

Awake!

Who Can Accurately Predict Man's Future?

PAGE 5

Twilight Years Can Be Useful Years

PAGE 9

A Closer Look at the Tongue

PAGE 17

How Animals Train Their Young

PAGE 20

JANUARY 22, 1973

THE REASON FOR THIS MAGAZINE

News sources that are able to keep you awake to the vital issues of our times must be unfettered by censorship and selfish interests. "Awake!" has no fetters. It recognizes facts, faces facts, is free to publish facts. It is not bound by political ties; it is unhampered by traditional creeds. This magazine keeps itself free, that it may speak freely to you. But it does not abuse its freedom. It maintains integrity to truth.

The viewpoint of "Awake!" is not narrow, but is international. "Awake!" has its own correspondents in scores of nations. Its articles are read in many lands, in many languages, by millions of persons.

In every issue "Awake!" presents vital topics on which you should be informed. It features penetrating articles on social conditions and offers sound counsel for meeting the problems of everyday life. Current news from every continent passes in quick review. Attention is focused on activities in the fields of government and commerce about which you should know. Straightforward discussions of religious issues alert you to matters of vital concern. Customs and people in many lands, the marvels of creation, practical sciences and points of human interest are all embraced in its coverage. "Awake!" provides wholesome, instructive reading for every member of the family.

"Awake!" pledges itself to righteous principles, to exposing hidden foes and subtle dangers, to championing freedom for all, to comforting mourners and strengthening those disheartened by the failures of a delinquent world, reflecting sure hope for the establishment of God's righteous new order in this generation.

Get acquainted with "Awake!" Keep awake by reading "Awake!"

PUBLISHED SEMIMONTHLY BY
WATCHTOWER BIBLE AND TRACT SOCIETY OF NEW YORK, INC.
117 Adams Street Brooklyn, N.Y. 11201, U.S.A.
N. H. KNORR, President GRANT SUITER, Secretary

Average printing each issue: 7,500,000

Now published in 29 languages

Five cents a copy

Yearly subscription rates for semi-monthly editions in local currency

Offices America, U.S., 117 Adams Street, Brooklyn, N.Y. 11201	\$1.50
Australia, 11 Beresford Rd., Strathfield, N.S.W. 2135	\$1.50
Canada, 150 Bridgeland Ave., Toronto, Ont. M6A 1Z5	\$1.50
England, Watch Tower House, The Ridgeway, London NW7 1RN	65p
New Zealand, 621 New North Rd., Auckland 3	\$1.50
Philippines, P.O. Box 2044, Manila D-406	\$1.00
South Africa, Private Bag 2, P.O. Elandsfontein, Tvl.	R1.10

(Monthly editions cost half the above rates.)

Remittances for subscriptions should be sent to the office in your country. Otherwise send your remittance to Brooklyn. Notice of expiration is sent at least two issues before subscription expires.

Semimonthly—Afrikaans, Cebuano, Danish, Dutch, English, Finnish, French, German, Greek, Iloko, Italian, Japanese, Korean, Norwegian, Portuguese, Spanish, Swedish, Tagalog, Zulu.

Monthly—Chinese, Cinyanya, Hiligaynon, Indonesian, Malayalam, Melanesian-Pidgin, Polish, Tamil, Ukrainian, Yoruba.

CHANGES OF ADDRESS should reach us thirty days before your moving date. Give us your old and new address (if possible, your old address label). Write Watchtower, 117 Adams Street, Brooklyn, New York 11201, U.S.A.

Second-class postage paid at Brooklyn, N.Y.
Printed in U.S.A.

The Bible translation regularly used in "Awake!" is the "New World Translation of the Holy Scriptures." When other translations are used, this is clearly marked.

CONTENTS

Amused or Embarrassed?	3	Smoking's Effect on Physical Fitness	19
Eating Habits	4	How Animals Train Their Young	20
Who Can Accurately Predict Man's Future?	5	Frankfurt Flughafen	
Twilight Years Can Be Useful Years	9	—Airport of the Future?	22
Unusual Fruit of the Tropics	13	The Invitation Remains	24
When Enemies Are in One's Own Household	15	Lingala—A Simple African Language	25
A Closer Look at the Tongue	17	"Your Word Is Truth"	
		'Jehovah's Thoughts Are Higher than Those of Men'	27
		Watching the World	29

Awake!

"It is already the hour for you to awake."
—Romans 13:11

Volume LIV

January 22, 1973

Number 2

AMUSED or EMBARRASSED?

SUPPOSE someone very close to you, and in your company, made a glaring social blunder or gave a foolish answer in the hearing of others. How would you feel? Your companion most likely would feel deeply embarrassed. But how would you feel? Would you also feel embarrassment or would you join the others in the amusement or ridicule?

Due to their immaturity, children, when seeing a mishap to a blind or crippled person, may think that it is something to laugh at. Thus a thoughtless youth burst out laughing when he saw an elderly heavy-set woman fall on an icy street. It seemed amusing to him, but not to the woman who felt the pain and who seriously injured herself.

The Bible well states a principle that should guide us, when it says: "There is an appointed time . . . for every affair under the heavens: . . . a time to weep and a time to laugh; a time to wail and a

time to skip about."—Eccl. 3:1-4.

What will help us to know when to be embarrassed and weep, or when to be amused and laugh? One thing is the ability to put ourselves in the place of the other person. Then we will not be like a certain witty newlywed girl. Every time her husband was vexed at having made a mistake, or at having had something go wrong, she burst out laughing. It struck her funny, but her reaction caused his vexation to be all the stronger and to be turned against her. Obviously, that did not contribute to a happy home. But with experience she learned to be empathetic; and when her husband was upset, she either kept quiet or offered a bit of comfort.

When someone close to you makes a mistake, how do you react? Especially should members of a family give thought to this matter. Fellow feeling, empathy, consideration and thoughtfulness should cause us to view the mistakes of family members with compassion, rather than to take a superior attitude and laugh in ridicule. Does not God's Word say of the human body that "if one member suffers, all the other members suffer with it"? Husbands are counseled to love their wives "as their own bodies." If they really do this, they will not belittle their mates, even if these do make a mistake. The

same principle can beneficially be applied by the rest of the family too.—1 Cor. 12:26; Eph. 5:28.

Unfortunately, one of the ways a lack of fellow feeling often manifests itself is by gossiping about the mistake another made, talking about it to others. Is that beneficial? The Bible counsels, "Speak injuriously of no one." That rules out gossiping about another's shortcoming. And love will remove even the desire to do so, because "love covers over even all transgressions."—Titus 3:2; Prov. 10:12.

We all need to watch how we view the shortcomings of others, because the tendency of many in our day is to be less compassionate, to have less empathy. Why? In some cases it is because we come in contact with many persons. The more people we rub elbows with, the less personal our relations with others are likely to be. The pace of modern society quite likely is also a factor. There always seems to be so much to do and so little time in which to do it.

What we feed our minds will also influence how we feel about others. How can we make it a practice to read about or view motion pictures depicting violent crimes without becoming hardened by them? How can we choose as entertainment motion pictures that feature the exploitation of others without its causing us to become more calloused?

How much more beneficial it is to read God's Word, the Holy Bible, daily! It can

help you to express fellow feeling when such is called for, since it is filled with both admonition and examples along this very line. As Romans 12:15 advises us: "Rejoice with people who rejoice; weep with people who weep." For an example of one who did this perfectly read the four Gospels, which tell about the life of Jesus Christ, the Son of God.

At the tomb of Lazarus he "gave way to tears." And toward the lowly and oppressed people of his day "he felt pity . . . because they were skinned and thrown about like sheep without a shepherd." To such he addressed the comforting words: "Come to me, all you who are toiling and loaded down, and I will refresh you. Take my yoke upon you and become my disciples, for I am mild-tempered and lowly in heart, and you will find refreshment for your souls."—John 11:35; Matt. 9:36; 11:28, 29.

And why should we be concerned with doing what is right along these lines? Because it is right. In this way we reflect the qualities of our heavenly Father and so bring honor to him. Furthermore, by being sensitive, by manifesting empathy and fellow feeling, we will often reap gratitude from the one who suddenly feels alone because of the ridicule of others. In all of this, we will benefit ourselves, since "he who refreshes others will himself be refreshed."—Prov. 11:25, *New English Translation*; Mark 12:31; Luke 6:31, 36.

Eating Habits

- A survey in the United States showed that many middle-class citizens, though able to afford good food, have fallen into very poor eating habits. On the basis of the recommended amounts of calories, proteins and fifteen other nutrients needed to maintain good health, the survey showed that, between 1955 and 1965, the number of Americans with good diets fell from 60 to 50 percent. Also, the number on poor diets (ones that supply less than two thirds of the recommended amount in one or more categories) increased from 15 to 21 percent.

Who can accurately predict MAN'S FUTURE?

TO KNOW the future is to have greater control over it. That is, a person seeing what the future holds can make necessary adjustments now for later benefits.

As a common example, consider the weather. Former United States president Lyndon Johnson stated that if weather forecasting were accurate for only five days in advance, it would save his country six billion dollars a year. Of course, early weather warnings would also preserve countless lives.

In many other spheres of activity, however, the need to know the future is at least equally urgent. Serious problems face all mankind as regards environmental, social, racial, military and economic questions, making the future uncertain. How successful have so-called 'men of vision' been in foreseeing the future?

Man Attempts to Predict the Future Accurately

There has been no shortage of effort on the part of men to predict the future. One man who is popularly credited with foretelling many things is Nostradamus, the sixteenth-century French astrologer and physician. But just how accurate were his prophecies? Consider this example to get some idea of what they were like:

"When the fork is supported by two pillars,
With six half-horns and six open scissors:
The very potent Lord, heir to the toads,
Will then subjugate to himself the entire world."

Do you consider that a clear prognostication from which one can draw an accurate picture of the future? Is it even

understandable? Since Nostradamus did not explain it himself, consider how one of his modern-day followers, Henry James Foman, interprets this 'prophecy':

"The first two lines indicate a date. When the fork, V, is sustained by two pillars, they make an M, the Roman numeral for one thousand. Six half-horns are CCCCCC, the numeral for six hundred; six open scissors, XXXXXX, make sixty. In other words, in 1660 the great Lord of France, heir to the Merovingians—whose [emblem] was the toad . . . will be the greatest monarch in the world. . . . in 1660 Louis XIV married Maria Theresa of Spain . . . Early in 1661 . . . Louis, at twenty-two, became virtual autocrat of France, the *Grand Monarque* of the civilized world."

One candid writer reading this explanation observed: "That isn't exactly what Nostradamus said, but then again, who knows what he meant?" (*Saturday Review*, January 15, 1972) Echoing the views of most scholars on the subject is A. C. Keller of the University of Washington: "Nostradamus' prophecies are vague and open to many interpretations." He did not accurately predict the future.

In more recent times, serious pronouncements of prominent men have had the force of prophecy. But how accurate have they been? Was American president Woodrow Wilson a true prophet when he predicted that World War I was to "bring peace and safety to all nations and make the world itself at last free"?

Did not Adolph Hitler definitely prove the falsity of that claim a little more than twenty years later when he plunged the nations into World War II? In turn, Hitler's Proclamation to the Nazi Party Congress at Nuremberg, September 5, 1934, glowingly prophesied:

"The German form of life is definitely determined for the next thousand years. . . . There will be no other revolution in Germany for the next one thousand years!"

How correct was that millennial prophecy regarding his people? One writer, himself in attendance that day at Nuremberg, later wrote:

"After twelve years, four months and eight days . . . the Thousand-Year Reich had come to an end . . . it had dissolved with a suddenness and a completeness that had few, if any, parallels in history."—W. L. Shirer, *The Rise and Fall of the Third Reich* (1960), page 1139.

Woodrow Wilson and Adolph Hitler were not accurate prophets. In reality, no man, of himself, no matter how wise, can be. Why not? There are a number of reasons to consider.

Why Man Has Failed to Predict the Future

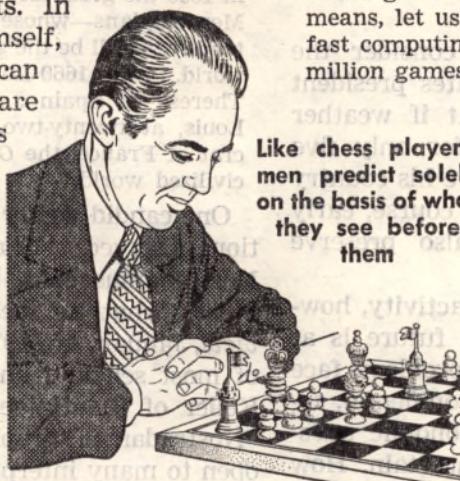
For one thing, men are often unable to gather together *all* the facts involved in a given situation. Related to this, and equally crippling to their efforts, is the inability accurately to *interpret* the information that is available. This is true even in the physical world.

For example, many factors govern the weather, such as heat, wind, terrain, and so forth. Even if all or most of the factors are known, it is extremely difficult to interpret them to know how the different laws will interact to create a certain future weather pattern. So, weather forecasters, no matter how expert, are often wrong.

Such is yet more true when trying to determine even broad or major developments in the future of mankind or a large part of it. Politicians who try to interpret the world situation and predict man's fu-

ture by it have been likened to chess players. There are only sixty-four squares on a chess board and thirty-two pieces. Superficially, therefore, the game seems relatively simple. But do you know how many games are possible with this 'simple' arrangement? According to the June 1958 *Scientific American*, at least 10^{120} , or, a one followed by 120 zeros! That magazine further observed:

"To get some idea of what that number means, let us suppose that we had a super-fast computing machine which could play a million games a second (a ridiculous supposition). It would take the machine about 10^{108} years to play all the possible games! So no conceivable machine could play a perfect game of chess, examining all possible moves."—Page 96.



Like chess players, men predict solely on the basis of what they see before them

If no man could anticipate all chess moves, how could he be able to foresee human affairs? The problems facing the human race are not limited to a small board of sixty-four squares and thirty-two pieces, but are vast, virtually innumerable. Additionally, each of man's problems are influenced in many ways by human will, which, of all factors, is the most unpredictable. It is no wonder, therefore, that historian Arnold Toynbee states: "I myself believe that prediction is not possible in the field of human affairs. I believe that the outcomes of human choices, purposes, and plans are unpredictable intrinsically, however fully we may be informed about the relevant past facts up to date."—*Reconsiderations*, 1961, page 4.

Nevertheless, like chess players, men continue to predict solely on the basis of what they see immediately before them. Should one of the expected 'moves' on the global chess board deviate from what is anticipated, a whole new situa-

tion is created, upsetting the prediction.

For instance, Karl Marx, the founder of modern Communism, interpreted the industrial situation in nineteenth-century England to mean that revolution would strike the country. But his prediction did not come true. Why? Because humans brought about certain unforeseeable changes in England, including collective bargaining rights and social legislation to improve the workers' lot. Professor of Economics H. W. Spiegel says: "Marx failed to anticipate these changes." And, today, the human element is a larger consideration than ever before when one contemplates the erratic behavior of many rulers and the rebellious elements within their nations.

Only God Reveals Man's Future

But what about God? Cannot he predict the future? Not only can he do so, but he chooses to reveal what he knows about the future to man. In fact, he feels urged to do so. Why do we say that?

It seems unlikely that the Creator would let man come into circumstances with a need to know at least the major developments due to occur in his future, and then entirely frustrate efforts to fill that need. As a God of love, Jehovah would be motivated to reveal the future to him. Yet there is another impelling reason for God to do so.

Jehovah unveils the future to prove to all that he is God. The True God should be able to tell in advance what his purpose is, should he not? Thus we read of God as boldly declaring:

"I am God, and there is no one like me; I reveal the end from the beginning, from ancient times I reveal what is to be; I say, 'My purpose shall take effect, I will accomplish all that I please.' . . . Mark this; I have spoken, and I will bring it about."

—Isa. 46:9-11, New English Bible.

Therefore, when Jehovah's predictions connected with his purpose come true he stands vindicated as God. Additionally, by notifying men of his will Jehovah shows himself historically active, concerned about human affairs, not apathetic and coldly uninterested.

Not surprisingly, therefore, God has demonstrated his prophesying ability on many occasions. For instance, scores of years before the fall of Judah and that land's seventy-year desolation while the nation was in exile in Babylon, Jehovah predicted these events. Babylon's subsequent overthrow was declared in advance. In that case, even the name of the conqueror, Cyrus (a Persian), was foretold —by name—more than a century before he was born.—Isa. 44:28; 45:1; Ezra 1:1-4; Jer. 25:11, 12.

God's purpose is in no way contingent on the uncertainties of human will. Nor is it to be stymied by powerful forces that mortal prophets cannot see and may not know about—the invisible demons. Jehovah knows that the demons are mustering the nations for "the war of the great day of God the Almighty . . . Har-Magedon." (Rev. 16:14, 16) As a Forecaster of the future, therefore, he stands in contrast to any modern man of affairs who predicts lasting peace through human efforts. Such predictions are certain to result in error, as forces outside human control are taking mankind to an ultimate war.

When Men Do Accurately Foretell the Future

However, did not men prophesy in the Bible? Why, then, can we say *their* predictions are accurate? Jesus' apostle Peter points to the reason, saying: "No prophecy of Scripture springs from any private interpretation. For prophecy was at no time brought by man's will, but men spoke from God as they were borne along by

holy spirit." (2 Pet. 1:20, 21) These prophecies were initiated by Jehovah God, though men were used to utter or write them. These prophecies were not based on man's interpretation of the trends of world affairs.

However, did not the Bible prophets, for instance, Daniel, use veiled language? Do not his writings contain symbolisms, like references to the defeat of 'a ram with two horns' by 'a male goat with a conspicuous horn'? How does this differ from the obscurely worded 'prophecies' of Nostradamus?

Well, Daniel and other Bible prophets did use symbols, but their meaning was not left to conjecture. Thus Daniel himself goes on to explain the 'ram with two horns' as representing the dual world power of "Media and Persia." Further, Daniel says "the hairy he-goat stands for the king of Greece; and as for the great horn that was between its eyes, it stands for the first king," that is, Alexander the Great, who conquered Medo-Persia some two centuries after Daniel's prophecy was recorded.—Dan. 8:5-7, 20-22.

Additionally, some parts of Daniel's prophecy are explained in other books of the Bible. (Compare, for instance, Daniel 11:31 with Matthew 24:15.) True, effort is obviously required to understand these prophecies, but the key for doing so is found right within the pages of the Bible itself.

Jesus' Accurate Predictions for Our Day

Of all men used by God to prophesy, Jesus is outstanding. Based on what he said, along with the words of Daniel and John, Jehovah's witnesses pointed to the year 1914, decades in advance,* as marking the start of "the conclusion of the system of things." (Daniel 4; Matthew 24; Mark 13;

Luke 21; Rev. 6:1-8) Within the period of one generation, outstanding war, food shortage, pestilence, and other terrible conditions were predicted to strike before God destroyed this system and replaced it with a new order.

But could not such a prediction of war and its accompanying afflictions be made for *all* periods of human history? No, not for all. For instance, were world conditions ripe for global war and the subsequent afflictions these prophecies indicated—precisely in 1914? Consider:

"World War I terminated the longest period of general peace in European history (43 years). . . . There was, before 1914, a free flow of ideas and a universal belief in continual progress. . . . The golden age of European history ended abruptly."—*Encyclopædia Britannica* (1959), Vol. 8, page 869.

"Nowhere, even in the summer of 1914, was a calculated, advance decision made for global war."—Joachim Remak, *The Origins of World War I*.

Major war was *not* expected in 1914 by men interpreting world affairs, much less a world war. But such war came anyway. In spite of modern technological and medical advances, there have also been massive food shortages, pestilences and related ills. This was accurately predicted centuries ago in the Bible.

However, Jesus also prophesied that at the "conclusion of the system of things" there would be a restoration of true Christianity. This would follow a long period of apostasy foretold to occur after the apostles died.—Matt. 13:24-30, 36-43; Acts 20:29, 30; 2 Pet. 2:1-3.

Have you not also seen this undergoing fulfillment today? True, the churches in general seem to drift farther and farther from the Bible, accepting unscriptural theories like evolution and condoning many forms of immorality. But have you ever investigated the modern congregation of Jehovah's Christian witnesses? See for yourself how they stand out in their hold-

* See, for example, the *Bible Examiner*, Vol. XXI, No. 1 (Whole No. 313), October 1876, pages 27, 28.

ing to genuine Christian teachings. Too, are you not an observer of the fact that the good news of God's kingdom is being preached in all the earth, exactly as Jesus predicted for our time? Have Jehovah's witnesses not called on you with this message? (Matt. 24:14) Quite likely their fine conduct, reminiscent of that of early Christians, has also been commented on in the public press of your area. The mani-

festation and flourishing of pure, unadulterated Christianity at this time also fulfills prophecy.

Yes, the evidence shows that Jehovah, who alone sees the future clearly, has revealed his purpose in the Bible. He has now raised up a people to declare that purpose straightforwardly. Wisely use the help they offer you to guide your future for lasting benefits.

Twilight Years

WITH each passing day we grow older. There is nothing we can do to prevent the aging process. But just as the twilight is a peaceful, useful time of day, so the twilight years of one's life can be.

Do you consider only the gray hair, the wrinkles, the slowing step, and loss of loved ones? Or are you thankful for the many rich experiences and maturity of thought that come with age? Do you think that achievement and ability are highest in early years and then go rapidly downhill?

Productivity in Later Life

Reader's Digest, drawing extensively from material edited by Doctors E. W. Busse and E. Pfeiffer, observed: "The peak of creative productivity remains high in

later years, especially in fields such as mathematics, invention, botany, the humanities. In statesmanship, ability tends to increase with age, and in the areas of abstract thought, such as logic and philosophy, the potential peak years occur between ages 45 and 83. Deteriorating mental ability is *not* inevitable in old age."

Professor N. J. Berrill concurred. "At 80 the mental standard is still as good as it was at 35," he wrote. "While the young mind tends to create new conceptions and ideas, the older mind . . . possesses greater steadiness, thoroughness and wealth of experience."

The evidence bears out that mental ability does not deteriorate at the rate physical ability does. In a group of four hundred famous statesmen, painters, warriors, poets and writers, it was found that 35 percent of their greatest achievements were accomplished between the ages of sixty and seventy; 23 percent were accomplished between ages seventy and eighty, and 8 percent when these people were past eighty years of age! All together, two thirds were past sixty.

Enjoying Long Life

It has long been observed that some people live far beyond the average life-

span, and maintain remarkable physical and mental ability. The Israelite prophet Moses wrote: "The days of our years are seventy years; and if because of special mightiness they are eighty years." (Ps. 90:10) And yet Moses was a vigorous eighty-year-old man when he led the nation of Israel out of Egypt, and of him forty years later the Bible says: "Moses was a hundred and twenty years old at his death. His eye had not grown dim, and his vital strength had not fled."—Deut. 34:7.

Today there are also persons who live past a hundred. Not long ago Washington correspondent Bruce Biossat wrote: "Some 15,000 Americans, an amazing number, are 100 years or older. . . . About a third of the present centenarians are on the Social Security rolls." Biossat said that there are some 250,000 Americans older than ninety, or about one in every 800.

Other places have a larger percentage of older persons, particularly the Republic of Georgia in the Caucasus Mountains, nestled between the Black and Caspian Seas, in the southwest part of the Soviet Union. In 1971, Sula Benet, professor of anthropology at Hunter College, New York city, visited the village of Dzhgerda in that area. She said: "There were 71 men and 110 women between 81 and 90 and 19 people over 91—15 per cent of the village population of 1,200."

Then there is the Vilcabamba Valley in Ecuador, which rivals the southern Soviet Union's longevity record. Brazil, too, boasts of its centenarians. On the high plateau of the State of Goiás lives Delfina da Costa Silva, who is said to be 155 years old. She still welcomes visitors with the proverbial cup of coffee, symbol of Brazilian hospitality.

Some Americans, too, are amazingly long-lived. Charlie Smith celebrated his

125th birthday July 4, 1967. Commenting on this, *Time* magazine observed: "Smith's claim to great age has more documentary support than most, but it is not enough. None of the 'evidence' specifically mentions him, or proves he was born where and when he says he was. . . . So far, none of these records has documented the survival of a U.S. citizen past 111 years."

But despite the lack of solid documentation for extremely old ages, it is obvious that some persons, especially in certain places, enjoy longer, healthful life. Why?

Secret of Longer Life

The good air of the higher altitude, the plain but nourishing food, and plenty of hard physical work are credited for the exceptional longevity of those in the southern Soviet Union. "The aged are never seen sitting in chairs for long periods," Sula Benet reported. They consider overweight people as ill and, when seeing such a person, will inquire about his health.

Another important factor is that the elderly feel useful. Wrote Russian-born Doctor Albert Parry regarding rural life in the Caucasus Mountains: "The family and the community make the old people feel important or at least needed by coming to them for advice."

So the aged are optimistic, and find pleasure in the prospect of continued life. As one ninety-nine-year-old of the village of Achandara said: "I am needed by my children and grandchildren, and it isn't bad in this world—except that I can't turn the earth over and it has become difficult to climb trees."

That satisfying work and feeling useful are important to longevity has been documented. For example, in the United States, researchers at Duke University's Center for the Study of Aging and Human De-

velopment recently reported that persons satisfied with their lot in life and happy with their work live longer. It has also been observed that longevity often runs in families, so heredity is also an important factor in longer life.

Aging and

Its Causes

Yet, regardless of what man does, he grows old and dies. In fact, it is the exceptional person who lives much past eighty or ninety. As was noted in the Brazilian paper *O Globo*: "Even if Medicine and Surgery were to accomplish all the miracles we expect of them, there would be no prospect of greatly prolonging human life. This means that, *even if man were protected from all accidents and all sickness possible and imaginable, our span of life would not go beyond an average of eighty years.*"

Why is this? Why does the Sequoia tree live thousands of years and maintain its vigor, while the human frame weakens, shrinks and generally disappears in less than a century?

Science tells us that the continuation of life depends on the body's ability to rebuild the cells. However, at a certain age the cells fail to be renewed properly. Thus a slowing down of the organism results and, finally, it comes to a complete stop. Dr. Isaac Asimov concluded: "Our cells seem to be 'programmed' by their genes gradually to undergo those changes with time which we call aging."

Modern science has not provided a sat-

isfying answer as to why these changes in the cells occur, resulting in aging and eventual death. It is believed by many doctors that aging itself is not a disease; it does not kill humans. Explained Dr. Moisés Bar-mak of São Paulo: "Old age, so often given as *causa mortis* in death certificates, does not exist. No one died of old age." Yet all die. Why? The Bible explains: "Through one man [Adam] sin entered into the world and death through sin, and thus death spread to all men because they had all sinned." That this is factual is readily observable: all men are imperfect, and all die.—Rom. 5:12.

Helping the Aged to Enjoy Later Years

The enjoyment that older persons find in life depends to a great extent on themselves. It is also influenced by the attitude of their children.

If a person has a real purpose in life, each day brings satisfaction, even though there may be pain or weakness with which to contend. Many are the elderly persons who have filled their minds and hearts with the good things found in God's Word, and they take pleasure in sharing these with others. Some have the strength to get out to visit other people in their homes; others use the telephone or the mails; still others talk to people around them in a hospital ward or a nursing home. They appreciate what others do for them and what they personally are able to do to provide the necessities and comforts of life. But one of the biggest factors

in their enjoyment of life is their being able to do something for others, something that is important, something that can help them to know God and his loving purpose to make this earth a Paradise, a place where the pains of old age will be no more, where death will cease, and even the dead will arise. It is sharing in activity such as that, more than anything else, that can make twilight years rewarding ones.—Rev. 21:3, 4; Acts 24:15.

But, whether those who are on in years cherish such a hope or not, they need a place to live. Some of them prefer to have their own home—perhaps near their children, but with the freedom to come and go without disturbing the plans that others may have.

In many cases, accident or illness makes it impossible for a widowed mother or a father who is alone to care for himself in later years. What then? Some children, with warm appreciation for what their parents have done, take them into their own homes, and the older ones, in turn, contribute the benefits of their experience in life to the household. In other cases arrangements have been made for them to stay in nursing homes, to receive care that may be needed. Sometimes this arrangement is made with genuine concern for all involved. In other cases it is done, not because it is the best arrangement, nor because it is what the children would want done for themselves in later years, but because it seems to be most convenient.

Convalescent and nursing homes have sprung up in increasing numbers, some 25,000 of them in the United States alone. Yet fewer than half of these offer skilled nursing. Some of these places appear more interested in realizing a monetary profit than in providing good care. Others, how-

ever, make a real effort to help the aged to enjoy their later years.

The city of São Paulo has about 100,000 persons past seventy years of age, and it has taken steps to improve conditions for the elderly. About a half hour's automobile ride from the city's center there is a veritable garden spot. Located in a beautiful setting is an institution for the aged who are in need of such facilities. There are about 900 residents living here.

There are separate quarters for men and for women, all clean, airy and well lighted. About 65 percent of the residents are unable to pay and are provided for freely; the others pay varying amounts. Those paying minimum prices live in wards of thirty beds; those paying top prices enjoy a private room.

Doctors, social-welfare workers and nurses are all in attendance. Sauna and steam baths are part of the health equipment. And a garden supplies fresh vegetables and fruit for the table.

To help make life meaningful, work is provided for the aged, and they are paid for what they do. They make bags, repair shoes and raise rabbits. Also, residents are able to go out and make purchases in the institution's shop.

In other parts of the earth, governments have provided modest apartments at very low cost. These may afford greater privacy, but they also require that the individual be able to do more for himself.

It is true that advanced age is accompanied with reduced vigor and deterioration of body. Yet mental ability, experience, wisdom, capacity for work and creativity are still present and, in some cases, are even superior. By keeping active, exercising regularly, and sharing in constructive work, the twilight years can indeed be useful years.

WHEN we new arrivals first set foot on the soil of this South American tropical country of Ecuador, it was a hot winter day in December. The sudden change from the deep-freeze weather we had just left in the north felt great, but it gave us a tremendous thirst. How we appreciated it when Carlos, our host, served us a refreshing pitcher of fruit juice.

U-m-m! How delicious! But what is it? We had never tasted anything just like it. Our host explained that it was *naranjilla* juice. *Naranjilla*, a Spanish name, means "little orange." It had a delicate flavor that reminded us of a mixture of pineapple, orange and apple, with maybe a hint of tomato juice thrown in. To make this fine thirst quencher, Carlos explained how he had peeled the fruit, put it in a blender, added water and then sweetened it a bit with sugar.

A few days later we saw some *naranjillas* in a market stall. They had been brought in from their jungle home beneath the towering Andes mountains. At a distance they did indeed look like little oranges, just about the size of tangerines. But when we came closer, the appearance changed from that of oranges to smooth and shiny-skinned tomatoes. However, when we picked one up we were surprised to discover that it had minute fuzz, something like a peach, but fuzz that was hard and brittle. What a strange fruit, this fuzzy tomato-like orange!

Higher up in the Andes the sierra people have what they call *tomate de árbol*, the "tree tomato," growing in their patios along with varieties of tropical flowers. The plants are about nine feet tall and bear fruit that is multicolored, ranging from bright orange to a deep purple. The

UNUSUAL FRUIT of the Tropics

By "Awake!" correspondent in Ecuador

fruit is not round like a tomato, but oblong and shaped at the ends like a miniature football. The taste? Well, it is a bit like tomato juice, only much sweeter. It makes not only a tasty drink, but also delicious preserves.

Introduced to Other Strange Fruits

Sometime later we had another pleasant experience when we were first served a drink made from *badea*. The *badea* grows on a vine and resembles a small yellow watermelon with a skin so shiny that it looks as if it has just been waxed. It too makes a delicious drink that tastes something like pineapple juice, but without the acid tang of the pineapple. Our big surprise, however, came when we found this drink full of seeds and we were told to eat them, the assurance being that this was the best part. Chewing these seeds (about the size of those of watermelons) gave the drink an entirely different taste, reminding us of certain grapes grown in the northern hemisphere.

In contrast with the *naranjilla* and *badea*, the outside appearance of the *chirimoya* is certainly unattractive. About the size and shape of a softball, it is dull green in color and has a scaly skin much like that of a reptile. So you can imagine the surprise we got the first time we sank our teeth into a *chirimoya* and found that it had a flavor something like ripe pears mixed with cream and sugar, only much

smoother! Many persons like to eat this fruit fresh, but others prefer it made into ice cream. Either way, one must admit that you cannot judge the homely chirimoya by its peeling any more than you can judge a book by its cover.

One day when we were passing a vendor's cart, a friend of ours stopped and bought what are called *guabas*. They are long, green and flat, and are curved much like the scabbard for a saber sword. Taking the guaba in his hand, our friend struck it against the side of the building to crack open its tough outer covering. And lo and behold! inside were some twelve or twenty blobs of snowy-white cotton, each blob containing a big black shiny seed. The pleasantly sweet taste of the guaba is quite convincing: this must be the original cotton candy of the tropics!

Probably the most popular treatment for minor liver ailments here in Ecuador is a drink made from the fruit called *tamarindo*. And should you be looking for tamarindo in the market, look for what appear to be big beans in brown pods about six to eight inches long. Then, inside, instead of beans as you would expect, the pod is filled with a sticky substance that looks very much like the flesh of prunes, and, of course, seeds are included. A drink made from this fruit is quite pleasant, a bit like apple cider. But, remember, it is a mild laxative. However, if that is what you want, you will agree, it certainly is a nice-tasting medicine!

Most Popular of Them All

The *papaya*, also found in the subtropics, is probably the most common fruit on the Ecuadorian table. Though some persons might mistakenly think it is a melon, it does not grow on vines. Instead, it grows in clusters at the top of palmlike trees. Papayas vary in size, large ones weighing fifteen pounds or more.

On the outside the color of this fruit is a deep green that gradually turns yellow in spots as it ripens. Inside, the meat is deep yellow or sometimes a bright pink or red. Unlike most other fruits, papaya has a hollow inside, in which a lot of little black seeds are attached to the meat, but which are easily scraped out. The meat is sweet and juicy and very delicious, unless you happen to get a bad one with a strong rather disagreeable flavor. Usually the smaller ones tend to have the strong flavor; the larger ones are the best tasting.

People in this country eat lots of papayas, not just for the sheer enjoyment of the fruit, but also for health reasons. In the tropics one's body needs lots of liquid to stay healthy and strong, and the papaya will supply this needed liquid in a very pure and delightful form. Then too it is an excellent aid for the digestive system. One can easily prove this to be true simply by topping off a big meal with a slice or two of papaya, and thus avoid the usual discomforts experienced after eating a lot of rich food. There is a sound medical explanation for this too. Nutritional authorities have found that the papaya is rich in an enzyme called "papain," which helps in the digestion of proteins.

In this regard, a friend of ours described how she puts this property of the papaya to good use in another way. She soaks her meat in papaya juice for a few hours, preferably overnight, and finds it to be an excellent tenderizer. This too is due to the enzyme present in this tropical fruit.

Well, we are no longer newcomers here in this beautiful tropical country with its many varieties of birds, flowers and fruits. What seemed in the beginning to be rather odd and unusual fruits are now our common acquaintances—old friends whose company we enjoy in a very special way. If you too would like to become better acquainted with them, why not visit us?

When ENEMIES — ARE IN ONE'S OWN HOUSEHOLD

THE message of true Christianity is one of peace. Being the "good news of peace," it appeals to 'friends of peace,' that is, to people seeking reconciliation with Jehovah God.—Acts 10:36; Luke 10:6.

Sadly, however, not all respond favorably to the "good news of peace." This produces divisions in households, with some accepting the "good news" and others rejecting it. Hence Jesus said: "Do not think I came to put peace upon the earth; I came to put, not peace, but a sword. For I came to cause division, with a man against his father, and a daughter against her mother, and a young wife against her mother-in-law. Indeed, a man's enemies will be persons of his own household."—Matt. 10:34-36.

For an individual to endure bitter opposition from those whom he loves is not easy. But it can be done if he truly appreciates that nothing is more important than maintaining a proper relationship with the Creator and with his Son Jesus Christ. The fact that even in our day many have put up with trying circumstances in their own households in order to serve God can encourage one to endure difficulties without giving up.

● Consider the experience of a 'friend of peace' in western Africa. He writes:

"Before coming to a knowledge of Bible truth I was very much disgusted with all the injustices that I saw in religion and politics. I felt so discouraged that I was thinking about taking my own life."

"It was then that one of Jehovah's witnesses called on me. Though not educated in the schools of this system, she told me some very encouraging things that an-

squared the very questions I had been thinking about. After reading the two magazines she left with me, my entire outlook on life began to change. In the same week I obtained the book *The Truth That Leads to Eternal Life* and began to study and apply what I was learning.

"Soon opposition began. First of all it came from those in my neighborhood. They began making fun of me in front of my wife and children, saying that I was going mad because of studying the Bible with Jehovah's witnesses.

"Because of what people were saying, my daughter decided to try to stop me. She called the police and they came, along with other Catholic 'friends,' to try to convince me to stop studying. Then they told me to get into the police car, as they were going to take me to the hospital. I tried to tell them that I was not sick and endeavored to resist. But they forced me to get into the car. When I got out I found that they had taken me to a hospital for the mentally ill.

"The room where they put me was very dirty and smelled of urine. It was so filthy that I did not sit down but stood up for two days without sleeping. Finally some cleaning was done in the room. But it was a terrible experience to live among people who were really insane. Only by calling on Jehovah in prayer was I able to endure under those conditions.

"Then suddenly I was freed. I learned that this was because of my son, who is a captain on a ship and who was in France at the time. When he heard what had happened to me, he sent a telegram demanding that I be released immediately. How thankful I was!"

"When I returned home, my family was ashamed of what they had done to me. I did not stop studying but increased my intake of spiritual food both in personal study as well as by attending meetings regularly. Soon I began telling the 'good news' to others and later I got baptized.

"What about my family? Happily I can say that my daughter who was mainly responsible for my being mistreated is now regularly attending the meetings of Jehovah's witnesses along with another of my daughters. My wife and daughters share in the discussion of a Bible text each day. How happy I am that I endured my trials!"

• Another example of what can happen is the case of a young man from Ireland. Because of the violence and bloodshed marking the conflict between Catholics and Protestants in Ireland, this young man went to sea as a steward on a refrigerated cargo ship bound for New Zealand. Somewhere en route someone had placed the books "*Let Your Name Be Sanctified*" and *Is the Bible Really the Word of God?*" in the ship's library. Seeing the books, the young man decided to read them to see if this religion taught and practiced peace.

He was so impressed with what he read that on arriving at Timaru, New Zealand, he immediately located the Kingdom Hall of Jehovah's witnesses and attended meetings. Before the ship sailed away, Jehovah's witnesses there supplied him with additional literature and explained that he might face opposition from family members and associates when he returned to his home in Londonderry, Ireland.

Back in Ireland, the young man had a confrontation with his father. His father said that, if he should see his son going from house to house witnessing, he would run him down with his car. At his son's obvious astonishment, the father admitted that he could not do it himself, but 'would get some of the boys to do it and, when

they find your body, they will blame the Orangemen [Protestants].'

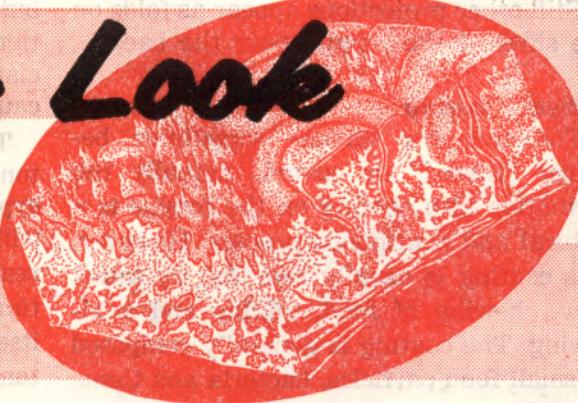
Later, in London, the young man, thoroughly despondent and contemplating a return to sea, thought of giving up the truth he had learned. But what did he do? Writing to Jehovah's witnesses in Timaru, he tells what happened: "I started thinking, Was it right to leave God after really finding him for the first time? No! It was not right to leave God. So I phoned the Bethel [the branch office of the Watch Tower Society] in London for the nearest Kingdom Hall address. I am now happy to say I am with my brothers and sisters here."

• A Moslem man in Israel who began studying the Bible also encountered opposition from his family. His wife was especially suspicious of his interest in the "good news." She accused him of wanting to abandon her in order to marry a Christian woman. She also declared her intention to leave with the children, and brought various members from her family and from among his relatives to try to persuade him to leave his new faith. Neighbors joined in the arguments and opposition. Then the Moslem authorities began a campaign against him, denouncing him and Jehovah's witnesses in general, at a talk given in the local mosque. Even so-called Christians told him to go back to his previous religion.

But throughout it all this man has stood firm. Now he is beginning to see some changes. One example of this was when his wife interrupted his weekly home Bible study and asked: "Won't there be any part for me in this paradise? I also want to live in this new order."

Truly, even if family members demonstrate themselves to be "enemies," one can endure opposition without giving up, and, perhaps, have the happy experience of seeing them change their attitude.

A Closer Look at the **TONGUE**



STICK out your tongue and say Aahh!"

One can only imagine the number of times that doctors have repeated this over the years. Physicians have long appreciated the importance of the tongue's appearance when examining a sick person. Particularly in times past, doctors had to rely more on their own powers of observation than on laboratory tests.

While the tongue does reflect some changes or diseased states in other parts of the body, it has been found that it can seldom be used to diagnose a specific disease. However, scarlet fever is one of the diseases in which the condition of the tongue is important in diagnosis, a person with this disease having what is called "strawberry tongue."

The Tongue and Its Surface

A unique organ, the tongue is a very mobile bundle of muscles covered with an extremely sensitive surface. The muscles in the tongue can flatten it, curl up the tip and even the edges when you whistle. These movements are possible because the muscles in the tongue are interwoven and go in several directions. There are muscles that start at the tip and extend toward the back. There are muscles that go generally from side to side. And there are those that go up and down. These all help

to give the tongue its various movements.

The tongue's surface is made up of numerous small projections that give it a somewhat velvety feel. (In the cat family tongue projections are big enough and hard enough to give the tongue's surface the feel of a rasp.) These small projections (called "papillae") can be seen easily by protruding your tongue and drying a small area with a soft, clean cloth. If one does this, one will note that there are different types of elevations.

The most numerous ones are the pink, slender, threadlike structures that are uniformly distributed over the surface of the tongue. These are usually the first to disappear in some diseased states, including certain nutritional disorders.

Another kind of small projection is like little rounded bumps on the tongue's surface. There are fewer of these mushroom-shaped elevations, and they are generally a little redder than the others. They also disappear at times.

If you stick your tongue out far enough, you will be able to see a larger kind of small projections on the very back part of your tongue near the throat. They are like squat towers surrounded by a moat. There are from seven to eleven of these round projections forming a "V" across the back of your tongue.

Still other projections appear as folds on the sides of the tongue near the back.

Tongue Coating

The tongue's surface sometimes becomes "furred" or coated. Actually the formation of a coating on the tongue is a natural and continuous process. However, this coating is usually removed by saliva flow, chewing of food, talking and swallowing. The coating is generally composed of small food particles, bacteria and tissue cells that are sloughed off the surface of the tongue in a way similar to that in which your skin sheds dead cells. The amount of coating that develops, of course, varies with each individual and also at different times of the day.

Any condition that interferes with the normal cleaning of the tongue may produce an abnormally coated tongue. Among the factors that can contribute to this are soft diet, mouth breathing for some, lack of attention to mouth hygiene, smoking, dehydration during fevers, and lack of normal saliva flow. Generally speaking, a furred or coated tongue indicates a somewhat lowered condition of health. When a person has a digestive upset, the shedding process of the tongue's cells is impaired, and they accumulate, resulting in a "furred" tongue. In many cases a coating can be cleansed from the tongue with a toothbrush at the time the teeth are brushed.

Other Changes and Conditions

Changes in the surface texture and color of the tongue are probably of much more significance than the coating. Even here, though, a physician needs to know more about an individual before he can diagnose a specific disease. The tongue does reflect changes in other parts of the body,

but it is not decisive. The tongue's condition may indicate the need for the physician to do further checking to locate the cause.

There are diseases that can affect the tongue specifically, such as cancer and syphilis. However, the tongue more often will show changes or conditions that are really harmless. The names are sometimes more frightening than the condition itself—names such as hairy or black tongue and geographic tongue describe conditions that are generally harmless.

So do not jump to unwarranted conclusions if your tongue seems to have a strange appearance. The cause could be as minor as the sharp edge of a tooth or filling, which can cause an irritation of your tongue. Of course, this should be taken care of so as not to cause further damage.

One of the most common causes of an undesirable tongue condition is said to be a deficiency of vitamin B. Grooves and ridges in the tongue have been attributed to a prolonged lack of vitamin B. It has been found that a sore, purplish tongue may be caused by a vitamin B₂ deficiency. In pernicious anemia the tongue has a beefy red color and is smooth and shiny, indicating a lack of vitamin B₁₂. A brilliant red tongue may be caused by a deficiency of niacinamide (nicotinamide). And some believe that a large beefy tongue may result from a pantothenic-acid deficiency.

Vital for Effective Speech

So important is the tongue for speaking that the phrase "a foreign tongue" also means "a foreign language." Even the English word "language" comes from a French word meaning "tongue." In persons whose tongue has been removed, speech is extremely defective.

During speech the tongue movements are perhaps the most precise movements that this organ can make. By touching and not touching the teeth and the roof of the mouth, the tongue helps in the formation and articulation of the various sounds. If you say the alphabet very slowly in your language, you will note the many movements your tongue has to make. Watching someone else speak is another way to appreciate its rapid movements. Some have tried to master lingual dexterity with their tongues by quickly saying what are known as tongue twisters, such as 'rubber baby buggy bumpers' and 'the sixth sick sheik's sixth sheep's sick.'

Even some very simple words keep the tongue busy. Take the word "things," for example. By pressing lightly against the backs of the upper teeth, so as to interfere with the breath stream and produce the requisite friction, the tongue articulates the voiceless "th." It then moves downward and backward and then up again to point the tip toward the ridge so as to direct a constricted, compressed breath stream against the cutting edges of the lower teeth. The tongue then is active in articulating the "s." Just for one word there can be a lot of movement by this bundle of muscles. Multiply this by 150 to 200 words per minute, and you can see how fast the tongue must move to keep up with your mind.

SMOKING'S EFFECT ON PHYSICAL FITNESS

Medical authorities are now generally agreed that smoking adversely affects physical fitness. *Geriatrics 1971*, published by Medical World News, says: "The lung function of chronic cigarette smokers is, on the average, reduced to levels of nonsmokers who are approximately ten years older."

However, some persons may say, 'I have smoked too long. It will do no good to stop now.' But the above-quoted article explains: "When an individual stops smoking, his lung function may, in 12 to 18 months, return nearly to the levels of nonsmokers; this applies even in 60-year-old subjects. Clearly, recuperative processes are still active in older people."

Do you want improved fitness, and perhaps additional years of life? If you smoke, there is something you can do. Stop smoking! It is really worth the effort.

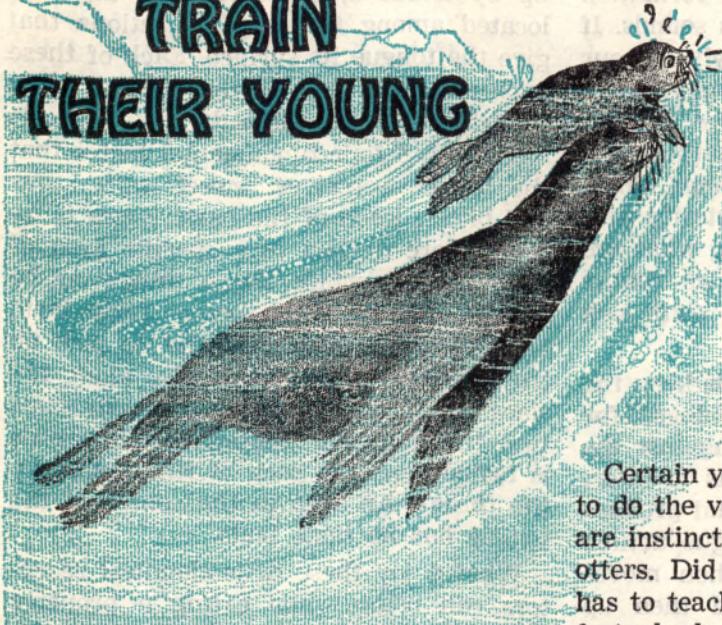
Delight from Taste

A most delightful function of the tongue is that of picking up and transmitting the taste sensation. This sensation is picked up by about 3,000 taste buds that are located among the tiny projections that give the tongue its surface. Each of these buds responds only to the kind of taste for which it was designed.

There are four fundamental tastes that the tongue perceives: sweet, salty, sour and bitter. Each of the basic tastes is located more or less in a specific area of the tongue's surface. Sweet things can be tasted on the tip of the tongue. Those taste buds along the sides near the tip pick up the sensation of saltiness. Also along the sides but toward the back are taste buds that transmit sour sensations. Bitterness is tasted near the back of the tongue by the throat. An area in the center of the tongue has no taste buds.

What a joy these little chemical receptors can bring while eating a properly seasoned meal! And the Creator has provided such a variety of tasty foods for man's pleasure and delight. Contrast this with how food seems so tasteless when you have a bad head cold, and you can appreciate the value of a healthy tongue. Your tongue may tell a physician a few things about your health, but in the realms of speech and taste it is of a great deal more value to you.

HOW ANIMALS TRAIN THEIR YOUNG



ANIMALS train their young? Use discipline? Require obedience? Yes, indeed! Such things play an important role in their lives. Survival is involved.

God-given instinct is the moving force. A limited amount of intelligence also comes into play. If they are to survive, the young need to be taught how to get food; they also need to learn to recognize danger and know how to cope with it. Animal parents do not give reasons to their young or explain why and how to do things. But they do teach by example, and they may inflict pain to help youngsters to stay in line.

Spending Time to Train Their Young

Animal parents spend much time in training their young ones. A she-bear may take up to two years teaching her cubs. She shows them where they can find food,

teaching them to dig for spicy tubers. And it is she that introduces them to the tangy sweetness of wild honey, a delicacy that they relish for the rest of their lives.

Young raccoons get quite a training in the art of being self-sufficient. Their mother spends time flipping frogs and crayfish to them, using play to teach them. She also instructs them in self-defense, hunting and fishing. In time her young ones learn to trail mice, catch frogs and unearth insect larvae. And she tips them off about where they can find wild grapes and the best corn.

Certain young animals undergo training to do the very things that we may think are instinctive. Consider the water-loving otters. Did you know that mother otter has to teach her young how to swim? In fact, she has to teach them to like water, for they will not go into it of their own accord. How does she do it? She may drag them into the water, pulling them by the skin of their neck. Or she may induce them to get on her back. Then, splash, into the water she goes! For a while she swims around with her litter hanging on for dear life. Suddenly, she submerges! Now the young otters are forced to sink or swim. And they try to swim! At first they are awkward, but little by little they learn.

A mother seal, also, has to take time to teach her little one how to swim. When in the water, she will plead, persuade and entice her pup to try swimming. Usually, she ends up simply pushing him adrift. But her work does not end there. She helps her whelp along by swimming under him at times. Should he appear in distress, she will put her head under his forequarters and push his head up out of the water.

After a time, the seal pup is able to swim on his own.

How does a young flying squirrel learn how to glide? His mother simply pushes him off a tree branch. And the youngster seems to know instinctively what to do to break his fall. He spreads out his tiny feet, and the thin membrane on each side connecting his front and back legs forms a sort of parachute enabling him to glide safely to the ground. Instinct indicates to mother flying squirrel when her little one is ready to learn this feat. If she pushed him out of a tree at too young an age, it could be fatal.

As the time nears for young winged birds to learn to fly, they begin exercising to develop their flying muscles. They crane their necks, twitch their wings, twist and squirm about. But it is mother bird that coaxes them to leave their nest and try flying. She will stand a few feet away, offering tempting bits of food to encourage them to get out and try their wings. In cases where the nest is in a very high place, it is crucial to make a success of their first attempt. Remarkably, many young fledglings may cover one hundred yards on their initial flight.

Teaching Them to Survive

In order to eat, young creatures who live by the sea need to learn how to fish. Seals, sea lions and polar bears will dive into the water and come up with a fish. Then they release it in front of their hungry youngsters. This encourages them to grab the prey before it can escape. It does not take very long for these animals to become quite adept at fishing.

How important it is that these young creatures learn all they can about getting food! Once they are big enough to fend for themselves, their parents' interest in

feeding them will shut down by instinct. And they will be on their own.

Survival also includes avoiding dangers. How do animal parents warn their little ones about these? A mother deer teaches her fawn to fear man by herself demonstrating such fear at the sight or scent of man.

When a she-wolf comes near a trap with her cubs for the first time, she shows great fear. Her young ones see her reaction and are helped to learn that traps are to be avoided.

The defense reactions of animals against dangers appear to be acquired mainly by learning. Giant rats that were born in captivity in Paris, France, did not react to a large python. They even approached it calmly and sniffed at its snout. But their parents violently attacked the snake, having evidently become acquainted with it in their native Africa. The same was true of young chimpanzees. Relatively speaking, they, too, were indifferent to a snake, although adults of their kind showed great fear of it.

Making Them Obey

At times playfulness gets in the way of young animals in taking their lessons seriously. But their parents seem not to put up with such nonsense. A mother cat, teaching her kittens how to catch mice, will box their ears if they are slow or inattentive.

Goats in the mountains of Scotland send their kids ahead of them through the rocks. Should a kid take a step in the wrong direction, a butt from his mother's horns will let him know it.

A young fawn must learn to stay very still at times in order to escape detection. If it insists on being restless, mother deer will give it a hard tap with her foot. And that usually gets it to settle down.

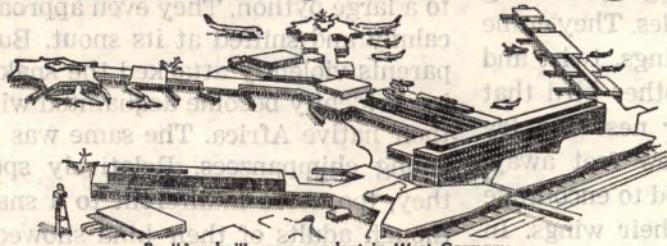
Lions, bears, squirrels and other animals also do not spare the rod on their disobedient youngsters. They curb foolishness by a sharp cuff, a shaking or a spanking. It is for the young ones' benefit. Parental discipline helps them to stay alive.

Is there a lesson in this for human parents? Perhaps. Human young, too, need to be taught obedience, they need to learn

what kind of food to eat and how to avoid dangerous situations.

But are human parents going to stop with that, satisfied that they are doing as much for their children as animals do? Our life as humans can be so much richer than that; it can have so much more meaning. The Bible has been provided by God to show us how.

FRANKFURT FLUGHAFEN



By "Awake!" correspondent in West Germany

FOR nearly eight years it was "Europe's largest construction site." Prodigious amounts of earth were moved and concrete poured. Gradually there emerged the new Frankfurt Rhein-Main Airport.

Known as the hub of Europe, with about 5,000 weekly flights fanning out to the remotest parts of the earth, Frankfurt Rhein-Main Airport or *Flughafen* is one of the largest airports in the world. In Europe it ranks third, after London's Heathrow and Paris' Orly. In 1971 over 10 million passengers placed tremendous strain on the antiquated facilities then in use. So it was not without considerable relief that the new terminal, hailed by many as the prototype of efficient, modern airport design, opened in March 1972.

FLUGHAFEN

-Airport
of
The Future?



Advantages and Disadvantages

In many ways the gleaming new air terminal will probably make the traveler's lot much easier. Instead of a sprawling, multiterminal complex, the new Frankfurt *Flughafen* is entirely under one roof. The central four-level, air-conditioned terminal is over half a kilometer long, or over 545 yards! So large is it that, when one is walking it is not unusual to be passed by an airport employee on a bicycle. At some points "moving sidewalks" help passengers to cover the distances more rapidly.

This tremendous building accommodates the 220 airlines serving Frankfurt. From the terminal center, four long boarding piers extend like fingers from the hand. Clustered around these piers are the parking positions for the aircraft, so that pas-

sengers are able to enplane or deplane completely under shelter.

In addition to the technical support systems required to move aircraft safely in the air and on the ground, the airport offers many of the features of a moderate-size town. There are office buildings, a post office, police and fire departments, banks, bathing facilities, barber and beauty shops, conference rooms, chapels, a well-equipped hospital with X-ray and operating room, a supermarket, restaurants and shops of all kinds.

Access to the airport for those without autos has been significantly improved by the new nine-minute city-center-to-airport express train service. The train may be boarded inside the air terminal several levels below the street. However, reaching the train can be a formidable task when escalators are not functioning, which until now seems to be all too often.

For those who arrive at the airport by auto, there is a three-level underground largely automated garage connected to the terminal. It is built to house 6,000 autos. While it is easily accessible, motorists complain they are affected by noxious gases, despite the expensive ventilation apparatus.

Also, vast areas of this huge parking facility are isolated and unsupervised, contributing to the breaking and entering of autos and the committing of other crimes. In addition, the elevators for carrying motorists suffer their share of breakdowns, and alternate stairways are often dark because lights have been vandalized. So while the characteristic airport traffic-and-parking jams have been lessened, other drawbacks exist.

Baggage Snags

Long check-in lines are kept to a respectable minimum by use of more than 240

check-in counters. All are only a few feet from the terminal entrance to facilitate luggage handling, but, unfortunately, not eliminating it. Porters are still needed. Also, self-service baggage carts are provided by the airport, but by midday these have been scattered far and wide throughout the vast airport and there are too few readily available to serve departing passengers.

About 12 percent of the \$300-million price tag for the airport (or \$36 million) was spent to install over twenty miles of computerized conveyor belts designed to move a total of 13,000 suitcases an hour. Each suitcase is to be placed on a standardized pallet at the check-in counter. Every pallet is provided with a strip bearing the destination code number. This number is to be electronically "read" by 650 reading units located throughout the system.

Theoretically, then, the luggage-bearing pallets move through the system automatically, twisting and turning, crossing and recrossing, until they arrive at the final collection or delivery points. On the airport's opening day a government dignitary was present to do the honor of pushing the button that was to activate the baggage system and send the first suitcase on its computerized way. This event was reported under the unmerciful scrutiny of nationwide television. The moment arrived. The button was pushed. But, much to the consternation and embarrassment of all, the suitcase went nowhere. The system did not work!

As of the date of this writing, six months later, the difficulty has yet to be corrected. No doubt the trouble will eventually be located and the system become operative. In the meantime, all baggage is dispatched by hand; a \$36-million investment lies idle; and passengers still wait impatiently for their luggage!

Communication—Loud and Clear

In planning the airport, considerable attention was given to communicating directions and information clearly, simply and accurately. For one thing, a unique system of picture signs is used that is understandable (and sometimes amusing) to nearly everyone regardless of language or literacy. For example, the sign for the nursery is a baby's bottle, and emergency exits are marked by signs showing a man running from a fire. The system is based on a series of signs developed for use at the 1972 Olympic Games in Munich, Germany.

Flight arrival and departure information is posted on 216 excellent, automated, easy-to-read information boards throughout the terminal. In the departure halls, 120 flights can be posted simultaneously. A central data-processing unit operates the boards. These visual displays are appropriately supplemented by an audio system of 6,000 specially designed and strategically placed loudspeakers, which can easily be heard and understood.

Of course, the best audio-visual system in the world is of no comfort to passengers when it announces flight delays. Some delays are understandable—weather, main-

tenance, searches to prevent hijackings, and so forth. But recently flight operations were subjected to an air traffic controllers' "slowdown" due to a labor dispute between the controllers and the German government. The airlines and indirectly the traveling public became the victims.

Technology and the Human Factor

It must be acknowledged that the Rhein-Main *Flughafen* is indeed new and, like all new structures and facilities, requires a breaking-in period. But it seems that this modern airport, which has much to recommend it, is having more than its share of teething troubles. And, instead of disappearing, the problems seem to increase.

What does emerge from the airport's experience till now is that, high-flying hopes and plans and the sheer vastness of the project notwithstanding, technology is not and never will be the answer-all. It has its limitations and failures, just as do the 25,000 humans it will take to staff the new airport.

But whether Frankfurt Rhein-Main *Flughafen* is a success or a failure, or a little bit of both, we leave to the traveler to decide for himself when next he passes this way.

The Invitation Remains

◆ Back in 1716 Johann Scheuchzer published a natural science report on the Swiss Alps, which cover some 80,000 square miles and contain hundreds of peaks that tower more than 10,000 feet above sea level. He posed a question "as to whether the mountains as we see them before us now, were created by God in the creative period, or at what time they originated." He believed that the Biblical flood had a considerable effect on the Alps and their present shape.

He also called attention to the fact that in the rocks of the high Alps one can find remains of seashells and other crustaceans pressed right into the stone formations. Then he offered the interesting challenge:

"Come here you who despise the Holy Scriptures, you who hold the record of the flood in the Book of Moses to be a simple fable; come and learn right here, you atheists and disbelievers, the dumb rocks will preach to you, the hard walls themselves will soften you, if it is possible to bend you at all."

The interesting invitation is still valid.

Lingala

-A
**SIMPLE
AFRICAN
LANGUAGE**

“M BOTE! Ozali malamu?” This is the friendly greeting and inquiry as to one's well-being that is heard in Kinshasa, the capital of Zaire, as well as all the way up the Zaire River to where we live, in Kisangani. This stretch of about 750 miles is Lingala territory.

Although French is the official language of the country, Lingala is the language used by both the Army and the police force of the Republic of Zaire. Spoken by over a million people in Kinshasa and by thousands more in the “interior,” Lingala's popularity goes on increasing.

True, Lingala does not contain technical terms for cars, radios, and so forth—these words have to be borrowed from French. But this in no way detracts from the language as a means of communication. Actually one can be as precise in conveying one's thoughts in Lingala as one wishes to be, and the language is relatively easy to learn.

Origin

The origin of Lingala is not clearly known, but the Portuguese evidently had something to do with it. When they were exploring up the Zaire River (formerly known here as the Congo River) in the seventeenth century, they are said to have developed Lingala as a means of communicating with the natives. Words like “mesa” for table and “mateka” for butter testify to the Portuguese influence.

However, quite a bit of the vocabulary comes from Swahili, which is a popular African language carried into Zaire from the east. Other words, like “lopitalo,” meaning “hospital,” come from the

By “Awake!” correspondent in Zaire

French, and were introduced by the colonialists. The word “motuka” (pronounced mo-too-kah) rather resembles the English “motor car”—and that is exactly what it means.

Structure

Lingala has no articles, either definite or indefinite, and no troublesome genders to learn. Therefore it quickly endears itself to the one who finds language study difficult. The verbs are simple to construct, the verb root stays the same for one verb, with few exceptions. The person and tense are determined by adding suffixes and prefixes to the root or stem of the verb.

For example, the root word for “preach” is “sakol.” In the word “kosakola” (to preach) the prefix “ko” is the equivalent of “to” in the English infinitive. If “na,” instead of “ko,” is used as the prefix and “i” instead of “a” is used as the suffix, the word formed is “nasakoli,” meaning “I preach.” To say “I preached,” “ak” is added to the suffix, forming the word “nasakolaki.” So precision of expression can be obtained in Lingala.

Some persons, however, complain about the lack of adjectives in the language. And it is true that there are not many, but this lack is easily compensated for. Abstract nouns can be used with a preposition. Thus instead of saying that “Jehovah is a *loving God*,” one says, “Jehovah is a *God of love*.” The meaning is still clear.

Something often difficult for a European

or an American to get used to is forming the plurals of nouns with a prefix rather than a suffix. In Lingala "Nzambe" means one God, but "ba-nzambe" is the word for more than one god. A person is "mutu," while "batu" is the word for people.

Idioms and Peculiarities

Lingala has a number of interesting idioms. For example, one does not necessarily "feel" pain; one may "see" it or "hear" it. One does not "make" decisions; one "cuts" them. The rain does not "stop," but "is cut." An angry person "ties up his face." If one is worried, his "heart is in heaven." A divorced person has had his marriage "killed."

Also, a blind person has "died for the eyes," but the alert one has "strong eyes." The flatterer has a "mouth of sugar" and the one who embezzles money is said to have "eaten" it. If you forget to wind your watch, it will "sleep," but if you drop it and it breaks, it is, in the Lingala way of thinking, "dead."

Another thing about Lingala that takes getting used to is the literal way in which questions are answered. To the question, "Have you not done that job yet?" one may get the reply, "Yes." And that is exactly what is meant, "Yes, I have *not* done the job."

Lingala is also to some extent a tonal language. That is to say that you must put the right stress or intonation on each part of the word to speak the language properly. This can produce some rather odd effects when one is a novice.

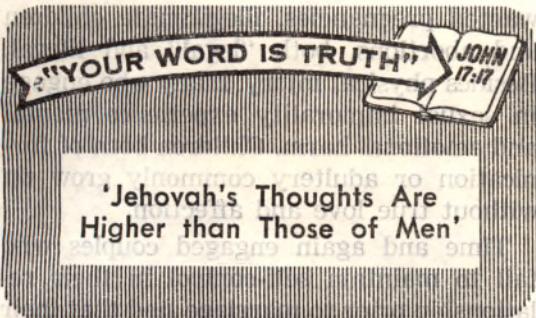
For example, a visitor may be collecting souvenirs and ask to buy a native *shield*. But if he uses the wrong tonal stress it may cause confusion, for he may be asking for a *peanut*. A woman just learning the language was overheard asking if the lady would like another man. What she meant to say was "man child."

Sometimes a new word has to be invented to express a thought in Lingala. For instance, the language has only one word for the words "soul" and "spirit." This is the word "molimo." In the Bibles translated into Lingala, "molimo" is generally used for both words. Yet these two words *soul* and *spirit* have entirely different meanings. So what happens at Hebrews 4:12, which says: "The word of God is alive . . . and pierces even to the dividing of soul and spirit?"

In Lingala most translators render this as the dividing of "motema na molimo." But this is not a good translation, for "motema" means "heart," and neither "soul" nor "spirit" is the same as "heart." So, in talking to people about the Bible, ministers of Jehovah's witnesses use "molimo" for "soul," and they use an invented word, "elimo," for "spirit." Bible study aids printed in Lingala by the Watch Tower Bible and Tract Society also use "elimo" for "spirit."

Apart from this problem with "molimo," the Bible versions available in Lingala are generally good in their conveying the meaning of the original-language text. They make known the Divine Name in the form "Yawe." Earlier versions of the Christian Greek Scriptures even preserve the name "Yawe" in places where quotations are made from the Hebrew Scriptures where "Yawe" appears.

Lingala is thus one of the many languages in which God's name and kingdom are being proclaimed. About 10,000 copies of the *Watchtower* magazine in Lingala are printed each issue, and tens of thousands of the Bible study aid *The Truth That Leads to Eternal Life* have also been printed in Lingala. Thus this simple African language, which has been such a useful means of communication, is now a powerful instrument in spreading the good news of God's grand purposes.



'Jehovah's Thoughts Are Higher than Those of Men'

IT IS not uncommon for humans to view and judge others in the light of their own thoughts and actions. Based on a standard that personally suits them, many have attempted to pass judgment even on the rightness of God's actions. This very thing is what unfaithful Israelites did in times gone by.

But the supreme Sovereign of the universe, Jehovah God, did not permit those Israelites to go on imagining that 'he would positively come to be like them' and come to view things in their way. He 'reproved them and set things in order before their eyes.' (Ps. 50:21) How? Back in the eighth century B.C.E., Jehovah God, by means of his prophet Isaiah, declared: "The thoughts of you people are not my thoughts, nor are my ways your ways. . . . For as the heavens are higher than the earth, so my ways are higher than your ways, and my thoughts than your thoughts."—Isa. 55:8, 9.

Those words called attention to the fact that the viewpoint of apostate Israel concerning Jehovah's dealings with mankind was wrong. In what way? Well, among other things, they did not appreciate that the condition in which a person found himself at the execution of Jehovah's adverse judgment determined whether he would be spared or destroyed. A person's past record of wrongdoing would not stand against him if he had truly repented and was conforming his life to God's ways.

On the other hand, a person's righteous acts would not be applied to his credit if the time for the execution of God's adverse judgment found him to be walking contrary to God's ways.

That is why Jehovah appealed to the unfaithful Israelites to abandon their own selfish ways and live in harmony with his ways, saying: "Search for Jehovah, you people, while he may be found. Call to him while he proves to be near. Let the wicked man leave his way, and the harmful man his thoughts; and let him return to Jehovah, who will have mercy upon him, and to our God, for he will forgive in a large way."—Isa. 55:6, 7.

When the Christian congregation was established in the first century C.E., Jehovah God, by means of his servants, began encouraging people of all nations to abandon their wrong ways. To those assembled at the Areopagus in ancient Athens, Greece, the apostle Paul said: "Seeing, therefore, that we are the progeny of God, we ought not to imagine that the Divine Being is like gold or silver or stone, like something sculptured by the art and contrivance of man. True, God has overlooked the times of such ignorance, yet now he is telling mankind that they should all everywhere repent." (Acts 17:29, 30) Repentance involves heartfelt sorrow for having followed one's own ways instead of God's ways.

Of course, just as in ancient Israel and back in the first century C.E., many people today do not want to acknowledge that God's ways are higher than their own. They prefer doing things according to their own standards.

There are people who consider it their right to resort to dishonesty in order to make a "decent" living. They may do work of inferior quality, use poor materials yet charge for good materials, steal from their employers or in other ways try to get

things to which they are not entitled. Their attitude is: 'We have to care for ourselves as best we can. God is not going to make a living for us.' Hence they have no desire to obey the Bible's command: 'Let the stealer steal no more, but rather let him do hard work, doing with his hands what is good work.'—Eph. 4:28.

But is the dishonest way of most humans better than God's way? Definitely not. Dishonesty does not build confidence and trust in fellow humans. Rather, people become extremely cautious, fearing that others will take advantage of them. Those who have been cheated are disappointed and often become bitter and angry. Poor workmanship and inferior materials have also caused injuries and even deaths.

Nothing good comes from dishonesty. The person who thinks he is gaining through his dishonesty is at the same time losing through the dishonesty of others. He, too, pays higher prices for goods and services because employees steal. Dishonesty thus brings about a vicious cycle. As more people take advantage of others, frustrations, disappointments, violence, injuries and deaths increase.

Sexual morality is another area in which many believe they should be able to follow their own ways. They feel that the Bible's condemnation of homosexuality, adultery, fornication and loose conduct is an invasion of their right to get pleasure out of life.—1 Cor. 6:9, 10; Gal. 5:19-21.

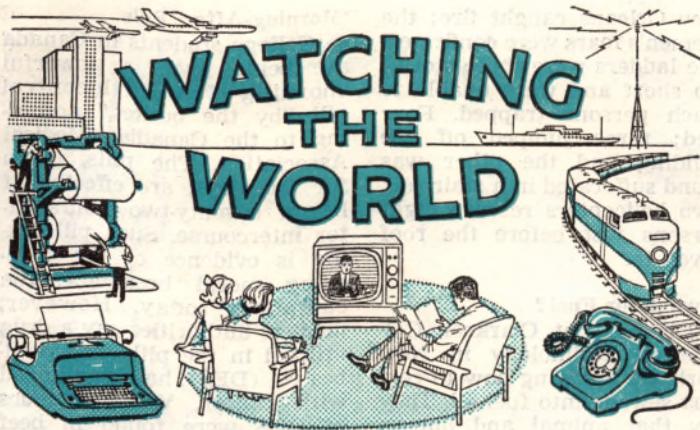
But is it not true that loose morals have only produced bad fruitage? What person has ever improved his marriage relationship and family life through loose morals? Separation, divorce and broken homes are often the product of sexual immorality. Today loathsome venereal disease is spreading like a plague. Sexual assaults are on the increase. Jealous lovers have resorted to physical violence to the point of committing murder. Then there are un-

wanted pregnancies, illegitimate children and abortions, both "legal" and illegal. Besides physical injury, many who engage in sexual immorality experience mental and emotional harm. Children born of fornication or adultery commonly grow up without true love and affection.

Time and again engaged couples who fail to maintain self-control in their relationship prior to marriage find that their fleeting moments of pleasure give rise to later trouble. Fornication or loose conduct just short of fornication does not start their marriage off on a solid footing. They undermine mutual respect, and thus erode the foundation for a happy home.

Thus it can be seen that the person who follows God's ways, not his own, is protected from injury. This is because the laws laid down by the Creator are designed to ensure man's happiness and welfare. The commands found in the Bible are not there for God's benefit. His position as universal Sovereign is not strengthened in any way just because certain humans choose to be guided by his ways. On the other hand, his position does not change either when people ignore his ways, to their own harm. Such human failure only makes God's righteousness more prominent and proves that God's ways are higher than those of imperfect sinners.

All persons who are following their own selfish ways but who desire to have good come to them should repentantly abandon their course and strive to govern their lives by God's ways. If we live in harmony with God's ways now, we will enjoy improved relations with fellow humans as well as wholesome and happy family life. We will also preserve a clean conscience in the sight of God and of men. And before us is the glorious prospect of everlasting life in a righteous new order where all intelligent creatures will live in harmony with God's lofty ways.



Churches in Turmoil

◆ Church leaders and political authorities world wide are concerned about radical clergymen. Sermons extolling the Cuban revolutionary Ché Guevara have been delivered in Catholic churches in the Netherlands. In Argentina, a Methodist layman said: "At our Union Seminary here, Ché Guevara is more of a hero than Jesus Christ." In West Germany, many young Protestant pastors have joined the Communist party. And about a hundred small "progressive" movements have been formed among Italian clergymen. In Africa, religious leaders are colliding with leaders of newly formed governments. The racial policies of many governments have led to divisions among churches, as some support such policies while others condemn them.

"Life" Magazine Folds

◆ After losing more than \$30 million in four years, *Life* magazine has ceased publication. In fifteen years, *Look*, *The Saturday Evening Post*, *Colliers* and now *Life* have all gone out of print. An official cited the reasons for *Life's* demise as rising postal rates, television competition and predictable heavy losses in the future.

Last U.S. Moon Mission

◆ What was billed as the final moon mission sponsored by the United States began when a Saturn 5 rocket launched the Apollo 17 moonship into space. For the sixth time men walked on the moon. No future U.S. moon trips are now scheduled. The entire moon project cost about \$25 billion.

Soviet Crop Failure

◆ A grain shortage was apparently one reason for recent cooperation between the great powers. Published statistics show for the first time how serious was this year's Russian grain crop failure. It forced Soviet authorities to purchase grain from abroad to ensure enough for domestic use and also to save the nation's livestock.

Smoking and Driving

◆ The National Safety Council's manager of motor transportation, John J. Flaherty, warns that smoking while driving impedes a driver's effectiveness. Even auto passengers who smoke increase the chances of an accident. This is because the oxygen reduction can become the same as when flying at an altitude of 8,000 feet. This affects vision. Additionally, a group of doctors studied ten drivers with

heart ailments as they drove through heavy traffic on the Los Angeles freeway. They found that small amounts of carbon monoxide aggravated the heart condition of these persons for at least two hours afterward. Their situation is made even more harmful if they smoke while driving. When pure air was substituted during their drive over the same route, their condition did not worsen. An estimated 1.8 million Americans have angina pectoris, a common heart condition.

Prison Inmates Pay for Crimes

◆ An experiment is being conducted at Sweden's prison factory at Tillberga. The 98 inmates there are being paid a monthly salary of about \$260. They make wooden houses for a government firm and their products are sold on the open market at regular prices. With their earnings the prisoners pay for their "board and lodging" and any entertainment. Also, they are obligated to pay damages awarded to victims and the state by the courts. This may include alimony.

Vietnam's Loss of Lives

◆ It is estimated that during the past decade 1.3 million persons died in Vietnam. The number of civilian casualties in North Vietnam cannot be ascertained. However, during the 1965-68 bombings it was estimated that 1,000 North Vietnamese were killed and injured weekly. The war has cost America \$105 billion since 1965.

Allegiance Question Upheld

◆ The United States Court of Appeals has upheld a New York state schoolteacher's "right to remain silent" during the pledge of allegiance to the flag. The teacher's views were not based on religious convictions. Rather, she personally believes that the statement "liberty and justice for

all" does not reflect the quality of life in the United States and that it would be hypocritical for her to recite such words.

Buying Sermons

◆ An estimated 40,000 clergymen spend \$1 million to purchase prepared sermons from a dozen firms. One Catholic priest in Chicago, Illinois, said: "Frankly I don't have the time or the training to produce a quality sermon each week. I don't think I'm short-changing my congregation if I find something suitable from an outside source." But religious writer Lester Kinsolving observes that congregations might ask of such ministers: "Was his seminary training comprised of theology—or was it limited to instruction in reading? Why can't the parish save on its budget by eliminating the minister's salary in favor of mailing mimeographed copies of his sermon-service to the parishioners at home—while replacing his pastoral counseling with special subscriptions to either Dear Abby or Ann Landers [advice columns in newspapers]?"

Methodist Membership Drops

◆ The Methodist Church in Victoria and Tasmania, Australia, reports that its membership over the past five years has dropped 5 percent. Decrease in the Melbourne area was 7 percent. In 1967 there were 56,406 Methodists in Victoria, but at the end of 1971 there were 53,529.

Tall-Building Fire

◆ In *Awake!* of December 8, 1972, a report was made about the concern of firemen that tall buildings can be firetraps. Elevators could jam, stairs, ducts and pipes could suck up flames in minutes and fire ladders might be too short. When that issue of the magazine was being received by subscribers, a tall building in

New Orleans caught fire; the firemen's fears were confirmed. The ladders were three stories too short and were unable to reach persons trapped. Four died; three jumped off the building and the other was found suffocated in a stairwell. Two helicopters rescued eight persons just before the roof caved in.

Sewage for Fuel?

◆ Chemists at Clarkson College of Technology in New York are studying how to convert sewage into fuel oil. They say that animal and human feces, after treatment, can be cooked into a low-sulfur oil. Americans and their pets could supply enough to produce 1.7 billion gallons of this oil annually, it was estimated. If it could be done cheaply, sewage could be a source of supply for much of the country's natural fuel. But it may not come in time. Top Atomic Energy Commission official John F. O'Leary predicts that oil and gasoline will come under rationing within the next year. He is not optimistic about other exotic sources of supply. He points out that such would not be feasible commercially before the year 2000. However, turning off lights and other appliances when not needed and keeping radiators off and thermostats low whenever possible cuts down fuel waste.

Birds in Peril

◆ Nesting birds along the Texas coastline are declining in number. In 1969 the major breeding areas showed a figure of 11,500. But in 1970 the number had dropped to 8,800. Pesticides and mercury used to treat rice seeds have cut the population of the white-faced ibis, a marsh bird. In 1970, ibis chicks were found dead with high levels of mercury and pesticide in their brains. Researchers report that the entire number of chicks was "virtually wiped out" that year.

'Morning-After' Pills

◆ College students in Canada are being given a powerful 'morning-after' birth-control pill "by the bucket," according to the Canadian Medical Association. The pills, taken for five days, are effective if begun seventy-two hours after intercourse. Such pill taking is evidence of the deepening moral breakdown on campuses today. However, medical authorities say a drug utilized in the pill, diethylstilbestrol (DES), has been linked with cancer. When residues of DES were found in beef livers, the government suspended its use on cattle. U.S. scientists report that young women whose mothers had been given DES developed a rare form of vaginal cancer.

Shaking Children

◆ Since a child's head is large in relation to his weak neck muscles, shaking him can cause neck injuries or break blood vessels in his brain. Dr. John Caffey of Children's Hospital of Pittsburgh pointed out that the shaking of children can break arm or leg bones. There is the risk of mental retardation, injury to eyes and even death. Some injuries can be likened to "whiplash" in automobile accidents. The doctor noted that shaking children is a common practice of many adults.

Doctor-Patient Relationship

◆ The Ontario Medical Association in Canada is trying to learn what people think about their doctors. They want to bridge the growing gap separating the public and physicians. Further, the American Heart Association was recently asked to consider the use of an ombudsman between doctors and patients. This go-between, a "physician-friend," would interpret the treatment to the patient acting in his behalf. One aspect of the problem was highlighted by the words of a London doctor: "I

run my medical practice strictly as a business. You're either ill or you're not. I have no time for the person who can't square up to his domestic problems, acquires a headache and then expects me to sit and listen while he spews up his misery across my desk."

No TV for Tots

◆ Dr. Manuel Suarez-Perdeguero, well-known pediatrician in Spain, declares: "Television is definitely harmful for children under four or five years of age." He said that this is an "internationally accepted" view. Gamma rays from an ordinary television set can be detrimental to a small child's rapidly developing brain. TV image vibrations can cause vision problems in later years. There is danger to the child's personality from watching violence. And the positions he

may take for extended periods can hurt his physical development. The doctor also observed that television limits the imagination of young children.

Health Care Problems

Universal

◆ Receiving medical attention is becoming a major problem in many nations. In the United States, nonemergency cases often overcrowd hospital emergency rooms. The Soviet Union has a special telephone hot line for ambulance calls and emergency medical care. However, abuses of it are causing long delays for patients. People, not wanting to wait at clinics, call on the ambulance service. At least 20 percent of the ambulance calls are said to be unnecessary. In Communist China the need for doctors is so great that authorities have

cut down the medical education curriculum to three or three and a half years.

Ear Clips Stop Dental Pain

◆ Soviet dentists have a new way of cutting down pain when drilling teeth. A new electrical anesthetic machine has been developed. Before beginning to drill, the dentist attaches a light plastic clip to the patient's ear. The clip is one pole of an electrical circuit. The other pole of the circuit is at the end of the dentist's drill. When the circuit is completed through the head of the patient, the pain signal from the tooth to the brain is blocked. One patient described how it felt: "I was sitting rigidly, waiting for acute pain, but there wasn't any. There was only a tickling sensation in my tooth."

