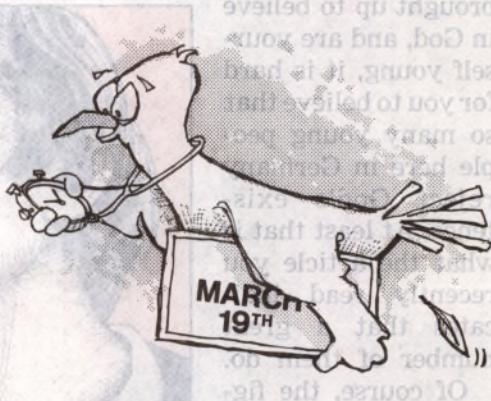
ison, commercial jets that cruise at 25,000 to 40,000 feet (7,600 to 12,000 m) have pressurized cabins for the safety and comfort of passengers who merely sit and rest. Without an extra source of oxygen, humans begin to experience shortness of breath and exhaustion at about 14,000 feet (4,300 m) and may die at higher than 25,000 feet (7,600 m).

RANGE: You probably have heard much about the great distances some migratory birds travel. Just how far do they go? The small New England blackpoll, mentioned earlier, flies 2,300 miles (3,700 km) nonstop to winter in South America. Golden plovers from the Aleutian Islands of Alaska fly nonstop 2,050 miles (3,300 km) to Hawaii in 35 hours, flapping their wings over a quarter of a million times. Some, after resting briefly, continue on another 2,100 miles (3,400 km) to the Marquesas Islands and beyond in the South Pacific. The record? Well, the Arctic tern seems to outdo them all. It travels 11,000 miles (17,700 km) each way between its breeding ground in the Arctic and its winter home in the Antarctic, nearly halfway around the earth. But, in its own way, the ruby-throated hummingbird is no less astounding. Weighing only about one eighth of an ounce (3.5 gm), it flies 500 miles (800 km) across the Gulf of Mexico in one hop, beating its wings 50 times a second for 25 hours.

TIMING: The swallows of San Juan Capistrano in California are so punctual that festivals are held to coincide with their return from Argentina each spring. Traditionally, March 19 is the day to welcome the swallows home, and, without using calendars or watches, they generally show up within a few days of that time.

NAVIGATION: How the birds chart their migratory course still remains the greatest mystery—no one can tell for sure just how they do it. They can respond to the sun, the stars, ultraviolet and polarized light, low-frequency sounds from distant surf, weather changes, coastlines and mountain ranges, and even the magnetic and gravitational fields of the earth. What a magnificent instrument the bird's brain turns out to be!

Truly, these creatures of the wing are unique. Who gave them their awesome tenacity and endurance and their amazing ability to navigate? Their astonishing abilities testify to the Creator's wisdom and power.



How sure are today's youth about God?

Wiesbaden, Germany, this subject. But so that I could supply September 8, 1981

you with some up-to-date material, I asked a few friends of mine to help me interview some representative young people. We discovered that many of them have very definite opinions, whereas others are having real difficulty in making up their minds about God's existence. Their expressions are quite enlightening. Let me share some of them with you.

Dear Alan,

I can understand the concern expressed in your letter. Since you live in a religious country, have been brought up to believe in God, and are yourself young, it is hard for you to believe that so many young people here in Germany reject God's existence. At least that is what the article you recently read indicates that a great number of them do.

Of course, the figures from a poll, such as the one mentioned in the article, do not always tell us everything we may need to know. The president of a New York-based opinion research firm recently explained that polls "say nothing about whether or not the public . . . has given a subject much thought." They do not "reveal whether people are at the vague beginning, the turbulent middle or the conclusive end of the process of making up their minds."

Nevertheless, there are definite signs that belief in God among young people in Germany (and perhaps in your country, too) is on the wane. During the years I have lived in Germany, I have talked to a great number of young people about



"I have never seen God"

Why Some Doubt While Others Believe

The young people raised four basic objections to believing in God. A common one was: "Since I have never seen God, I cannot believe that he exists." But Joachim, a 15-year-old Catholic, said that "the things I have seen in nature are cause enough to believe." His classmate, Ulrike, agreed, saying that God "can be seen—in his works."

A second argument—offered, however, without supporting evidence—was that "science has proved that there is no God." "To the contrary," said others, scientific investigation reveals "order and regularity" in the universe, "works of precision" that "could not have come about by them-

selves." Sascha, a teenage Catholic, argued that, since "science has proved that everything had a beginning," there must be some Great First Cause who got everything started—God.

Another reason given for doubt was more of a complaint than an argument. "People say that God will help you, but he never does," lamented a young girl. Not all agreed. This illustration could be used to point up the weakness of her argument: Have not all of us experienced, at times, that friends or relatives have failed to offer us help when we felt we needed it? There may have been a variety of reasons why they did not help, but their nonexistence was obviously not one of them. Conceivably the fault could have been more ours than theirs.

The fourth objection was the one heard most often: "If there is a God, he would not permit wars, murders and all the other terrible things that happen."

A Hamburg student argued: "If there is a higher power, why doesn't he forbid such things?" Clearly the student had overlooked the fact that, according to the Bible, God has forbidden these things. But this has not prevented man from doing them. Yet, is it logical to conclude from man's disobedience that God does not exist? Does a child's disobedience prove that he has no father?

At times people have stood by and witnessed terrible crimes without taking steps to prevent them. We may question whether they acted properly in doing so or not, but would we doubt the existence of such

standby people? Likewise, many persons question whether it has been proper for God to permit wickedness, but this is no reason to doubt his existence.

Resolving this question may seem difficult. Once found, however, the answer is truly satisfying. It involves understanding that an issue has been raised disputing the rightfulness of God's rule and the truthfulness of his word. Realizing that, to settle this issue effectively, a period of time is necessary also helps us to understand God's permission of wickedness. The Bible book of Job (chapters 1 and 2), I think, gives a fine explanation.

Belief, but Not "Firm Conviction"

Many young people have little basis for their opinions. Some say they believe, but are not quite sure why—perhaps saying simply, "Because my parents do." Others do not believe. Often they say: "What I have heard about God is not convincing." But have they investigated to see if what they have heard is true? Just how diligent have they been in giving the subject consideration?

Out of 66 students in one group, 29 admitted that they did not know whether their parents believe in God or not. Apparently in their homes God is not a subject of general conversation. Not having given the subject much thought, these young people still find themselves "at the vague beginning . . . of the process of making up their minds."

This is true of many older people, too. An article in the German magazine *Der Spiegel* recently acknowledged that faith



"God has never helped me"

The Churches Are Causing Many To Lose Faith

among most Germans is "more hope than faith, more vague assumption than firm conviction." But in a so-called Christian nation, why should this be?

The Church"—"An Interference Factor Between God and Man"

Many young persons make a distinction between belief in God and belief in "organized religion." In fact, many people feel that the orthodox churches have done little to further their belief in God. No wonder that in the past decade alone over 2,000,000 persons have withdrawn membership from the Catholic and Lutheran Churches in Germany.

A major in political science and history said that, despite being raised in a religious atmosphere, it was "only through personal reflection that I arrived at my conviction that there is a God." In effect, these young people are saying: "God, yes—Church, no."

Back in 1968 the magazine *Stern* was already warning: "A third of all the Christians in the Federal Republic are in danger of losing [faith in] God." And then, pointing an accusing finger, it added: "Ministers are helping them do it."

True. Ministers who over the years have fostered a "God is dead" theory. Ministers who have placed undue emphasis on a do-it-yourself "social gospel" and ignored God's kingdom, the divine solution to man's problems. Ministers who, in God's name, have taught doctrines that are both unreasonable and clearly unscriptural. Ministers who, as a group, have set a miserable example. "Even the Church does not pattern itself according to the Bible," reasoned one North German. So why should anyone else?

A young man who angrily declared that "everything connected with the Church is swindle" was speaking for many. In his case "everything" included "belief in God." The Churches, although claiming to represent the Creator, have in reality misrepresented him, and thereby succeeded in making multitudes of their own people doubt his very existence.

This has not gone unnoticed. A young African student in Hamburg, his eyes scarcely concealing his feelings of betrayal, lashed out: "The nerve of you Europeans! You came to Africa and converted us from so-called pagan religions to the worship of a God I now discover none of you even believe in!"

In an attempt to regain lost membership, the Catholic and Lutheran Churches are seriously considering undertaking an advertising campaign that would result in magazine readers finding, amid advertisements for soap and toothpaste, church-sponsored ones "selling faith." According to press reports, advertising experts preparing the campaign are in agreement "that the 'good news' [is] being sold in the robes of day before yesterday, rather than in the language of the people of today." To correct this fault, they have prepared clever slogans and appealing pictures to sell their product.

But trying to sell faith by wrapping it up in an attractive dress does not go far enough. More important than the packaging is the product itself. People—especially young people—want to know *what* they should believe, *why* they should believe it, *why* it is *logical* to believe it, and *what benefits* can be derived from believing it. In short, they want their questions answered.

'For Each Question I Asked, The Witness Who Came To See Me Had A Bible Answer'

The Churches of Christendom and their ministers, instead of copying the fine example of Jesus in giving clear, straightforward answers from God's Word, have resorted to long-winded and evasive explanations that caused one of the advertising experts to remark: "The Church is an interference factor between God and man."

Helping Young People Develop

Strong Faith

What the clergymen of Christendom's Churches have failed to do, Jehovah's Witnesses are trying hard to accomplish. By letting God's Word of truth speak out in answer to the questions of inquiring youth, they are having success. The following experience from a person now one of Jehovah's Witnesses is typical of many:

"The questions I asked clergymen while going to school and to confirmation classes were either answered incorrectly, unsatisfactorily or not at all, leaving me at this point unable to deny the existence of God, but also not thoroughly convinced. But I gave the matter little consideration. After all, even learned theologians varied as to their views about God and the Bible. 'If clergymen who study theology at college cannot understand the Bible, then it must be a book incapable of being understood and one that contradicts itself.' This is what I fully believed."

These words describe how thousands of young people today feel. The desire and the need to believe are present with many; the logical basis for doing so is often absent. They are still "at the vague beginning . . . of the process of making up their minds." This is well illustrated by the

words of a young man who explains why he became one of Jehovah's Witnesses.

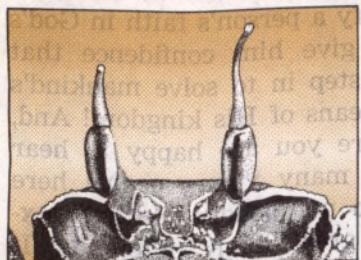
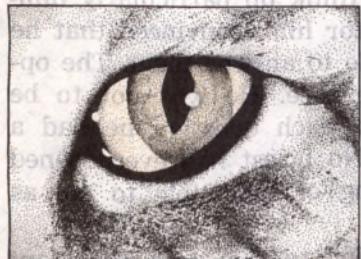
"I had always believed that God existed, but I had no idea of what his purpose was for the earth or for mankind. I was in complete darkness as to the real meaning of life. I had question after question for the Witness who weekly came to see me. I tried to think up particularly difficult questions for him, convinced that he would be unable to answer them. The opposite was the case. He was not to be ruffled, and for each question he had a Bible answer. No priest had ever opened up the meaning of the Bible to me as he did."

How gratifying to hear how Bible answers can fortify a person's faith in God's existence and give him confidence that God will soon step in to solve mankind's problems by means of His kingdom! And, Alan, I am sure you are happy to hear that, although many young people here in Germany do not believe in God's existence, yet a great many others do. It is hoped that many young people who are still "at the vague beginning" or "the turbulent middle . . . of the process of making up their minds," and whose belief is more "vague assumption" than it is "firm conviction," will yet take advantage of the fine educational opportunities offered free of charge by Jehovah's Witnesses and will thus find answers to their Bible questions.

Well, it has been a real pleasure conversing with you, Alan, even if it was only by means of paper and pen. Hoping to hear from you soon, and sending warm greetings of Christian love, I remain

Your friend,
[signed, Johann]

Eye fashion—not just for looks



Eye fashion among animals is nothing less than fantastic. Yet they are designed not just for looks but for sight. Each animal has its particular needs and each meets them beautifully.

Look at the eyes illustrated on the left. Can you tell whose eyes they are?

If you say the one at the top belongs to the cat you are absolutely right. The characteristic pupil gives it away. Its ability to contract and expand in response to brightness has been used by the Chinese as a device to tell the time of day. But the wide-open pupil is only one means the cat uses to see in dim light. Have you ever noticed a cat's eyes shine at night? A layer of cells at the rear of the eye acts as a mirror to reflect traces of light back into the eye so that the nerves can pick it up a second time. The feline eye is also much admired for its delicate hues—blue, hazel, brown, green, orange. Some cats even have a different color in each eye. Some competition for the ladies!

For the second picture, if you think you see the eyes of some creature from outer space, you are on the wrong track. Actually, the two stalks that seem to be growing out on top of the head are the eyes of a crab. By means of thousands of light-sensitive facets on each eyestalk, the crab can see all around—360 degrees. It can detect the altitude and slightest movement of the sun and the moon, and can sense changes in brightness as small as 2 percent. Some crabs have such keen vision that they can detect a six-foot-tall person 60 feet (18 m) away and run for cover. Even when hiding in the sand, the crab can send an eyestalk up as a periscope.

What about the angry-looking eye in the third picture? That is one that has become proverbial—the hawk eye. Why does the hawk or eagle always look so fierce, or bold? Actually, the raised "eyebrow," which we interpret as a sign of boldness, is a bony protrusion above the eye socket that serves as a protection for the eye. It has nothing to do with attitude, and the eagle cannot change its looks even if it wants to. Notice the narrow crescent at the left of the eye? It is the eagle's third eyelid. Most birds close their upper and lower lids only to sleep. Blinking is done by sweeping the eye with a semi-transparent membrane (its third eyelid)—so it won't lose sight of its prey in the process.

If you have trouble identifying the fourth eye, don't be discouraged. It is surely one of the strangest of all. It belongs to the Anableps, the four-eyed fish of Central and South America. It has two pupils in each eye. When the fish swims along the surface of the water to hunt for food, it keeps its eyeballs halfway above the water, using one pupil to scan the world above and the other to see below the surface—doubling the chances for a meal, or an escape. The four-eyed fish not only has dual vision but can also see two things at the same time. Try topping that with your bifocals.

The eye is said to be the window of the body, and "window dressing" among animals is far more sophisticated than anything man can devise. Each one, in its own special way of seeing, praises its Maker, "the One doing great things unsearchable, wonderful things without number."—Job 5:9.

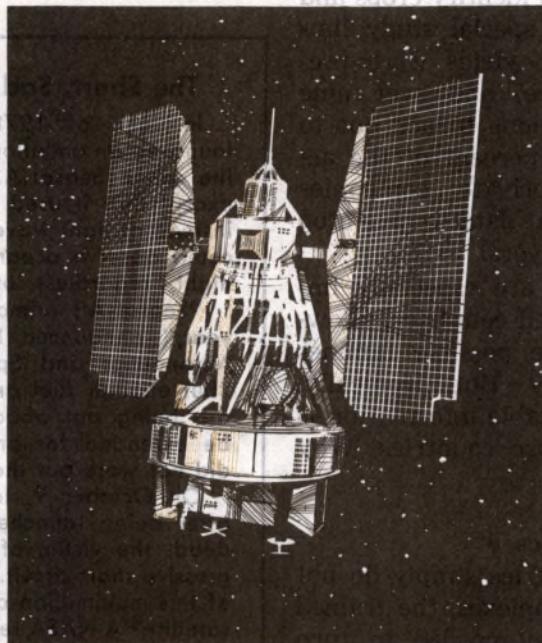
Sky eyes are watching you

YOU may not know this, but you are being watched. No need to look over your shoulder, however. Your observer is overhead—920 km (570 miles) above you! The eyes watching you are not human, but electronic. They belong to a satellite called *Landsat*.

Actually, the satellite is more interested in the land around you than in you yourself. Are you a farmer? Landsat can tell what kind of crops you are growing and how well they are doing. Its data can be used to make estimates of your harvest, and these will often be 90 percent accurate. Could there be oil or uranium on your land? Landsat can detect subtle geological clues to help answer that question.

From Pole to Pole

Of course, you are not always being watched. Each Landsat (currently there are two) passes directly overhead about once every 18 days, taking electronic pictures from its polar orbit. Why a polar orbit? There is an important reason.



Suppose you were riding above the earth's equator in a satellite. Things might get a little dull after the first few orbits, because you would always have the same view. All you would see below would be the tropics, orbit after orbit. Now imagine being in a polar orbit instead. As you traveled from north to south, the earth would slowly turn beneath you. No two orbits would be the same! If you

just passed over Athens, Greece, your next orbit might put you over London, England. Eventually, you would get a bird's-eye view of every place on earth, which is just what Landsat needs to do its job.

The polar orbit has another advantage as well. Because of it the sun angle in Landsat's pictures is roughly constant, except for gradual changes with the seasons. This consistency is valuable for map-making.

Early Successes

Soon after Landsat was launched, scientists realized that it had great potential

for finding minerals and identifying crops. During its very first week, Landsat I identified over 30 previously unknown geological features in one part of California. As early as 1977 it was estimated that Landsat had identified new oil reserves worth one billion dollars!

Meanwhile, an experimental program was under way to see if Landsat information could be used to identify crops and predict harvests. In a special study limited to wheat, harvest yields were predicted long in advance, and over nine tenths of those predictions turned out to be accurate within 90 percent of the actual figures. Soon private companies sprang up using Landsat data to give crop forecasts to private buyers.

Such crop forecasts are especially important to less developed countries, allowing them to anticipate possible famines and request aid early. But, ironically, much of Landsat's valuable information is not being used by those countries. Why not?

Technology and Politics

Less developed countries simply do not have the computer complexes, the trained experts and the money needed to turn Landsat data into reliable crop forecasts. Techniques are being experimented with to allow such countries to get the same information out of Landsat pictures with man power instead of computer power. But while such techniques might work for crop estimates, computer analysis is still needed when Landsat pictures are used to find minerals. This is causing problems.

Although less developed countries do not have the technology and computer personnel to get the most out of Landsat pictures of their countries, others do—the big oil and mineral companies. "Many of these firms maintain well-equipped image analysis laboratories where Landsat scenes

of LDC [less developed countries] land areas are routinely scrutinized," observes the respected journal *Technology Review*. "These companies are then able to negotiate lease rights while possessing better information about the LDC resources than the LDC's themselves." What has resulted? "The mistrust generated by this unfortunate situation has led some LDC's

The Short, Sad Story of Seasat

In June of 1978 the United States launched an ambitious experimental satellite called Seasat-A. It was like Landsat, except that it used high-resolution radar instead of light waves to see. So Seasat-A could observe ocean conditions day and night, regardless of cloud cover.

"Seasat-A's primary mission is for one year," announced NASA (the National Aeronautics and Space Administration), "but enough fuel and other consumables are being put aboard so the flight can be extended for another two years." It did not work out that way.

On October 9, less than four months after being launched, the satellite went dead, the victim of a massive and progressive short circuit. What caused the loss of this multimillion-dollar, state-of-the-art satellite? A NASA review board concluded that Seasat's engineers may have taken too much for granted.

The board found that "a test was waived without proper approval, important component failures were not reported to project management, compliance with specifications was weak, and flight controllers were inadequately prepared for their task."

Technology works no better than the people who are responsible for making it work.

to take actions, such as the nationalization of the industry."

Politics also enters the question of Landsat's resolution—that is, how much detail can be obtained from its pictures.

Taking Pictures From Space

Although Landsat is equipped with a television camera, its high-resolution pictures are supplied, not by a camera, but by a device called a multispectral scanner. How does it work?

The satellite has a mirror that moves back and forth, "looking" at a strip of ground below. Light from the ground bounces off the mirror and goes into a telescope, where it is focused on four sets of light detectors, which are like the film for this electronic substitute for a camera. Each of the four sets of detectors is sensitive to a different kind of light. One looks at just green light, another looks at red light, and the other two look at different frequencies of infrared light.

Each of the four detectors is looking at light from the same small square of ground below, but since each detector is looking at a different type of light, the detectors respond differently. For example, water absorbs infrared light readily. So when Landsat looks at a little square of water down below, the infrared detectors don't see much. The water appears black in infrared. Not so for the green-light detector! It sees plenty of green light being reflected from the water, so the water is very bright to it. In fact, the green detector can even be used to measure the depth of water down to about 20 meters (65 feet) with considerable accuracy.

These little squares below, about an acre in size, are the smallest things Landsat can see. They correspond to the grain in ordinary film. No matter how much a Landsat picture is enlarged, its resolution is limited by these little spots called "pixels." Each pixel has a number showing how bright it appears to be for each wavelength in which it is viewed. These four numbers are like a fingerprint, allowing viewers to determine if they are looking at a pond of water, city streets, or an illegal marijuana patch.

So all Landsat really "sees" are numbers! From these far more can be learned than from an ordinary camera snapshot.

Right now the "grains" on Landsat's electronic "film" are about an acre in size. It is possible to improve the resolution greatly. Indeed, the next generation of Landsats is expected to have "grains" of less than 30 meters square (about 98 ft. square), or only about $\frac{1}{4}$ acre. France is planning to launch a satellite with 10-meter (33-foot) resolution, which will yield a 1/40-acre "grain."

But what if such high-resolution pictures are used, not by farmers and prospectors, but by intelligence agents of a hostile country? "The subject of what level of resolution civil survey satellites should be allowed to have has been heatedly debated in the United Nations," says *Technology Review*. Some countries have used Landsat pictures "to monitor natural resources of their neighbors rather than to manage their own natural resources."

Technology and Wisdom

It is an issue that goes back thousands of years in man's history—his inability to use his achievements properly. Interestingly, the Bible comments on this very problem, which existed back at the time of the building of the tower of Babel some 4,000 years ago. Although it was the engineering marvel of its day, that tower was being misused, evidently for false religious purposes.—Gen. 11:5-9.

In the case of geological satellites such as Landsat, great potential exists for good, but also for harm. Will speculators use crop forecasts to attempt to manipulate commodities markets, or will those forecasts be used to help people needing food? Will mineral surveys open the door to wise national resource policies, or to international plunder by high-technology companies? Will fear of spying limit the usefulness of future satellites? Human nature may have more to do with the answers to those questions than human technology.

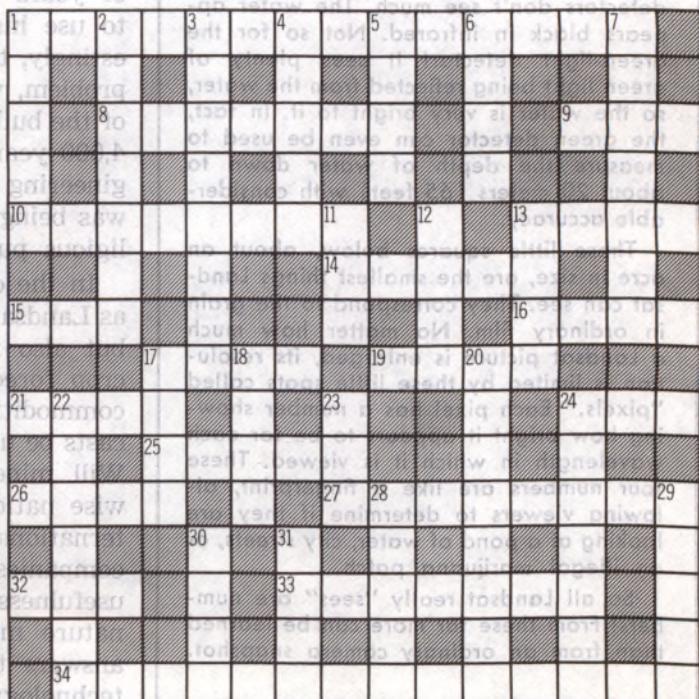
crossword puzzle

Clues Across

1. Used to inquire of Jehovah (Exodus 28:30; Numbers 27:18-21) [3 words]
8. First-named judge after Joshua (Judges 3:7-11)
9. Methuselah's reached 969 years (Genesis 5:25-27)
10. Abram feared he would be ----- since he had no offspring (Genesis 15:1-4)
13. Abraham made one to Moriah in order to offer up Isaac (Genesis 22:1-14)
14. Israelites were not to exact this from their financially weak brothers (Leviticus 25:35-38)
15. Father of Canaan (Genesis 10:6)
16. "Do not go beyond the things that are written" is a good one (1 Corinthians 4:6)
17. Killed the Moabite king Eglon (Judges 3:12-25)
19. "---- I am! Send me" (Isaiah 6:8-10)
21. Hezekiah's wicked father (2 Kings 16:1-4, 20)
24. A son of Benjamin (Genesis 46:21)
25. That of Ahasuerus stretched from India to Ethiopia (Esther 1:1, 20)
26. A continent today, but in Bible times a Roman province (Acts 19:8-10)
27. Jeremiah tested the Rechabites in "the dining room of the sons of Hanan the son of -----" (Jeremiah 35:3-19)
32. Hezekiah's mother (2 Kings 18:1, 2)
33. Men he sent to get Elijah were destroyed by fire from heaven (2 Kings 1:2-17)
34. King who destroyed Jerusalem (2 Kings 25:1-10)

Clues Down

1. Bath-sheba's Hittite husband (2 Samuel 11:1-4)
2. Paul left here to avoid being stoned, but later returned (Acts 14:1-23)
3. Wicked queen (2 Kings 11:1-20)
4. Mortal man is like grass that ---- up (Psalm 90:3-6)
5. Mankind's common grave (Revelation 20:13, "Authorized Version")
6. First word of cryptic message to King Belshazzar (Daniel 5:1-31)
7. Edomite sheik (Genesis 36:40-43)
11. Jehovah makes it shine on wicked and good alike (Matthew 5:43-48)
12. David prayed for this kind of heart (Psalm 51:7-10)
13. A craftsman from here
17. "A skilled copyist" who returned to Jerusalem from Babylon (Ezra 7:1-8)
18. One person to whom chapter 30 of Proverbs is addressed
20. Kinsman
22. City rebuilt by the Reubenites (Numbers 32:37)
23. His sons returned to Jerusalem from Babylon with Zerubbabel (Ezra 2:1, 2, 57)
24. Temanite companion of Job (Job 2:11)
28. What wisdom will enable one to do for thinking abilities (Proverbs 5:1, 2)
29. Sarai's maid servant (Genesis 16:1-4)
30. Ancestor of Samuel (1 Samuel 1:1, 2, 20)
31. Giant slain by David's mighty man Sibbecai (2 Samuel 21:18-22)



The fascinating world of the translator

THE advertising campaign of an American automaker in Belgium nearly collapsed when its slogan "Body by Fisher" was translated "Corpse by Fisher." And, in France, the executives of a soft-drink manufacturer literally shivered when they found that their ad, which described their drink as "the Refreshment of Friendship," came out saying it "Throws Cold Water on Friendship."

Stories such as these are not uncommon in the world of the translator. But they point up the difficulty and challenge of translating from one language into another. Yet, in a world with about 3,000 languages, translation is very much a necessity. International diplomacy, commerce, education, travel and a host of other activities depend on the work of translators—men and women working quietly in the background, trying to channel ideas and information across language barriers.

Pitfalls and Dangers

It takes more than just knowledge of two or more languages to translate successfully. An in-depth understanding of the subject matter is required if one is to be a professional in that field. If he is going to specialize in a new field, he must learn the new terrain in order to avoid the pitfalls. And pitfalls are plentiful. For example, an article in the Danish edition of *Reader's Digest* about ancient Egypt mentioned Moses and the 10 "tablets"! Apparently the translator mistook "plagues" for "plaques" and then got the

10 plagues mixed up with the tablets containing the Ten Commandments.

Even simple terms become not so simple when translated into another language. For instance, "benzin" in Danish is not "benzene," "benzine" or "benzol" in English. It is the stuff called petrol in England and gasoline, or gas, in America. On the other hand, "petroleum" in Denmark is paraffin in England and kerosene in the U.S., and, of course, paraffin in the U.S. is a wax in Britain. Confusing, isn't it? But, for a translator, problems of this sort are countless, some of which may not be resolved satisfactorily even with the aid of a dictionary.

A word in one language seldom covers exactly the same ground as its equivalent, if there is such a thing, in another language. Often, the translator must choose from among several similar words, considering the subject, context, style and many other factors. Making the right choice could be crucial. Some years ago, a Japanese product inadvertently made a bad name for itself when the translator of its English-language instruction brochure failed to comprehend the not-so-subtle difference between "famous" and "notorious."

Then, too, the associations or connotations tied to a word must not be ignored. Take as an example the Bible word "Armageddon," which Webster's dictionary defines as "a final and conclusive battle between the forces of good and evil." (Rev. 16:16) For something similar, the Danes

have the word *Ragnarok* and the Germans use the expression *Götterdammerung*, made famous by Richard Wagner's opera by the same name and meaning "twilight of the gods." But in treating a Bible topic, a translator would not use either of these words for "Har-Magedon," loaded as they are with pagan, mythological associations.

Idioms and figures of speech are particularly difficult to handle. To illustrate: An *Awake!* article about the benefits of walking offered this advice: "One should walk as if he is going somewhere and it should be a regular exercise." All is well—in English, that is. But, when translated into Danish, "to go to a certain place" is a figure of speech meaning about the same thing as "to visit the water closet," or the rest room, in English. Fortunately the expression was caught and corrected before it went to press.

Science or Art?

Good translation puts demands not only on the translator's mind but also on his heart, feelings and experience. For this reason, it has not as yet been possible to build a machine that can do the job satisfactorily without the aid of human editors. Why not? Because languages are very, very complex, and they differ from one another not only in vocabulary but also in grammar and sentence structure. So, translation is much more than just

finding equivalent words in another language for the original.

So far, translation machines or computers are having some success in handling scientific or technical material. This is because the style of this type of writing is quite similar in all languages and the vocabulary is relatively uniform and limited.

When the writer or speaker is an artist who really knows how to use words not only to convey information but also to express feeling, emotion, insight and motivation, it takes a correspondingly skillful artist to translate him faithfully. This is especially true when it comes to poetry, in which feelings and ideas are expressed precisely by special word choice and order, rhyme and rhythm and grammatical construction. All of this, and perhaps even how it finally looks on paper, must be reproduced in the translation. So, almost inevitably, in translating such literary works, "something is lost in the translation," as the saying goes. Where it is claimed that the translations are better than the originals, usually they are re-written works, not translations.

Even if the writer or speaker is not so skillful, the job of the translator is not made any easier. How so? Well, the translator must remember the basic rule: He is not the author; so he is not authorized to "improve" on the original. His job is to convey the thought, feeling and mood of the original as faithfully as possible. But if the message from the original is unclear, what is he to convey? Still, he must not succumb to the temptation to clarify what is obscure, strengthen what is weak or refine what is awkward. Exercising that restraint can be a real challenge.

Ideal and Reality

Ideally, a translation should be as faithful to the original as possible. In practice, however, there is much disagreement as to what is considered faithful. Some main-

In Future Issues

■ Accidents of Evolution or Acts of Creation?

■ My Search for Social Justice

■ What Obstructs Universal Brotherhood?

tain that a faithful translation must retain the *form* of the original—its particular style, choice of words and expressions, figures of speech, grammatical structure, and so forth. But, given the difference in languages, this is more easily said than done.

Take, for example, the expression “precious as the apple of one’s eye.” Can you imagine the problem this creates for the translator who is working with a language and culture where apples do not exist? Even if there is the word “apple,” the expression may be completely meaningless and even strange to the reader. On the other hand, in some languages, an equivalent expression is “precious as one’s heart and liver.” But is it the translator’s prerogative to make such changes in order to get the idea across to the reader?

Problems such as these lead some to argue that the *content* of the message is more important than the *form*, and in order to preserve the content and to create the same response or reaction in the reader, the form must be changed. So, the form or the content—which? Such is the dilemma facing every translator.

What Can Help?

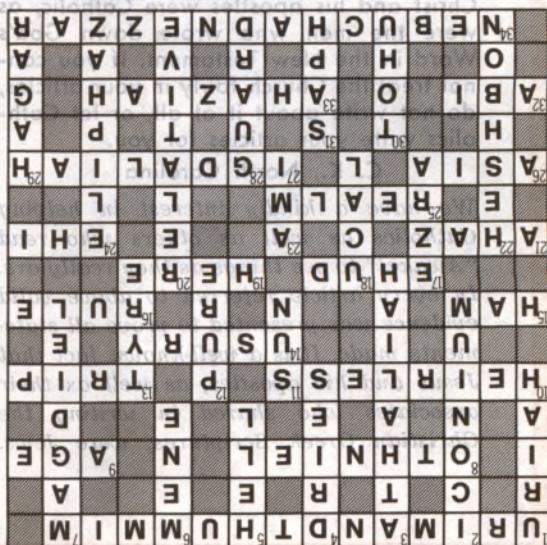
If you are a translator, or hope to be one, what can you do to prepare yourself? It is obvious that, first of all, you must know well the languages with which you work. But what does it mean to know a language well? Since a language is inseparable from its cultural background, a well-known professional translator in Europe suggests that a translator must cultivate “the ability to hear hidden quotations, the muffled echoes of the classical literature of the language in question, its proverbs, its dialects.” He recommends that “he who translates from English ought to be familiar at least with the Bible, Shakespeare, Alice in Wonderland and the most common nursery rhymes.”

You can also prepare yourself by getting acquainted with the people for whom you translate. Get out among them and talk to them. Listen to what they say and note how they think. Will they be able to understand big words, or foreign words? Or should you, rather, use expressions that are more familiar to them?

Reading good literature, both originals and translations, is very helpful. It can be quite instructive for you to compare the original with the translation and thus learn from what the professionals do. Remember, too, that language is never static; it develops and changes. So the translator must be alert to new trends and new vocabulary.

As with everything else, practice results in improvement. To make progress, however, the critical advice and suggestions of one who is qualified are valuable. And, of course, you must be willing to accept and apply them—humbly and patiently. Mastering the skills of a translator is an endless process. It is very much like art. There is only so much that can be taught; the rest is up to you.

CROSSWORD SOLUTIONS



From Our Readers

UNFAIR CRITICISM OR HONEST EXPOSE

I have to agree with one of your English readers concerning your unfair criticism of the Catholic Church. It seems that you say something bad about Catholicism with every issue of "Awake!" In past issues you have: ridiculed devotion to Mary; devoted much space to harping on internal disagreements in the Church and the declining number of religious vocations; accused the Vatican of collaborating with the Nazi engineers of the holocaust (May 8, 1981); referred to an agreement between the Catholic archdiocese of Philadelphia and the United Way as an "unholy alliance" (June 8, 1980); and implied that Catholics on their way to hear the pope cheat the Italian bus system (March 8, 1981). But the worst example of anti-Catholicism appears in your issue of May 22, 1981, where you claim "that there are serious conflicts between [the] Church and God's own Word, the Bible." This is outright slander. Surely you are aware that Jesus Christ and his apostles were Catholic, as were the men who wrote down God's Word in the New Testament. If you cannot treat the Church fairly in your articles, do not write about it at all, or let Catholics write your articles for you.

C. K., North Carolina

We have a kindly interest in helping Catholics as well as others who read "Awake!" to see things as they really are. In every article referred to above valid evidence was presented to prove all statements made. It is a well-known fact that Jesus and his apostles, as well as their associates who shared in writing the Christian Greek Scriptures, were Jews.

The Catholic Church was not founded until more than two hundred years later.

—ED.

Just by chance I found, abandoned in a corner of the classroom for technical studies, a copy of "Awake!" It has had a strong impact on me. Some of its articles, like the one about Mariolatry, have been developed with pleasing equanimity that exclude, fortunately, a position of aggressive fanaticism.

M. D., Colombia

Thank you for the renewal notice. May I take the opportunity to thank you for your excellent publication. I have read it for three years and I am always finding something exciting and interesting. It is good, in fact, rare, to find publications that are as unbiased as yours are. May you continue for a long time yet.

E. K., Australia

I would like to mention that I personally find your magazines helpful and interesting. Recently I lent them to a colleague at work, a highly qualified electronics engineer. He was not only interested in the contents but was highly impressed by the technical and factual accuracy of the articles. This corresponds to my own views and I would add that although there are points on which I am not yet fully convinced myself, I particularly respect your presentation of your views, your plain straightforward arguments, your not "smudging" issues, avoiding unpalatable facts or argumentative points, i.e., in general your scrupulous honesty.

J. P., England

Watching the World



Soviets Complain

◆ The newspaper *El Mercurio* of Cuenca, Ecuador, recently carried a report from Moscow complaining that "Jehovah's Witnesses continually recruit Soviet young men despite the prohibition upon the sect . . . Authorities have never approved listing Jehovah's Witnesses among the sects tolerated in the USSR for two fundamental reasons: their refusal to comply with military service and their concept of the imminent end of the world, which is called 'war propaganda.'" The authorities also complained that "they do not place their children in the pioneer or Komsomol (Communist Youth) organizations, nor do they join the Communist Party, the unions or vote in the elections. . . . [They] carry on an extraordinary effort to spread the 'good news' [their Bible message about God's kingdom]."

To counteract Witness growth, says *El Mercurio*, "the Soviet press is unrelenting in its attacks on the sect, accusing it of ideologically undermining the population." Even so, it notes, "Jehovah's Witnesses have been able to recruit tens of thousands of members in the USSR and they seem to be stronger in Central Russia, the Caucasus region, and eastern Siberia."

to someone." —April 20, 1981, p. 108.

Turkey and Human Rights

◆ The Turkish newspaper *Milliyet* recently reported: "In Ferikoy, Istanbul, 146 persons were arrested when holding a secret meeting under the name of 'Jehovah's Witnesses.'" According to the report, both security police and a military patrol searched the house and arrested those attending the so-called secret meeting, catching them "red-handed." With what fearsome 'secrets'? Answers *Milliyet*: "During the raid a great amount of books 'Choosing the Best Way of Life' [a discussion of the Bible books of 1 and 2 Peter] and 'Service Meeting Programs' [outlines for religious meetings] of the suspects were found."

Was this actually a secret meeting? Well, for nearly five years, Jehovah's Witnesses had been meeting at this same "house" (Kingdom Hall) for their thrice weekly religious meetings, and this fact had been properly registered with the Military Commander in Istanbul. In 1974 Turkish courts and the government legally accepted Jehovah's Witnesses as a religion and in 1980 the Supreme Court of Appeal acquitted them of charges of subversive activity. Hence, such police action is an outright violation of the freedom of worship and human rights, which even the Military Government under Chief of State General K. Evren has promised to protect.—See *Awake!* 6/8/81, pp. 25-27.

World Under "Hypnosis"?

◆ When former Ambassador to Moscow George F. Kennan recently received the Albert Einstein Peace Prize, he commented on the U.S.-Soviet nuclear buildup. He said that they were acting like "victims of some sort of hypnosis, men in a dream, like lemmings [small creatures known to drown themselves en masse]

headed for the sea." Kennan also said that the atomic overkill capacity of the nations has reached "such grotesque dimensions as to defy rational understanding." Such irrational behavior is to be expected, according to Bible prophecy, because the nations are being maneuvered by unseen demonic influences that "go forth to the kings of the entire inhabited earth, to gather them together to the war of the great day of God the Almighty . . . to the place that is called in Hebrew Har-Magedon."—Rev. 16:14, 16.

"Closer to Armageddon"?

◆ After Israeli warplanes attacked and destroyed an Iraqi nuclear plant near Baghdad, *Newsweek* magazine considered the problem of spreading atomic capabilities among smaller nations. "No matter how dangerous the nuclear game has become," said *Newsweek*, "smaller powers, fearful and suspicious of their neighbors, still seem determined to play. The result . . . will be a world in which all nations live a little bit closer to Armageddon."

Cow Wrecks Train

◆ According to the United News of India, survivors of India's worst train disaster claimed that the engineer had suddenly braked on a bridge to avoid hitting a cow, one of Hinduism's sacred animals. This is thought to have caused seven of the train's nine overcrowded cars to tumble into the Bagmati River, drowning as many as 800 passengers, or even more by some estimates. The chief minister of Bihar State declared the wreck to be "the biggest and worst in living memory."

Inventor Says "Pill" Abused

◆ "I personally feel the pill has rather spoiled young people," said the coinventor of the birth-control pill, Dr. Min-Chueh Chang. "It's made them

more permissive . . . But people will abuse anything." As a result, he complained, youth "indulges in too much sexual activity and pays less attention to other activities." As for the sexual revolution, he said, "we were not interested in that. The oral contraceptive was made merely for the population explosion . . . rather than that young people could have a good time."

Papal Visit Backfires

◆ The papal visit to the Federal Republic of Germany late last year reportedly caused a wave of church membership withdrawals in Cologne. According to the newspaper *Schwarzwalder Bote*, the Cologne District Court had been registering a monthly average of 200 declarations of withdrawal, but after jumping to 485 in October, withdrawals rose even higher, to 381 for just the first half of November (the month of the pope's visit). Why? Many Cologne Catholics are said to have specifically mentioned the papal visit and the German bishops' pastoral letter issued in connection with the fall governmental elections. Apparently such obvious political meddling did not set well with many Germans.

Thirty-Six Years in Hiding

◆ A Soviet newspaper reports that police recently found a 61-year-old man who had been hiding in a dark bunker for the 36 years since World War II. His family had hidden him so that he would not be punished for collaborating with the Nazis. He was said to be almost blind and without any sense of time.

Australian Look at U.S. Guns

◆ "Even a cursory look at the relentless U.S. statistics on deaths caused by guns leads the observer from any other Western democracy to the conclusion that the American attitude toward this problem borders upon insanity," observes the *Age* newspaper of

Melbourne, Australia. "Handguns caused about 10,000 deaths in the U.S. last year. The British, with a quarter the population, had 40. In 1978 . . . there were more killings with pistols and revolvers by children ten and under in America than the British total for killers of all ages. In Japan, with half the U.S. population, the 1979 total of crimes involving handguns was 171; in West Germany it was 69."

Why the immense difference? In the *Age's* opinion, "Americans seem unable or unwilling to acknowledge the simple truth that nations such as Australia, Britain, Canada, Japan, Germany, and Sweden have strict gun control and far less gun mayhem. It cannot be a coincidence."

Hens' Lenses

◆ That laying hens should wear contact lenses seems absurd. But it apparently solves a real poultry problem. The birds peck at each other to determine who is "top chicken." If blood is drawn, the rest often will kill the victim. "A farm can lose as much as 25 percent of its flock," explained a poultry science researcher at Virginia Polytechnic Institute. "Debeaking" has been a method of coping with the problem, but it makes feeding awkward and wasteful. On the other hand, red-tinted contact lenses "keep hens docile because the red tint makes it difficult for them to see blood," reports *Science 81* magazine. The lenses are said to cost less than 20 cents (U.S.) a pair, stay in for the egg-laying life of a hen, and save farmers about a cent per dozen eggs by keeping flock death rates to 5 percent.

"Psychic Phenomena"

◆ The *American Journal of Psychiatry* reports that a survey has revealed that 58 percent of medical school deans, psychiatrists and others in the

field favor a study of psychic phenomena in their school curricula. Over a third of those surveyed claimed that they had personal knowledge of a psychic event. "Our findings indicate a high degree of conviction among psychiatrists that many psychic phenomena may be a reality and that non-medical factors play an important role in the healing process," said Dr. Stanley Dean, professor of psychiatry at the University of Miami, in Florida. And *Medical Tribune* magazine observed: "The survey adds to mounting evidence that psychic phenomena are gaining some official respectability."

In a similar vein, Dr. J. O.

Mume, writing in the *Sunday Observer* of Lagos, Nigeria, recently stated: "Trado-medicalism [traditional medicine] cannot be complete if it fails to take into consideration the incidence of diseases and misfortunes caused through . . . witchcraft." He added that "by taking into account the influence of witchcraft, trado-medicalism can treat many diseases that elude scientific diagnosis." Similar phenomena existed in the time of Christ, who knew and ably dealt with their demonic source.—Matt. 17:14-18.

Driving to Distraction

◆ According to studies by European researchers, reports

the Italian newspaper *La Provincia* of Cremona, "five percent of all [auto] accidents that happen every year in Europe have as their primary and secondary cause the fact that the driver was smoking." The article notes that, among other things, smoking causes "distraction of the driver due to tobacco ash falling on his clothes, or the cigarette that slipped on the seat or car rugs. In his attempt to get it back, the driver takes his eyes off the road, with very serious results." *La Provincia* indicates that, on the recommendation of the researchers, Italy's ministry of transportation has considered prohibition of smoking while one is driving.

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