

Awake!

APRIL 22, 1983

THE WORLD ECONOMY



-where is it heading?

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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 stays politically neutral and does not exalt one race above another.

Most importantly, this magazine builds confidence in the Creator's promise of a peaceful and secure new order before the generation that saw the events of 1914 C.E. passes away.

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Feature Articles

Every person on earth is affected—directly or indirectly—by the world's troubled economy. The cost of living continues to go up. The purchasing power of money goes down. Will the banks all fail? Who is responsible? What is the solution to the money problems of the world? Read the following articles for the answers to these urgent questions

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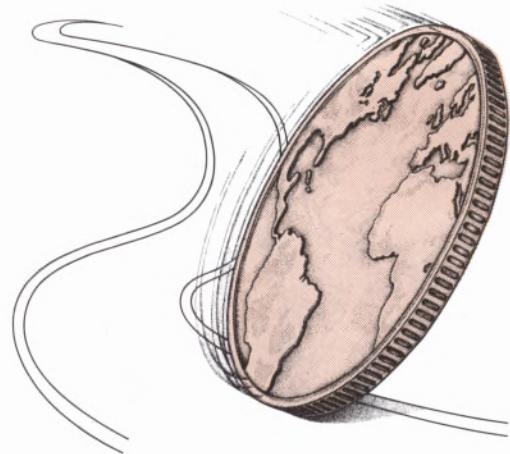
THE WORLD ECONOMY

**Where Is It Heading?
What Will It Mean for You?**

“YOU just don't know how hard it is making ends meet," says Ann. True, her middle-class home is lovely, but the mortgage payment is almost heart stopping. And though her husband's paycheck is substantial, inflation has chiseled away at its value. "Every week prices creep up," Ann says, "while my shopping money stays the same." She thus feels squeezed by unrelenting pressure. "I've offered to take on a part-time job," she sighs, "but he doesn't want me to."

On the other side of the world, an African farmer named Alion faces similar frustration. Government controls have set prices so low that his work of tilling and planting is simply unprofitable. In times past, Alion says, "everybody would try to plant more than the next farmer. Now, everyone settles for growing the same." It just isn't worth the extra effort of growing more produce.

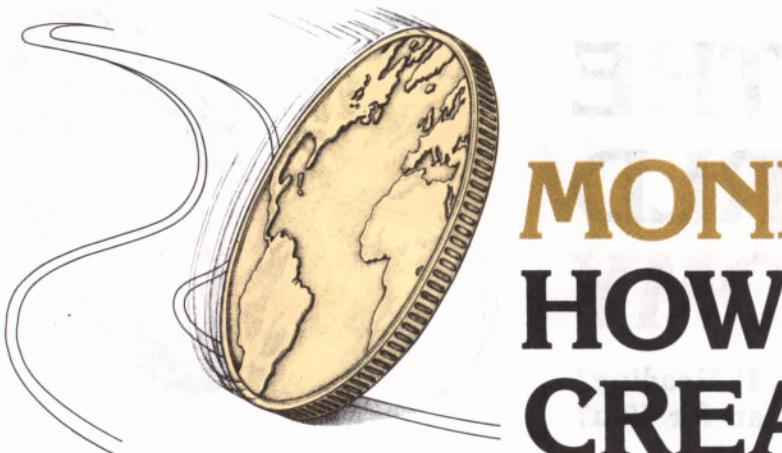
Anxiety and despair are the legacies of our troubled economic times. And no doubt you, too, are affected, regardless of what part of the world you live in. The future seems obscured by question marks: 'Should I buy now before prices



go up? Should I invest what little savings I have? Can I even trust that the banks are a safe place to deposit my money?"

Such concerns are not mere paranoia. In the United States, for example, 1982 saw more banks close than any other year since 1940. Bankruptcies were ominously close to the all-time peak reached during the Great Depression of the 1930's. Towering interest rates had choked the life out of businesses, large and small. And the problems are by no means confined to any particular country. 'So just where is the world economy heading?' you might ask in frustration.

Frankly, no one really knows whether tomorrow will bring news of an economic rally or further retreat. The economy is just too unpredictable. Yet we can authoritatively predict where the world economy is headed in *the long run*. To do this, however, we must look beyond wage-price spirals and balance-of-payment deficits and search out the *real causes* of today's problems. Nevertheless, it would be helpful first to take a brief look at some of the economy's external problems.



MONEY— HOW CREATED?

FEASTING makes you happy and wine cheers you up," a wise man once said, "but you can't have either without money." (*Ecclesiastes 10:19, Today's English Version*) But just what is this mysterious thing—money? Where does it come from?

Long ago man realized that neither bartering nor lugging around metal were convenient ways of doing business. So the ingenious Chinese invented paper money. And in time other nations, too, opted for the convenience of printing paper that was, at least in theory, redeemable for precious metal—usually gold.

The gold standard, however, had a built-in flaw. It is said that the total value of all the gold *ever* mined is only about \$85 billion dollars (using the old \$35/oz price of gold). Nowhere near enough of the shiny stuff exists to keep up with the frantic growth of population and business.

To illustrate, after World War II the U.S. dollar became *the* currency of international trade. Billions of U.S. dollars

thus came to be in the hands of foreign governments. Claimed one writer: "Already by 1965 there were more dollars in the hands of foreign banks than *the gold in Fort Knox was worth*." (Italics ours.) What if the nations all suddenly demanded their gold? So in 1971 the United States 'closed its gold window.' Foreign nations could not redeem their dollars for gold, though the United States still maintained huge gold reserves. For all practical purposes, then, the money was backed only by the good faith of the United States government. This threw the international monetary system into chaos.

Money, therefore, is worth only as much as people *think* it is worth. The more money governments print, the less value people put on it. But the printing presses are not the only source of money.

Out of Thin Air

"You ought to have deposited my silver monies with the bankers," said a man in one of Jesus' parables, "and on my arrival I would be receiving what

is mine with interest." (Matthew 25:27) Even in Bible times, bankers knew the art of lending money for a tidy profit and sharing some of this gain with the depositor as "interest." In doing this, however, bankers are cleverly creating money.

For the sake of argument, imagine yourself depositing \$100,000 (or a similar amount of your country's currency) in a bank. Next is a customer who borrows \$10,000 to start a new business. You may figure that your deposit, minus this loan, increases the bank's assets by only \$90,000. But that is not how a banker reasons. Rather than giving the borrower \$10,000 in hard cash, the money is usually credited to *his bank account* for him to draw upon gradually. So instead of the bank's assets *decreasing*, the bank's ledgers show a total of \$110,000—\$10,000 created out of thin air!

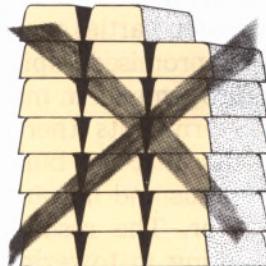
This figure juggling may give you a headache, but it brings a smile to the banker. In this way banks are able to lend more money than they really have. 'But isn't that dangerous?' you ask. It can be. Especially if a bank lends money irresponsibly. Nevertheless, it is rare that all the depositors and borrowers come at the same time demanding their money. So banks keep enough hard cash on hand to handle their day-to-day business.

Governments, too, create enormous amounts of funds without necessarily running their printing presses. For example, according to the book *The Money Balloon*, the Federal Reserve Bank of the United States "goes through an obscenely complicated series of bookkeeping entries—moving numbers around, buying and selling Government securities, making loans, buying securities and agree-

ing to sell them right back, selling securities and agreeing to buy them right back . . . but when all this activity is analyzed, the Federal Reserve System is creating money out of thin air."

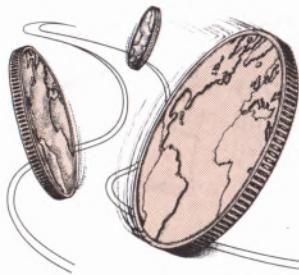
You, too, may unwittingly create money. The credit card lets you borrow money every time it is used. Checking accounts often let you write checks for more money than is actually deposited. In this way, the supply of money grows—and inflation is fueled.

The money system is therefore a bubble that could easily burst if people lost confidence in the system. Nevertheless, if money is so easily created, where does it go?



World currency is no longer backed by gold





MONEY— THERE'S NEVER ENOUGH!

SAID King Solomon: "Your money can be gone in a flash, as if it had grown wings and flown away like an eagle." (*Proverbs 23:5, Today's English Version*) Many squander their money, like the highly paid army general who went bankrupt after purchasing "two Cadillacs and a second mink coat for his wife."

Similarly, a government can live beyond its means. The United States, for example, has accumulated an internal debt of over one *trillion* dollars! Other countries have likewise piled up astronomical IOU's, including large *external* debts to foreign sources, such as the Soviet Union's (16 billion dollars) and the Philippines' (10 billion dollars).

'But why haven't the nations been more prudent?' you ask. For one thing, ours has been a time of unprecedented demand for material goods. Economist Irving S. Friedman thus explains: "After World War II, governments could not survive, nor could opposition parties come into power unless they promised rapid, general, and major improvements in material well-being." Governments therefore needed money—lots of it—to build the roads, schools, hospitals and housing that people clamored for. The results? Huge borrowings, resulting in towering global debts. The situation dramatically worsened after 1973.

In that year OPEC (Organization of Petroleum Exporting Countries) drastically cut the flow of oil to the rest of the world. The world reeled from this devastating move. Prices of oil soared. Hardest hit, however, were the developing nations.

The March of the Petrodollars

OPEC's tactic worked, and its members were suddenly fabulously rich (although more recently they find themselves in financial difficulty due to the oversupply of oil and falling prices). But back then much of their newfound wealth marched to the cash-starved developing nations. But this desire for profit proved to be at the 'root of many injurious things.'

—1 Timothy 6:10.

All this cash helped fuel inflation, which some countries have tried to control by letting interest rates soar. The heavily indebted nations, however, were trapped—they needed more money but could not pay even the interest on their old loans. As we will later see, these debts now threaten the solvency of *the entire world economic system!*

Financing the Third World

After World War II the World Bank and the International Monetary Fund (IMF) were established to lend money to needy countries. Wealthier member nations finance these organizations. Re-

cently, the president of the World Bank, A. W. Clausen, declared that "a key and central aim of The World Bank is the alleviation of poverty." And these institutions have indeed funneled much needed money to developing nations. We are reminded, nevertheless, of a bit of wisdom found at Proverbs 22:7: "The rich is the one that rules over those of little means, and the borrower is servant to the man doing the lending." Some developing nations therefore resist accepting help from these organizations. Why so?

In order to protect its investments, the IMF typically requires that a borrowing

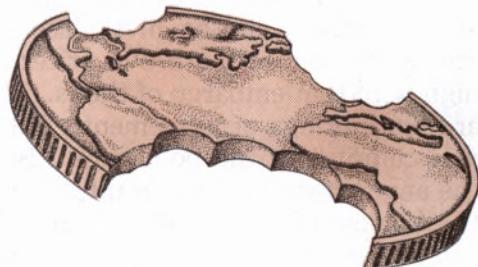
nation drastically alter its economic policy by attempting to balance the budget, cut government spending and devalue its currency. These may be sound economic ideas, but they can also throw a poor country into chaos. One economist thus concluded that forcing these policies on a developing country is "like throwing an anchor to a drowning man."

Simply printing more money is a futile ploy—it merely tightens the death grip of world inflation. So, heavily indebted nations may have no choice but to succumb to the policies of the international lending organizations.

INFLATION —WHAT'S BEHIND IT?

YOU go to your favorite café and order a cup of coffee at an already inflated price. But when you go to the cashier you are informed that in the time it took you to drink it, the price has nearly doubled. Impossible? No, for people in Germany during the 1920's had this very experience—a chilling example of how inflation can accelerate.

Your experience with inflation may not be quite so drastic. Nevertheless, Argentina has experienced an inflation rate of 500 percent and is one of several countries suffering from disastrous, rapid inflation. Nevertheless, students of the Bible are not surprised at this development, since Revelation 6:6 told of a time



when a day's wage would buy a mere "quart of wheat."

Like most of us, however, you may be confused as to who (or what) is to blame for inflation. So let's ask the "experts"! Imagine a courtroom gathering of businessmen, politicians and economists. You have the solemn privilege of presiding over the proceedings.

Down comes the gavel as you commandingly say: "Order in the court! The world economy is near death and one of you is to blame! Who would first like to defend himself?"

"If it pleases the court," says an economist, "I would like to try to shed some light on what has taken place. Inflation,"

says he, "is a simple result of the law of supply-and-demand. When the banks extend a lot of credit, the money supply grows. Now, the more money people have, the more they can demand goods. The more goods are in demand, the more they cost. It's really quite simple."

"Don't go putting the blame on us bankers," objects a man in a business suit. "If we didn't extend credit, the whole economy would lapse into a recession. Without credit, people can't buy houses, cars or even household appliances. Business and industries suffer. The stock market sags as investors pull their money out. Now, I admit we have at times got a bit carried away extending credit. But it was OPEC who gave us all that money in the first place. And they're the ones who drove prices sky-high with that embargo of theirs. (There are murmurings of agreement.) But the *real* culprits are the politicians." Before the angered statesman can utter a word, the banker cuts him off, saying, "Yes, *you're* the ones spending all that money on your pet government programs. Why, because you fellows do so much spending, there's greater demand for goods. So prices naturally go up!"

"Now that's all I'm going to take," says a politician. "First of all, it is the

military establishment that is always demanding more money for those 'toys' of theirs, even though there are already enough bombs to blow up the world several times over! And I remind you that you bankers are the ones that cry when interest rates are raised to control inflation."

"But all that has accomplished is to plunge the world into a recession," the economist says. "Besides, prices almost never come down once they go up. Several times the cost of raw materials went down. And what did some industrialists do? Instead of passing on the savings to the consumer, they invested their money in more advertising to try to increase consumption of their products!"

An industrialist is red-faced. "Now, just a minute," he says. "How can we lower prices when labor is constantly demanding higher wages? Sometimes the labor unions have demanded a raise *in anticipation* of inflation—before it even happens! What can we do but raise prices? Besides, we keep people employed. So what if our growth leads to inflation?"

With this remark the room erupts into chaos, broken only by the slam of your gavel. "Now I've heard enough of your excuses," you say. "I may not be an economist, but it's plain to me that *all* of you have had a part in this. All have contributed to this dreadful situation. I therefore sentence you . . . "

But your gavel is frozen by a sudden realization on your part. You think about all those credit cards in your pocket and how you've overused them. You think of the things you purchased out of excessive want—not need—and a fear that prices would go up. Your confidence as a judge wanes, and with head bowed low you join the ranks of the guilty.

Some of the Causes of Inflation

- Excessive Credit
- Government Spending
- Military Expenditures
- High Wage Demands
- OPEC's Oil Embargo
- High Interest Rates
- Floating Rates of Exchange in International Money Market
- Unprecedented Consumer Demand

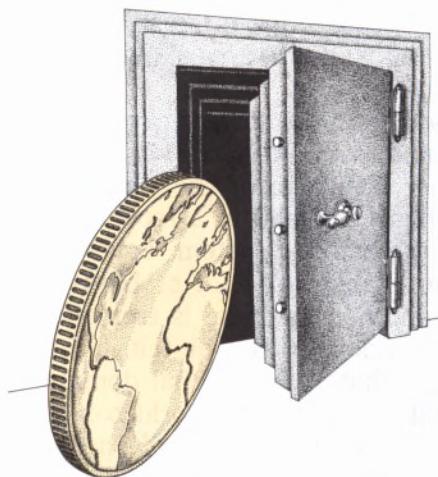
YOUR MONEY —SAFE IN THE BANK?

MONDAY morning they began lining up. They braved bitter cold and an estimated five-hour wait. The calm assurances of bank executives, economists and political leaders merely heightened the sense of panic. All over the nation, indeed all over the world, an ever-increasing crowd of people were besieging the banks, making the same demand—GIVE US OUR MONEY!

Might this be the news that you will read sometime in the near future? *The Wall Street Journal* recently quoted economist Alan Greenspan as saying that "the chances of a dangerous [bank] breakdown are the greatest in a half century." Why so?

Where the Money Has Gone

Recall how thoroughly you were checked out the last time you applied for a small bank loan. Surprisingly, banks are not always so prudent when *large* amounts of money are involved. For example, Mexico, with its sizable oil reserves, easily obtained some \$57 billion in loans. Then came the worldwide surge in interest rates and a drop in oil prices. Mexico stood at the brink of bankruptcy. A mini-panic among bank investors occurred as rumors spread that Mexico might default on these enormous loans. Emergency steps were therefore taken to pipe yet more money to this nation. While a crisis may have been headed off, other nations, such as Poland and



Brazil, are also having difficulties paying off their huge debts.

Billions more are invested in businesses. In times past, large businesses financed their organizations by selling bonds (long-term loans) to the public. But when interest rates climbed, investors sold their bonds and invested in more profitable areas. Businesses were forced to turn to short-term, high-interest bank loans. Banks, however, could lose a fortune if these businesses went bankrupt. The recent collapse of the Drysdale Government Securities Corporation is a scary example of just how vulnerable banks are—it cost them \$285 million!

Global Dominoes?

Economists thus fear that these factors could work together to produce a global domino effect. Suppose a foreign nation, or a number of large corporations, defaults. One or two major banks could go bankrupt. This, in turn, could frighten depositors in other banks, who might start a frenzy of bank withdrawals. Since banks keep only a moderate amount of cash on hand, there could be a massive liquidity crisis. Bankers would

be desperate for cash. This chain reaction could expand into a worldwide economic collapse!

Bankers nevertheless say that such a scenario is unlikely. David Rockefeller, former chairman of the Chase Manhattan Bank, claimed in a recent interview that the banking system "is very sound." True, "banks do a lot of business with one another, so there is tremendous interdependence." But he felt it "most unlikely" that such a global domino effect would pull down the world banking system. Since the success of the banking system rests on public confidence, however, it is understandable that banking leaders speak so optimistically.

'But surely a nation would not allow its major banks to fail,' you might say. But that is exactly what the central Bank of Italy did! The collapse of the Banco Ambrosiano received much publicity because of its close connection with the Vatican. When the scandal-ridden bank failed, the Bank of Italy, to the surprise and consternation of European bankers, withdrew its support. Bankers fear this may have set a dangerous precedent.

"Peace and Security" in the Financial World?

The *New York Times* of October 10, 1982, claimed "insiders predict that fear of a breakdown of international finance will ultimately drive the parties to agreement." During the economic collapse of the 1930's, however, the nations shunned cooperation, and, instead, "sought to shelter themselves from the prolonged world-wide economic storm without regard to the harmful effects of their actions on other countries." And there is little indication that the nations have had a change of heart. Inflation-ridden governments have, for example, allowed interest rates to rise, regardless of the devastating effect that it has had on poorer nations.

Nevertheless, the Bible does foretell that soon prominent leaders will predict "Peace and security!" (1 Thessalonians 5:3) To what extent this will involve some sort of worldwide economic patch-work remains to be seen. In the meantime, how does one deal with the world's shaky economy?

ECONOMIC PROBLEMS —WHAT SOLUTION?

FROM what source are there wars and from what source are there fights among you?" asked the Bible writer James. "Are they not from this source, namely, from your cravings for sensual pleasure that carry on a conflict in your



members? You desire, and yet you do not have. You go on murdering and coveting, and yet you are not able to obtain. You go on fighting and waging war." (James 4:1, 2) Does this not ring true? Is not the *real* problem man himself? Does

not his insatiable desire to possess things cause economic conflicts?

It is greed for profit, not unselfish concern for one's fellowman, that has caused bankers to lend such enormous funds to countries that cannot pay them back.

Greedy self-interest prevents the nations from cooperating together and working out a solution

And the Bible roundly condemns such profiteering. (Nehemiah 5:1-11; see also Exodus 22:25.) It is greedy self-interest that prevents the nations from cooperating together and working out a solution.

Since the Bible has so accurately described the emotional factors that lead man into such difficulties, it should not surprise you that it also predicts the outcome of the problems, economic and other, that beset the nations today—the complete demise of the present world system. This will come right on the heels of a proclamation of "Peace and security!" A nightmarish period of time called the "great tribulation" will expose, among other things, the worthlessness of trusting in the material goods that people have feverishly accumulated. "Into the streets they will throw their very silver, and an abhorrent thing their own gold will become." Imagine! Even gold and silver being viewed as worthless. But will this merely be because of inflation? No, for the prophecy continues: "Neither their silver nor their gold will be able to deliver them in *the day of Jehovah's fury.*"—Matthew 24:21; Ezekiel 7:19.

True Christians, however, do not fear that day of execution of divine judg-

ment, nor any accompanying economic collapse. They know that the "great tribulation" will culminate in the destruction of this wicked system of things, which will be replaced by a righteous new government of God. (Revelation 21:1-4; see also Daniel 2:44.) This government will bring real economic security to all earth's inhabitants.—Isaiah 65:21-23.

Faith in this coming government helps Jehovah's Witnesses to cope with these harsh economic times realistically. They recognize that pursuing a materialistic course can make one forgetful of Jehovah God. (Deuteronomy 8:10-17) Instead, they are aware of the importance of pursuing the values espoused in the Bible. This acts as a protection for them. During times of unemployment many are willing to take on more menial jobs that others might disdain. (Ephesians 4:28) Persons who really apply Bible principles are comfortable with a simple life-style. And like the writer of Proverbs 30:8, they pray: "Give me neither poverty nor riches." So, rather than living beyond their means, they are happy to have merely

Pursuing a materialistic course can make one forget about God

the necessities of life. They know the Bible condemns excessive debt, and they thus use self-control with credit cards and charge accounts.—Psalm 37:21.

Please allow us, then, to share our faith with you by a study of the Bible. In this way not only will you be prepared for the world's coming tribulation, including economic collapse, but you can find joy and contentment *now!*

Our Son / HANDICAPPED!

WHAT an anxious wait! Our first child was about to be born. I was in the hospital that day, not as I usually am with scalpel in hand, but equipped with a camera to document this great event in our lives. My heart beat faster as I saw the tiny head slowly begin to emerge. My son and heir! And then—what a disappointment! He was obviously handicapped—a harelip and, as I found out later, a complete cleft palate! I went numb all over and began to tremble with despondency. My wife was given a sedative immediately so she would not suffer the same shock. Tears filled my eyes as I turned to leave the room.

Later, in the hospital's nursery, I wept from sheer disillusionment. Why us? Our first child! Why had this happened to us? How would my dear wife, Isaura, react when she learned of it? Later, as I regained my composure, I began to reason more clearly.

I remembered that the Bible taught that we are all imperfect, subject to weaknesses, illnesses and defects. Our child was born handicapped because we, his parents, are imperfect. Some irregularity in our genetic makeup or in the environment had caused this defect. For our own part, we had inherited imperfection from our forefathers and originally from our first parents, Adam and Eve. How relieved I was that I had not blamed God for what to me was an enormous disappointment!—Psalm 51:5; Romans 5:12.

It was only natural for me, a sur-

geon, to think, too, of what my medical studies indicated as to the cause of this handicap. No one factor can be isolated as *the* cause. Stress, medication such as antibiotics or contraceptives, pollution and heredity are considered to be possible factors.

How to Meet the Challenge?

Whatever the cause in our particular case, the main question was: How could we meet the challenge? I remembered a fellow medical student who had also been born with cleft palate and lip and later had been operated on. But what a time he had had as a child to make himself understood! And I thought especially of the psychological problems he had to face because of unkind words, even mimicry, on the part of others. Could we prepare our son to stand up to such experiences? Even more pressing at the moment—how would I tell my wife so as to minimize the blow to her? I had tried once, only to have to leave the room before bursting into tears.

Impatient to see her child, Isaura asked me on the second day: "What's wrong with our baby? I want to see him." Sheding my professional bedside manner, I tearfully told her. "Is that all?" was her amazing answer. "The main thing is he's alive. I would really be sad if he had been stillborn, but he's our child and he is alive! I want to care for him."

I was completely unprepared for the serenity with which she reacted and felt

ashamed of my own previous reactions, even more so as I saw with what tenderness she took him into her arms. When I pressed her later on the matter, she answered: "Of course I knew that he had some problem. Remember, I had only a spinal anesthetic so I was watching by the reflection on the lamp. I saw he had a defect but didn't know how serious it was. My biggest fear was that he might be stillborn. So how happy I was to hear his first cry!" All my stewing had been unnecessary!

We began to appreciate the problems we would face in raising our child. Like every baby with a cleft palate, it was impossible for him to breast-feed or even to suck. We first had to draw the milk from Isaura and then carefully feed it to him with a tiny spoon.

Treatment Begins

I had attended only one birth where the child was born with cleft palate and, aside from that, had had no experience with the problem. So we began reading books, especially those dealing with the treatment. This research took me to a plastic surgeon who directed me to the State-operated Hospital for the Study and Rehabilitation of Lip-Palate Lesions in Bauru, S.P., Brazil, called affectionately *O Centrinho* (the Little Center). There we were informed: 'Yes, we will be glad to handle the case, but only after he is three months old.' In the meantime we were to do the best we could in feeding him as we had been doing. We drove home with a slight feeling of disappointment, not quite sure whether we were on the right track or not.

Three months dragged by. Finally on the day set we drove early to Bau-

ru. What we learned that day left us amazed but also hopeful. Our son would be operated on that very day, and while we waited we would be informed as to what was involved. We learned that his first lip operation was only the beginning, and that we should be prepared to carry on with his treatment for several years! Besides the plastic surgeon, other specialists would take part in different stages of treatment: a pediatrician, a nose and throat specialist, a specialist in orthodontics and another in speech defects, and finally a psychologist. "He is to be treated by all these people? Is it that serious?" we asked. "Yes, he will probably need help from them all," was the answer.

The pediatrician would prepare our son for the surgeon who would perform the lip operation and, about 18 months later, would operate to repair his palate, or the roof of his mouth. We learned also that infections are quite common in the throat and the ears of children suffering from cleft palate, requiring the attention of a specialist in these areas. In nearly all cases of cleft palate, too, the teeth of the child grow in twisted or irregular; so enters the specialist in orthodontics to

**"What's wrong with our
baby? I want to see him"**

care not only for the baby teeth but also for the permanent ones. Persons with harelip or cleft palate also have difficulty in forming words clearly so they require special training to overcome speech defects. Finally, the psychologist attends both the patient and his parents to prepare them for problems that arise as the

child comes in contact with others in school and on playgrounds.

After nearly eight hours of talks and interviews during that first day at the *Centrinho*, we began to appreciate the problems ahead of us. Slide showings helped to impress on our minds the need for us to be patient, for much would depend on our attitude and efforts during the treatment. I learned that my initial negative reaction was quite common among parents in our situation. In fact, my reaction was mild compared with that of some. Not infrequent are feelings of actual rejection of the child by parents, with expressions such as, 'I detest having a child like this!' or, 'He was born this way to punish us!' Some parents just want to leave the child at the hospital and forget about him. In contrast with such negative feelings were those of real affection for the child and of genuine desire to do whatever they could for his welfare.

Eating Was a Problem

The operation had improved his looks immensely and with time the scars became almost invisible. But other problems remained. With no roof in his mouth, swallowing liquids was a real chore. It was impossible for him to suckle, and if we gave him too much food, it would just run out of his nose. Constant care was needed so he would not choke. Weekly control visits to the *Centrinho* were a *must*. However, as time went on, we became more adept at feeding him and caring for him. We were happy to confirm what we had been told from the beginning: His defect would in no way affect his mental processes. What a joy to see him develop into an energetic, active child, normal in every other respect!

We were very grateful for the counsel received at the *Centrinho*, as it helped us to cope with the reaction of other persons who for the first time saw a child with harelip. I recall one occasion when we attended a religious convention soon after Adner was born. A friend of ours remarked: "Poor little thing! He's going to die!" Happily, we were able to explain just what was involved. We made no effort to hide his defect and we tried not to pamper him. Rather, we tried to rear him as we would any other child.

During the months that followed we had to make a decision. We felt that it would be good for us to have another child. To raise an only child with the special treatment that he needed could result in his being spoiled. But should we risk having a second handicapped child? We decided to run that risk, so by the time Adner was being readied for his palate operation, Isaura was well along in her second pregnancy.

The operation on the palate was more serious than the one on the lip and took much longer. For us it was more stressful since we could not see him until he was released from the hospital. But how happy we were when we knew that it, too, had been successful! Now, with healed lips and a roof in his mouth, he was finally able to eat without any difficulty. Another big hurdle was passed. The next obstacle was to teach our son to speak properly.

Learning to Speak Clearly

The lip and palate operations naturally affected his ability in this regard. To understand his problem, consider for a moment just what is involved in speaking. Observe your mouth as you pronounce the vowels (a, e, i, o, u). You will

notice that you can do so with only limited movement of your mouth and lips. Vowel formation depends mainly on the air from your throat passing unrestricted through your mouth. But now try forming the consonants (b, c, d, f, etc.). Notice that as you form these consonants, it requires a greater movement of the lips, tongue or throat. Anything that hinders this movement makes it more difficult to form sounds. So you can see the problem faced by a child who has had an operation on his lips and the roof of his mouth.

You may have noticed that anyone who has a cleft palate speaks with a heavy nasal sound. The reason is that, with no roof in the mouth, the air passing over the vocal cords in the back of the throat is forced out in a manner that gives a definite nasal sound. The purpose of the operation on the palate was to close the cleft in the roof of his mouth—a very delicate operation. In our son's case, this successful operation enabled him to begin to speak with little nasality, but he still needed months of special training at the *Centrinho* so as to speak clearly. At times it seemed that he realized when he did not speak correctly and he would correct himself. We were very happy with his progress. At five years of age he was able to speak clearly, and his visits to the hospital were suspended for about a year.

The next stage of his treatment will be to correct his permanent teeth when they begin to appear. As is generally true of children suffering from harelip and cleft palate, both the baby teeth and the permanent ones tend to come through irregular in number, shape and size, and some out of place. Some just do not come through. Treatment involves

braces to straighten crooked teeth and, in many cases, prostheses to substitute for teeth that are missing. We do not anticipate any problem when Adner begins this treatment.

Has It Been Worth the Trouble?

This is a question that some people have asked. It is true we have had many anxious moments during these five years. The weekly visits to the *Centrinho* were a trial, especially for Isaura. There have also been many sleepless nights when our son was recovering from surgery. However, as we watched his lips and mouth heal rapidly, as we heard him gradually improve in speech, we could only repeat the thought of the Bible psalmist, 'In a fear-inspiring way we are wonderfully made.' (Psalm 139:14) Moreover, as we listen to him use his copy of *My Book of Bible Stories* to teach his younger brother (who happily was born without any problems), there is no doubt as to whether we did the right thing.

We are grateful to the clinical group at the *Centrinho* for what they have done for our son, and for what they continue to do on behalf of persons afflicted with cleft palate and harelips. Above all, we are grateful to the great Creator of our wonderful bodies—who has given us the marvelous hope of living in a New Order free of sickness and physical defects. Along with other texts, the expressions used in the following passage especially fill us with hope: "At that time the eyes of the blind ones will be opened, and the very ears of the deaf ones will be unstopped. At that time the lame one will climb up just as a stag does, and the tongue of the speechless one will cry out in gladness." (Isaiah 35:3-6)
—Contributed.

Charging Africa's Giant Battery

By "Awake!" correspondent in South Africa



WOULD it surprise you to learn of a battery that is powerful enough to supply the electrical needs of a large city? Even more remarkable, that, by "overcharging" it, water is supplied to a thirsty industrial area? Such a unit is obviously not portable, and so, to examine it, we need to travel to the picturesque setting of the Drakensberg mountains, near the border of Lesotho in South Africa.

Our lookout point is the edge of the great African escarpment, at an elevation of over 3,000 metres.* The air is crisp and the view breathtaking. Behind us, stretching farther inland, is a vast central plateau, known as the highveld. At our side the Tugela crashes over the escarpment into the green foothills, starting as a stream and soon becoming a large river.

Looking down from the Drakensberg escarpment, we note two power lines. They do not lead to a power station belching smoke into the air; rather, these power lines end abruptly in the rockface of a foothill. About 400 metres above the power lines and over the crest of a hill is a large reservoir. About five kilometres† away lies a second reservoir situated at a much lower level. Strange-

ly, the reservoir levels are constantly changing. Never are both full or empty at the same time. In fact, their fluctuations can be anticipated on a weekly calendar. On Friday afternoon you can be sure that the lower one is full, but on Monday the water will be gone and the upper reservoir will be full to the point of overflowing!

Hidden underground is a network of tunnels and shafts that run between the reservoirs. The tunnels connect up with four large machines, operating either as pumps or as turbines generating electricity. Twenty-six million cubic metres of water must be pumped up in order to fill the upper reservoir. It can be likened to a large battery, supplying not only electricity but also water to the thirsty highveld. It is called the Drakensberg Pumped Storage Scheme.

Advantages Outweigh Pumping Costs

Though batteries are useful, they usually cost money and take time to recharge. Likewise, electricity is needed to pump water into the upper reservoir, which takes over 35 hours to fill. This is done during weekends and at night, making use of off-peak power.

At present, South Africa's electrical needs are supplied mainly by coal-burning power stations, with a capacity

* 1 metre = 3.28 feet.

† 1 kilometre = 0.6 miles.

of about 19,000 megawatts. The extra megawatts stored in the Drakensberg is thus a welcome supplement in times of emergency or peak demand. An enormous draw of electricity is registered when meals are prepared at midday and early evening.

To bring an extra coal-burning power plant into operation is expensive and pollutes the air. It also takes hours to reach full power from a cold start. Controversial nuclear power plants operate at a fixed capacity, resulting in wasted electricity during off-peak periods. With pumped storage schemes it takes about three hours of pumping to produce two hours of electricity. Is that worth it?

"Despite the inefficiency in pure energy terms," states the *Encyclopaedia Britannica*, "such facilities are of great practical efficiency because they allow the use of otherwise wasted off-peak power." Using excess generating capacity and converting it into power when required is like buying stock when it is plentiful and cheap and then reselling it profitably when the supply is in demand.

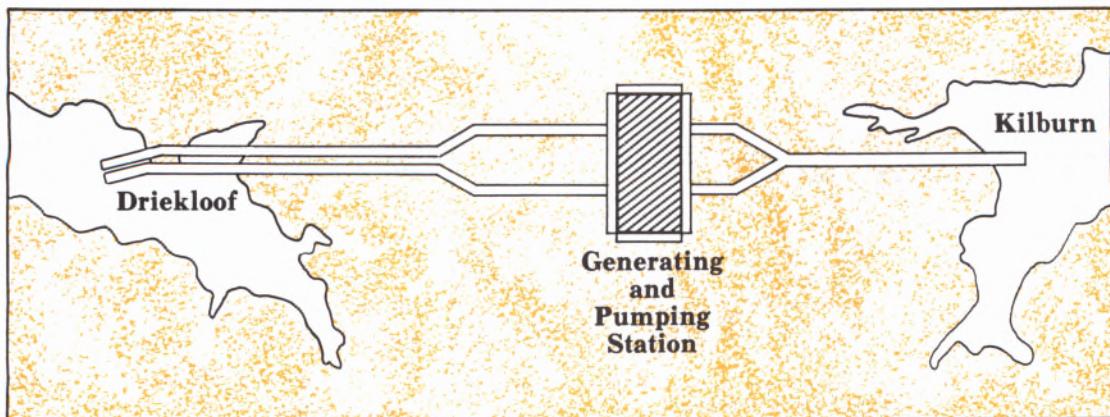
The Drakensberg Pumped Storage Scheme has an added benefit—supplying water to an expanding inland industry.

Such include the gold mines, which are South Africa's highest source of revenue. More gold is produced here than in the rest of the world combined. Sufficient water must be supplied, regardless of the cost. During weekends, when the upper reservoir of the Drakensberg scheme is filled, the pumping continues for an extra 10 hours. Thus millions of cubic metres of water are transferred each week from the low Tugela basin to the much higher Vaal basin. A small expense considering the high price of gold!

How Does It Work?

Water from the Tugela River is channelled into the lower Kilburn reservoir. From there it is pumped up through the mountain to fill the upper Driekloof reservoir. Once filled, this upper reservoir overflows into another. It is the largest reservoir in South Africa, and, when completed, it will have one of the largest earth walls in the world.

At regular weekly periods when electrical demands reach a peak, the process of pumping is reversed. The upper reservoir's "plug" is pulled. As the water rushes down, the giant pumps become turbines, generating 1,000 megawatts in



less than three minutes. If necessary this output can be continued for $27\frac{1}{2}$ hours before the battery needs recharging. In other words, the upper reservoir needs refilling. (See illustrations below.)

The Underground Powerhouse

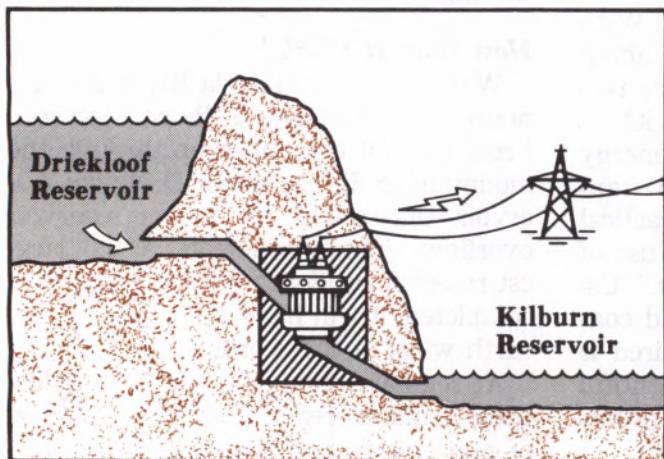
The four reversible pump-turbines are concealed more than a hundred metres below the surface of the mountain in an excavated chamber. This large cavity has a volume equivalent to a 13-

story block of flats with 77 two-bedroom apartments on each floor! On either side are another two large chambers containing valves to regulate the backflow of water and transformers that convert the generated power to the required transmission level.

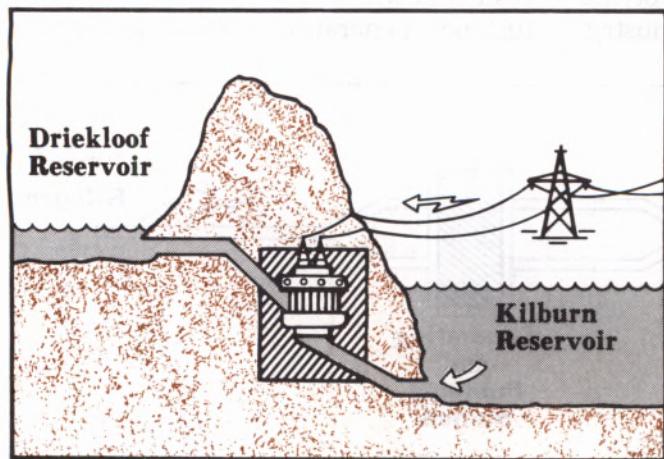
Each pump-turbine can generate a maximum of 270 megawatts, the equivalent of more than 360,000 horsepower. That is far more than the electrical capacity used by the neighbouring state of Lesotho. Whether pumping or generating, these giant machines rotate 375 times a minute.

The concrete-lined water tunnels are six metres in diameter. Before reaching the lower reservoir they combine, forming an even larger tunnel. Here water flows at a tremendous speed, reaching about 200 kilometres per hour. All of this takes place out of sight beneath the waving grass of the Drakensberg foothills.

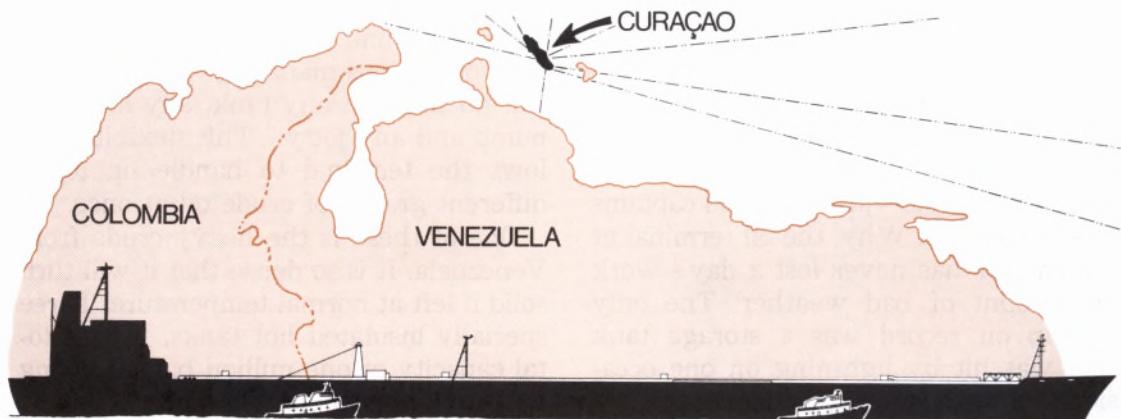
Since the world's first pumped storage scheme began operating in 1892 near Zurich in Switzerland, appreciation for their value has grown. Though successful as a means of storing power, these schemes do not originate power. Power stations elsewhere have to provide the thrust to energise the pumps to lift the water. Only when water gravitates back does the stored hydraulic energy become mechanical energy on the spinning shaft to drive the generators, producing electrical energy once again.



Used as a Generator



Used as a Pump



Crossroads of the Oil World

By "Awake!" correspondent in the Netherlands Antilles

BLIG ships, some of them the world's largest, come to Curaçao's Bullen Bay. They do not come to this tropical island in the Netherlands Antilles with tourists or vacationers. Rather, they come with the one precious commodity that is in great demand around the world—oil.

To be economically feasible, crude oil must be shipped in very large quantities, in supertankers. These VLCC's (Very Large Crude Carriers), as they are commercially called, can carry from 150,000 to 500,000 tons of oil, and require harbor facilities with depths of 50 to 95 feet (15 to 29 m) of water. There are not many ports around the world that can handle this kind of ship. In fact, in all the United States, the largest oil consumer, there is not one that can handle even the smallest VLCC's, those in the 150,000-ton range. This is where Bullen Bay comes in.

Crude oil from the Middle East and Western Africa is brought here by the VLCC's. From here, it is reloaded onto

smaller tankers and shipped to the United States and other destinations. Likewise, oil from Venezuela and Mexico is shipped here in smaller tankers and is then carried by the VLCC's to points worldwide. Little is it known that Bullen Bay is the site of the world's largest oil-transshipment terminal, the crossroads of the oil world.

Natural Assets

What makes Curaçao the ideal location for such an operation is the fact that the shoreline around the island is virtually free from hidden rocks, reefs or shoals. The inviting clear blue-green water around the island is so deep that there is a story circulating among the locals that the island of Curaçao is like a toadstool sitting on top of a stem in the Caribbean Sea. Someday, so the story goes, the stem is going to snap, and the island will tumble into the sea. In the meantime, however, deep-water harbors around the island, such as Bullen Bay, serve as a vital link in the oil world.

Another natural asset is Curaçao's favorable climate. Year around, the temperature is in the low 80's (26-29 C.), the humidity is low, there is never a foggy day, and the tide seldom varies more than three feet (1 m). In a word, the weather is stable—just what sea captains would hope for. Why, the oil terminal at Bullen Bay has never lost a day's work on account of bad weather! The only mishap on record was a storage tank that was hit by lightning on one occasion, but with no serious damage.

Big Tanks and Pipelines

Central to the facilities here are the 61 gleaming, silver storage tanks. One of them is so mammoth that when it was constructed, a soccer game was played in it to dramatize its size. It is the biggest in the western hemisphere. It alone can hold up to one million barrels of oil. Together, all the tanks have a storage capacity of 17.5 million barrels. This is more than twice the amount of oil imported by the United States each day.

A complicated network of pipelines and pumps connect up all the tanks and the six piers or jetties where tankers load

and unload their cargoes. "The beauty of the pipeline setup," says the terminal's operations manager, "is that the oil can go through any tank, any line, any pump and any jetty." This flexibility allows the terminal to handle up to 20 different grades of crude oil at once.

One of these is the heavy crude from Venezuela. It is so dense that it will turn solid if left at normal temperature. Three specially insulated hot tanks, with a total capacity of one million barrels, along with an independent insulated pipeline system, keep the heavy crude molten while it's unloaded from the smaller tankers or reloaded on the VLCC's for their long journey to Europe, Japan and elsewhere. This unique feature is apparently so profitable that the slogan was coined: "Hot storage tanks offer cold cash benefits."

While the main business at Bullen Bay is oil, it is mixed with water—ballast water. Tankers that come for oil are loaded with fresh water as ballast. Instead of being dumped into the sea, up to one million tons of this fresh water is reclaimed by the efficient deballasting station at the terminal each year. This is an important contribution to the welfare of the island, since fresh water is otherwise obtained only by distillation of seawater, a very expensive process.

In Our Next Issue

- *Does Your Child Have Learning Problems?*
- *Why Don't My Parents Understand Me?*
- *Are You Thankful for Green Plants?*

All in a Day's Work

Every day about one million barrels of oil move through Bullen Bay. When a supertanker arrives, it may take as many as three of the large tanks to receive its cargo. To unload it may tie up one of the six piers and the associated pumps and pipelines for 40 to 48 hours. Other tankers may come in to take the oil away. And in any given day there may

be a dozen or more tankers moving in and out of the terminal. When it comes to scheduling the operations, "it's rather like a jigsaw," says a project manager.

All of this is directed by the operations room inside the office building. Through 10 video screens and remote control, skilled operators can monitor and control everything that is going on. A well-equipped laboratory, as well as sophisticated portable electronic equipment, maintain a constant surveillance

on the quality of each shipment. All of this has earned the terminal the enviable title 'the Rolls Royce of oil terminals.'

This Bullen Bay terminal never closes. Tankers of all sorts and sizes come and go at any time of the day and night. But this is hardly noticed by the thousands of tourists that come and go, much less by the millions of people elsewhere whose livelihood depends on the cargo that flows through this largest oil-transshipment terminal of the world.

THE ELECTRIC EEL —An Engineering Marvel

Horses that were being driven across a stream in South America wildly rose up on their hind legs and plunged into the water. Why?

They had been subjected to severe shocks from electric eels. One eel may measure as much as 8 feet (2.4 m) in length and nearly one and a half feet (0.5 m) around. Experiments have shown that the current generated by an electric eel is strong enough to make a number of 100-watt bulbs flash.

How does the electric eel produce such a strong current? There are three current-producing organs that occupy about 40 percent of its body. Each cell of the current-producing system is designed in such a way that there is a concentration of negatively charged ions inside and positively charged ions outside. The resulting electrical potential is quite small. However, since some 6,000 to 10,000 of these cells are linked together in one column, the combined voltage may be over 500. Additionally, there are about 70 columns, arranged in parallel on each side of the eel's body

with an output of approximately a one-ampere current.

Two features of design have been discovered that make a simultaneous electrical discharge possible. The nerve conductors of differing lengths also vary in thickness. The thinner the nerve conductors are, the slower the brain's discharge signal will reach the cells. So the nerve conductors leading to the most distant parts are the thickest. Then, too, the shorter nerve conductors have a delaying mechanism that prevents a premature electrical discharge.

The electric eel cannot be harmed by its own current. With the exception of two membranes that make it possible for the electric current to be discharged into the water, the rest of the thick skin serves as an ideal insulator. The linkage of the electric cells is such that the current cannot flow to any other parts of the eel's body.

Such masterful design points to the existence of a designer. The Bible clearly identifies him by the name Jehovah God.—Genesis, chapters 1, 2.

Does God Have a Mother?

AS THE ambulance bore him swiftly to Gemelli Hospital, Rome, "John Paul, bleeding profusely, softly murmured 'Madonna, Madonna' in Polish." So read a news report of the attempt by a Turkish gunman to assassinate Pope John Paul II in May 1981.

By appealing to Mary in a terrible crisis, the pope highlighted the veneration that is directed to the divinely chosen, highly privileged woman who gave birth to Jesus and who is often called Mother of God. This reverence for Mary is very widespread and takes many different forms, which makes people wonder, 'How did it develop?'

Nearly 2,000 years ago, Mary, a young virgin woman living in Nazareth of Galilee, had a sublime experience: a heavenly messenger told her that she was to bear a son whom she was to call Jesus. Mary asked how that could be since she was a virgin. "'The Holy Spirit will come upon you' the angel answered 'and the power of the Most High will cover you with its shadow. And so the child will be holy and will be called Son of God.'" —Luke 1:26-36, *The Jerusalem Bible*.

Thirty years later that "Son of God" conducted a dynamic preaching campaign and formed the Christian congregation. During the next few centuries Christianity went through great tribulations and also transformations. In time it became the official religion of the Roman Empire. Differences of opinion also devel-

oped, including one relating to Christ: Was he God the Son or the Son of God?

The Roman Emperor Constantine, a professed but unbaptized Christian, called a special council of bishops of the Church at Nicea in the year 325 to consider the question. As a result, the doctrine of the Trinity became official dogma defining Jesus as coequal, coeternal and "of one substance" with God. However, in the original Nicene Creed formulated at that Council no mention was made of the virgin Mary.

Since Jesus had been officially proclaimed "God," the next logical step, from the viewpoint of the Church, was to proclaim Mary "Mother of God." This was done in 431 at the Council of Ephesus where she was defined as "Theotokos," meaning "God-bearer," or "God's mother." However, it took centuries before the cult of Mary* became really widespread. Dr. F. Van Der Meer, in his book *Augustine the Bishop*, shows that in Augustine's day (fifth century), and in the area of North Africa, "Mary . . . had no place in popular devotion." Nevertheless, by about the year 1000 the cult of Mary was popular throughout Europe, many churches being named after her, such as the famous *Notre Dame* (Our Lady) of Paris.

In 1854 the doctrine of the "Immacu-

* "In popular usage, 'devotion to Mary' is synonymous with the 'cult of Mary.'"—*New Catholic Encyclopedia*, Volume 9, page 364, paragraph 4.

late Conception" became dogma, ruling that Mary was free from sin from the moment of conception. In 1950 the belief that Mary was taken bodily to heaven (the Bodily Assumption) was defined by Pope Pius XII. All of this was very gratifying to the Marian movement or those especially devoted to the cult of Mary.

Wrote Catholic author Zsolt Aradi in his book *Shrines to Our Lady Around the World*: "Mary watches over the nations . . . from magnificent cathedrals and small road shrines; from the tops of mountains and the shores of the ocean . . . The veneration of Mary . . . has become part of the landscape. Thousands of churches mainly Catholic and Orthodox, but Protestant also, are called Mary's or St. Mary's."

In Saragossa, Spain, there is a famous image of Mary known as *La Virgen del Pilar* (The Virgin of the Pillar). A local legend has it that Mary was transported by angels from Jerusalem to Saragossa, met James the apostle there and left behind "a small column of jasper upon which there was placed a beautiful small statue of herself." Says the book *Shrines to Our Lady Around the World*: "The sentiment of the Saragossans toward their beloved *Virgen del Pilar* . . . is interwoven with their patriotism, with their nationality, . . . they acclaim her as the leader of their nation."



Virgen del Pilar

In South America, in 1930, Argentina, Uruguay and Paraguay recognized a local image, our Lady of Lujan, as their protectress. Adds Aradi: "Recently the Argentine Army chose the Virgin of Lujan as its patroness. And according to an old custom a regiment of the army was dedicated to her services. This regiment becomes her 'property' and the members of the regiment call her 'La generala del Lujan' [The lady general of Lujan]."

A national leader, a military commander, co-redemptrix of mankind, mother of all men, mediatrix of all graces, queen of all creation, mother of God, queen of heaven—all these titles and honors are attributed to Mary. As a result, many thinking Catholics are seriously wondering if

all of this is not going too far. Wrote an associate professor of theology at Princeton Seminary: "Our violations of Mary are legion. . . . We have made her the Queen of Heaven."

But What Does the Bible Say?

Sincere students of the Bible have great respect and warm love for Mary as a faithful servant of God, chosen by him to play a vital role as mother of the Messiah. They deeply appreciate her example as a humble, devoted follower of Jesus Christ. But they do not regard her as the mother of God. Why not? Simply because God's Word

never refers to Mary as "mother of God."

Note the example that Jesus himself set in addressing his mother at the marriage feast of Cana. The account reads: "And the wine failing, the mother of Jesus saith to him: They have no wine. And Jesus saith to her: Woman, what is that to me and to thee?" (John 2:3, 4, *Douay*) Once when he was speaking in public, a certain woman in the crowd said to him: "Happy the womb that bore you and the breasts you sucked!"—obviously a fine opportunity to pay special honor to his mother. But, instead, Jesus said: "Still happier those who hear the word of God and keep it!" (Luke 11:27, 28, *JB*) Just before he died Jesus spoke to his mother and his beloved disciple John and said: "Woman, behold thy son. After that, he saith to the disciple: Behold thy mother."—John 19:26, 27, *Dy*.

To sincere Christians these references to Mary in the Bible teach plainly that Jesus took great care *not* to show special honor to his mother or to allow their relationship to influence him. The apostles followed his example. Let us now examine the crucial question . . .

Is Jesus God?

Again let God's Word clarify the matter. When the angel announced Jesus' birth to Mary, he said: "The Holy which shall be born of thee shall be called the Son of God." (Luke 1:35, *Dy*) Jesus *never* claimed to be God. However, the Jews accused him of making himself God, but he corrected them and said: "I am the Son of God."—John 10:33-36, *Dy*.

Just before he died Jesus cried out: "My God, my God, why hast thou forsaken me?" (Matthew 27:46, *Dy*) After his resurrection he said: "I ascend to my Father and to your Father, to my God

and your God." (John 20:17, *Dy*) On another occasion he said: "The Father is greater than I." (John 14:28, *Dy*) Obviously God, Jehovah (or, Yahweh), does not need to pray to anyone. But Jesus prayed often to his Father in heaven, at times "with a strong cry and tears . . . And whereas indeed he was the Son of God, he learned obedience by the things which he suffered." (Hebrews 5:7, 8, *Dy*) Almighty God, the Father, could never die. But our hope of salvation rests on the fact that Jesus did die.

For these and many other very cogent reasons, true Christians maintain that Jesus is not God, but, rather, his Son, and therefore that Mary is not the "Mother of God." Moreover, Jesus once said: "God is spirit, and those who worship must worship in spirit and truth." (John 4:24, *JB*) On the other hand, the cult of Mary has diverted the devotion and worship of millions of sincere people from the Creator to a creature. This is tragic in view of the Bible's condemnation of those "who changed the truth of God into a lie and worshipped and served the creature rather than the Creator."

—Romans 1:25, *Dy*.

Lech Walesa, the popular Polish leader, is reported to have said, when under heavy strain: "No, no. I'm not scared. I always have Mother Mary behind me." But is he looking to the true source of protection? Students of the Bible, when under stress, will follow this inspired counsel: "Do not be anxious over anything, but in everything by prayer and supplication along with thanksgiving let your petitions be made known to God; and the peace of God that excels all thought will guard your hearts and your mental powers by means of Christ Jesus."—Philippians 4:6, 7.

Young People Ask...

What's the Harm in Pornography?

"PORNOGRAPHY is everywhere; you walk down the street—there it is displayed openly on newsstands," recalled 19-year-old Ronald. "Some of our teachers would bring it to school, reading it at their desks while waiting for the next class." Yes, people of various ages, backgrounds and educational status are avid readers of pornography.

"Presently, eighteen million Americans—twice as many as there were fifteen years ago—are regular readers of 'soft-core' [pornographic] magazines," revealed a popular magazine. Perhaps you have been tempted to look at erotic literature, pictures, cartoons or movies. Will it really do any harm? First, let's examine why it's so popular.

Why the Interest in Pornography

To ensure the continuity of the human family, God created us with a powerful sex drive, designed to be honorably satisfied within marriage. (Genesis 1:28) Upon your reaching puberty, many questions about sex, as well as conflicting emotions, surge through your mind. Some, to satisfy their curiosity about these newly awakened emotions, turn to pornography.

What effect does pornography have? "When I read girlie magazines and viewed the photographs it was exciting!" admitted Mark. This young man revealed the *real* reason for the vast

popularity of pornography—it can intensely stimulate your sexual desires. In fact, the English word "pornography" comes from the Greek word *pornographos*—the 'writing of prostitutes.' These ancient writings described the sexual activity of prostitutes, no doubt for the purpose of arousing the passion of the readers. Mark adds: "I looked forward to new issues of these magazines because going through ones I had finished didn't give me the same flush of excitement. It's habit-forming." But does that mean it's a harmful habit?

Effects on You Now

One 15-year-old girl watched a "porno" movie with her friends. Afterward she bemoaned: "I disliked it because it made something so beautiful, private, and spe-



cial so cheap and disgusting." Yes, pornography has an overwhelming message: "Sex is purely for self-gratification." This message is even more evident in today's pornography that is saturated with rape and sadistic violence for sexual pleasure.

"Porno" viewers soon find that "milder" forms (soft-core) no longer are stimulating. They thus seek out pictures or movies that are even more gross. This can lead to truly debased views about others. As New York University assistant professor Ernest van den Haag wrote: "Pornography invites us to perceive others only as pieces of meat, as objects of exploitation for the sake of our own sensations of pleasure."

The Bible shows that "because of the *insensibility of their hearts*" some even came "to be past all moral sense" and "gave themselves over to loose conduct to work uncleanness of every sort with greediness." (Ephesians 4:18, 19) This didn't happen overnight. For instance, the original Greek word for "insensibility" was used at the time to describe the slow healing of a broken bone. At first a weak sticky substance containing calcium gradually builds up on the broken edges; then it bridges the gap and in time hardens to become like stone. So, too, with those described by the Bible, slowly—little by little—their hearts were hardened until they became insensitive, without feeling. Would you want this to happen to your heart?

Effects on Future Marriage

Whether your eventual plans include marriage or not, pornography presents a warped, idolized view of sex. One could desire the fantasy world pornography offers and end up disappointed with one's own mate. Why? Because *real* life is

different. A young wife, who was an avid reader of pornography before marriage, commented: "Reading pornography caused me to desire with my husband the abnormal things portrayed in the books. This led to constant frustration and a letdown sexually."

In a 1981 survey conducted among several hundred women regarding the effects of pornography on their rapport with the men in their lives who read it, nearly *one half* reported that it caused serious problems. It actually destroyed some marriages or engagements. The comments of one wife were typical of many: "I can only assume by [my husband's] need and desire for sexual release with pornography that I am inadequate . . . I wish to God I were a woman who could satisfy him, but he prefers plastic and paper and his need has destroyed a part of me. . . . Pornography is . . . anti-love . . . It is ugly, cruel and destructive." Yes, raw sexual appetite, fueled



What you read can affect your heart

by pornography, is no more a sign of love than brutality is a sign of strength. A young husband admitted: "Pornography encouraged selfishness; I was very intent on satisfying just myself." However, with some young people there is an even more important consideration.

Friendship With God

An increasing number of young people are intent on having a friendship with God. This enables them to elevate their thinking above the fantasies of illicit sex. So they try to heed the Scriptural advice: "'Quit touching the unclean thing'; 'and I will take you in.' 'And I shall be a father to you, and you will be sons and daughters to me,' says Jehovah the Almighty." Because of this heartwarming promise these young persons respond to the words of the Bible writer: "Let us cleanse ourselves of every *defilement* of flesh and *spirit*."—2 Corinthians 6:17-7:1.

Reading pornography works directly against such efforts. Some of these Christian youths, who previously viewed pornography, were interviewed. They revealed that reading even an occasional sexy magazine had a desensitizing effect on their conscience. It led to self-abuse and even fornication. Confessed a young husband: "Erotic images constantly reappear. You have to fight to remove them."—Colossians 3:5.

Breaking the Habit

"Many times pornography is in my direct line of sight, so I am forced to see it at first glance; but I don't have to look a second time," observed Darryl. So refuse to look where it is openly displayed or to be chided into pursuing it by classmates.

Avoiding it, however, is only part of the answer. "Whatever things are true,

whatever things are of serious concern, whatever things are righteous, whatever things are chaste, whatever things are lovable, whatever things are well spoken of, whatever virtue there is and whatever praiseworthy thing there is," urged the apostle Paul, "*continue considering these things.*" (Philippians 4:8) Fix your mind on these. This takes effort! Yet wholesome literature, such as this magazine, that will enhance your respect for God and others will make it easier to "continue considering" these thoughts and strengthen your resolve. You will draw even closer to God as a friend.

It may take real effort to rid yourself of pornographic desire, but don't despair. Never tire of begging our compassionate heavenly Father for help. Ask for his forgiveness when on occasion you may fail. "As a father shows mercy to his sons," states the Bible writer David, "Jehovah has shown mercy to those fearing him. For he himself well knows the formation of us, remembering that we are dust." (Psalm 103:13, 14) Yet a person with the problem has to do his or her part, as 18-year-old Karen observed: "As an imperfect person it is difficult enough trying to keep my mind on things that are chaste and praiseworthy. Would it not be all the more difficult if I deliberately read pornography?"

Those who cherish a good conscience and a wholesome relationship with God and others feel as did the apostle Paul whose words *The Living Bible* paraphrases as follows: "Like an athlete I punish my body, treating it roughly, training it to do what it should, not what it wants to. Otherwise I fear that . . . I myself might be declared unfit."—1 Corinthians 9:27.

From Our Readers

Overcoming Shyness

Being the only African, having a poor background and being among 15 fresh students from developed and superpower nations, you can just imagine how shyness was going to drown me due to inferiority complex, and the impacts it could have had on my studies in Sweden. But then I came across the articles "Why Am I So Shy?" and "What Can I Do About My Shyness?" (October 22 and November 8, 1982) Those two articles helped me to overcome a great heap of shyness.

M. K., Sweden

Alcoholism

I must thank you for the articles "An Alcoholic in the Family" and "Living With Alcoholism." (December 8, 1982) Although my husband doesn't drink anymore, I realized that I still have some feelings of bitter resentment toward him. For many years I also resented the feeling that I was handling this alone. But how can you feel alone when you see your problems and feelings written all over the pages of *Awake!*, along with helpful suggestions and scriptures that so fittingly apply? How can you feel alone when you know that everyone who reads those articles will now understand what you're going through and be better able to support you? I'm glad my husband overcame his problem. Thank you for helping me to overcome mine more completely.

C. J., Oregon

I am so grateful for these articles because alcoholism is very difficult for those

not living with it to comprehend. Thank you for all the research and time you must have put into those eight pages. I will always keep that encouraging magazine handy, especially the box on page 20.

P. M., Louisiana

As a social worker employed in a state psychiatric hospital, I can state that your articles were absolutely correct in identifying the first step for the family of an alcoholic, namely, to determine how it has affected them. I am planning to share this timely material with the rest of our treatment team.

M. D., Georgia

Avoiding Robbery

In your article "There Are Ways to Avoid Robbery" (January 22, 1983) you advised, "When vacationing, be sure to notify mailing or paper delivery services." I recently attended a meeting of apartment-house tenants arranged by the police, after two robberies, to enlighten us on protecting our property. One outstanding point made was NOT to interrupt mail or paper deliveries. Paper boys especially were not to be told of vacations. The officer said that while your paper boy might not be dishonest, in the group where they prepare their papers for delivery there could be one who is and who might note the address and a robbery would follow. Have a trusted friend pick up all deliveries and save them for your return.

R. M., Oregon

Good suggestion. The idea in the article was not to show everyone passing by that you were away.—ED.

Watching the World

'Atomic Millstone'

● Scientists who worked on the Manhattan project that led to the development of the atomic bomb recently met together on the 40th anniversary of the first sustained nuclear reaction. "We recognize that not everything that came out of the nuclear age is beautiful," said Professor Robert Sachs, who organized the reception. "We're not celebrating anything except perhaps the intellectual power that made this possible." An even more pessimistic note was struck by scientist Robert F. Christy. "The atmosphere then was so different," he said. "We were surrounded by a world of war. To win the war, anything you could do was justified, and there was great intensity of common effort to split the atom. Only when we exploded the first bomb did I appreciate more fully the implications." But he added: "The atomic bomb is like a millstone around our neck."

27,000 Tons of Words

● "Words cascading upon words," writes Kenneth L. Adelman, the U.S. deputy permanent representative to the United Nations, speaking of all

the addresses, speeches, resolutions, and so forth, that are "duly recorded, translated, printed and distributed" at the UN and "preserved for posterity." What kind of words? "One hot resolution last month contained a host of prefatory paragraphs, one of which ran 225 words, mostly multi-syllabic, but devoid of both verbs and any discernible sense," Mr. Adelman reports. He adds: "A U.N. official calculates 29,000 hours of meetings in 1982, equal to three and one-third years. Some 700 million pages of U.N. documents were produced in 1982, weighing around 27,000 tons." What is the cost? "Astronomical," says Mr. Adelman, "since the cost of a single page of a U.N. speech, estimated by this same official at more than \$200, exceeds the annual per capita income of 16 U.N. member states."

Businessmen Seeing Stars

● "What moves a growing number of businessmen to consult an astrologer before venturing into new investments?" asks the business edition of the German newspaper *Frankfurter Allgemeine Zeitung*. According to the report, many

businessmen and companies, often disappointed by the business forecasts of various economic institutions, are now viewing astrology as an alternative in predicting the future. It is used "when opening a new firm, making cooperative agreements with other firms, for establishing fiscal policy, when selecting workers or when dealing with personal concerns and problems," says the paper.

Economic Woes Worldwide

● "One of the most profound upheavals of the century is shaking the world's economy and virtually no one has been left untouched," says an article in the *Detroit Free Press*. "Large numbers of people are out of jobs and entire industries are threatened with failure." How is this affecting the various nations? "In some places, the recession has translated into coups, currency devaluations, political repression, riots or guerilla conflicts," says the article. Some nations, like Britain, are experiencing the highest rate of unemployment in their history, while others stagger under tremendous foreign debts. "The poorer countries are still trying to get roads, running water and latrines," said one analyst. "When the coffee crops don't do well or whatever, it is not a question of doing without a big car or living less well. These people are dying."

India's Population Growth

● While China is the world's most populous nation with over a billion people, India may well overtake it in the next century. At present, India's growth rate, 2.5 percent a year, is almost double that of China's. The last census, taken in 1981, showed that the population (684 million) had doubled since India

gained its independence in 1947. "The stresses and strains on the social, economic, political and sheer human aspects of life are now felt to be reaching near breaking point," said Mrs. Avabai Wadia, head of the Family Planning Association of India. Indian officials hope to stabilize the population at 1.2 billion by the year 2050.

Cheapest Travel?

● How much does it cost to travel the 3,000 miles (4,800 km) across the Australian continent by car? Only 12 pence—if you count the toll to cross the Sydney Harbour Bridge. The Quiet Achiever, the name of their solar-powered car that resembles a bathtub on wheels with a table on top, took under 20 days to make the journey. The solar cells, housed in the flat top, powered a pair of 12-volt car batteries that drove the one horsepower electric motor at speeds of up to 40 m.p.h. "We have proved solar powered vehicles are feasible," said driver Hans Tholstrup. "Now it's up to the motor industry to find a wider role for them."

Sea Surface Irregular

● Satellite measurements from space show that the sea surface is not as level as most people think, but that the geography of the ocean's surface corresponds with the floor surface deep below. "The density of the Earth is not uniform," says Richard Rapp of the department of geodetic science and surveying at Ohio State University. "Irregularities in structure of the crust and the mantle create variations in the Earth's gravitational field." High gravity pulls down and results in a valley in the water's surface, while low gravity causes a large bulge—both of which remain relatively constant, although currents and other fea-

tures can change. As reported in *The Globe and Mail* of Toronto, more precise measurements will be made by a new satellite due to be launched in 1986, which will "provide the first comprehensive global map of currents and tides." Besides aiding navigation, it will "also indicate areas where atomic waste can be buried at sea without danger of leakage moving into coastal areas," the report said.

Japan Changing

● Traditionally regarded as life-long, the bonds of matrimony are beginning to crumble in Japan. According to a recent survey, there is now one divorce for every five couples getting married—a postwar high of one divorce every 3 minutes and 11 seconds—which officials say is fast approaching West European levels. Outstanding, they say, is the marked increase of divorces among couples who have been married for 10 or 20 years. Among the reasons given by the *Asahi Evening News* are the "rising social standings for Japanese women in terms of education and job opportunities," and the slowing birthrate and smaller families that "make divorce a more easily acceptable proposition for women."

Changing also is Tokyo's reputation for being the safest big city in the world. Recent statistics show an average of one murder per day, one case of robbery and arson each day, and some kind of theft every 2 minutes and 30 seconds in the Tokyo area.

Telephone Sex

● The drastic increase of genital herpes and the fact that there is no cure for the dread disease have led to the formation of a new business: Telephone sex. "Advocates boast it is herpes-free, guilt-free and

keeps sex perverts off the streets. It is the latest fad to sweep Toronto," says *The Globe and Mail*. With ads for "fantasy fulfillment over the phone," "whatever gets you thru the night" and to "explore, experience and enjoy the erotic," any caller with a credit card can talk as long as the caller wants for \$35 a call. Operators claim they are providing society with a "valuable service" and a "legitimate, legal outlet for their urges to engage in talk about sex," as well as "a lot of revenue and jobs for Canada." The police "have checked into the businesses and say there is nothing illegal about them," reports the paper.

Sight Saver

● A man in Zimbabwe may owe his vision to mother's milk. A report in the *Zimbabwe Herald* says the man related how a cobra had slithered into his truck, raised itself up and "spat in my eyes." An observing bystander grabbed me and pushed me over to his wife who was breast-feeding a baby and told her to put some of her milk into my eyes, he said. According to the report, doctors told the man that this most likely saved his sight, and that he, though he still had some blindness in one eye, would probably regain his full sight.

Moon Rocks Silent

● Moon rocks, brought back to reveal some secrets of the universe, have instead raised a lot more questions. "At the time, everyone had the naive idea you were going to be able to push a button and make great discoveries," said Dr. James R. Arnold, custodian of samples of moon rocks brought back by astronauts 10 years ago. Although scientists have been studying them for the past decade, they say there is still no

concrete answer as to where they came from.

Open Door Closes

● "When China adopted the open-door policy a few years ago, foreign records, tapes and TV sets . . . flooded the Chinese market," says the *South China Morning Post*. But now, concern over "bourgeois poison"—a reference to "aspects of Western culture considered unhealthy and detrimental to the socialist system"—has brought about a ban against records, prerecorded cassette and video cassette tapes. TV antennas capable of receiving Hong Kong stations had already been banned last year. "The regulations," reports the *Post*, "also provide for the confiscation of any products judged to be

anti-China, anti-communist, religious or pornographic in nature."

Leprosy Control Hampered

● "Leprosy control methods developed over the last 30 years may be rendered completely ineffectual," says a report from the World Health Organization. About 25 countries have reported that leprosy bacteria is now resistant to the drug Dapsone, which is "cheap and virtually without toxicity in the dosages used." With the rate increasing steadily, "urgent action must be taken to prevent the further development of Dapsone resistance," the panel said. An alternative, multidrug therapy, may have to be used, even though expensive and with possible poisonous side effects.

Friends Needed

● The importance of friends should not be underestimated, says Dr. Vivian Rakoff, head of psychiatry at the University of Toronto. "Without sustaining, supportive social structures, people perish." In fact, says Dr. Rakoff, a lack of friends leads more often to suicide than does either poverty or unemployment. "People who are lonely and in despair are prime candidates for suicide," says the doctor. "There is strong evidence that more people do themselves in where the money is best, the economy is strongest, unemployment is lowest." Dr. Rakoff added that building friendships "takes an awful lot of skill, however, and not everybody succeeds."

