

Awake!

APRIL 8, 1980

PEOPLE

Why They
Act
The Way
They
Do



FEATURE ARTICLES ■

people. What makes them "tick"? Why do some do so much good, and others so much that is bad? Most of us are a mixture of both good and bad. Knowing how we are made will help us to understand what we need, and what happens when needs go unfulfilled. Genes are involved. Environment is involved. And more. This series seeks answers

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WHY THIS MAGAZINE IS PUBLISHED

"Awake!" is for the enlightenment of the entire family. It reports the news, tells about people in many lands, examines religion and science. But it does more. It probes beneath the surface and points to the real meaning behind current events, yet it stays politically neutral and does not exalt one race above another. It also shows how to cope with today's problems. Most importantly, "Awake!" builds confidence in the Creator's promise of a peaceful and secure new order within our generation.

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

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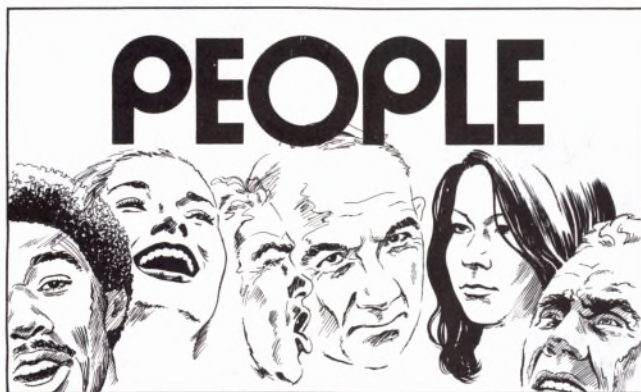
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People do good deeds and they do bad ones. They are a mixture of both good and bad. Many times they are on target and many times they miss the mark. They are contradictory, both bitter and sweet. Why? What makes them this way? What, really, makes people "tick"? This series on PEOPLE seeks the answer.



What Makes Them "Tick"?

WHY does a man walk in one day and shoot his wife and four children? Why does another man spend his life laboring to care for his family?

One person lives a life of service to mankind, while another makes a career of crime and violence. One gives generously to alleviate suffering; another hoards wealth and creates pain and misery. Some give to the poor, whereas others blame the poor for their poverty. One group finds joy in building and creating. Others derive vengeful delight from senseless vandalism. Why do different people act so differently?

Moreover, why can the same person at times be so kind and loving, and at other times be so cruel? He may use his knowledge and the power it brings to do good for humanity, then turn around and use this same knowledge to make bombs to blow women and children to bits. Some may feel sorrow afterward, while others feel nothing. Why this inner conflict, this war between flesh and spirit, this condition in man as though he were a house divided against itself? Is it inherited? Is it due to the environment? Are there unsatisfied needs within people that propel

them toward evildoing? And if these needs are met, does it enable them to do the good they may wish to do?

The apostle Paul wrote about this inner conflict: "I do not understand what I do; for I don't do what I would like to do, but instead I do what I hate. I don't do the good I want to do; instead, I do the evil that I do not want to do. My inner being delights in the law of God. But I see a different law at work in my body—a law that fights against the law which my mind approves of."—Rom. 7:15, 19, 22, 23, *Good News Bible*.

James, a brother of Jesus, wrote of the contradictions within people: "The tongue, not one of mankind can get it tamed. An unruly injurious thing, it is full of death-dealing poison. With it we bless Jehovah, even the Father, and yet with it we curse men who have come into existence 'in the likeness of God.' Out of the same mouth come forth blessing and cursing. It is not proper, my brothers, for these things to go on occurring this way."—Jas. 3:8-10.

Note the statement about coming into existence "in the likeness of God." What does it mean? Is it the key to answering the question, What makes people tick?

PEOPLE

How They Began

Knowing how they began will help us to understand what they have become



THERE are reasons both logical and scientific for believing the Bible account of the creation of the first human pair.* That book's first chapter states: "In God's image he created him [man]; male and female he created them."—Gen. 1:27.

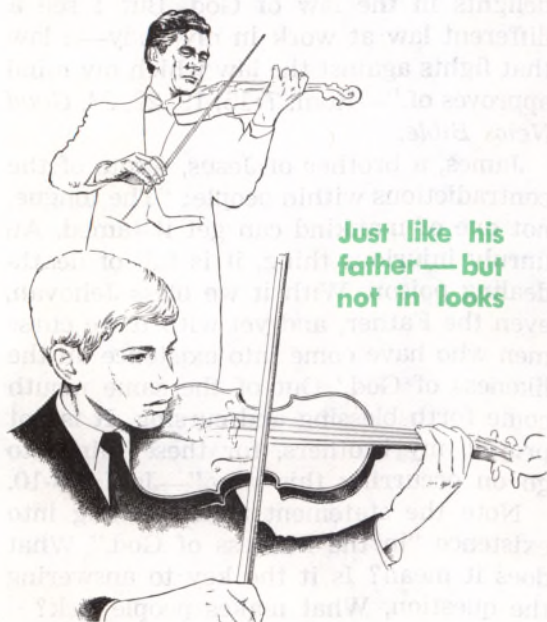
What does it mean to be "in God's image"? Does it mean the first human looked like God in a physical sense? If so, it means that he or his descendants could

* See the book *Did Man Get Here by Evolution or by Creation?*, as advertised on page 32.

have made a carved image that would look like him. But this was not possible. So Isaiah asked: "To whom can you people liken God, and what likeness can you put alongside him?" Jesus himself said: "No man has seen God at any time." So again the question, What does it mean to be "in God's image"?—Isa. 40:18; John 1:18.

People may see a boy and say, "He's just like his father!" However, the boy may not look like his father. But he is like his father in other ways, such as disposition, personality, mechanical ability, musical talent, physical agility or moral qualities. Having attributes similar to his father's, the boy is said to be like his father.

It is in this same sense that the first human pair were created in God's likeness. They were given certain attributes possessed by God. This accounts for the tremendous gulf between man and the lower animals. These godly qualities equipped the man to exercise dominion over the animals. To both the man and the woman God said: "Be fruitful and become many and fill the earth and subdue it, and have in subjection the fish of the sea and the flying creatures of the heavens and every living creature that is moving upon the earth."—Gen. 1:28.



Just like his father—but not in looks

Male and female he created them. Different? Obviously different. Different physically. Different mentally. Different emotionally. Men and women are pleased with these differences. It makes them complements of one another. They were created to be complements. (Gen. 2:18, 20) In a particular respect man was in God's image where woman was not—in headship. (1 Cor. 11:3, 7) Both the man and the woman shared in being in God's likeness insofar as each one possessed the divine attributes given at the time of their creation.

What are some of the qualities of God that were built into the first human pair? Some of them are made manifest by his visible creations. Romans 1:20 declares this: "His invisible qualities are clearly seen from the world's creation onward, because they are perceived by the things made." Without words or voice or speech, God's works in heaven and on earth are declaring his glory, reflecting his attributes.—Ps. 19:1-4.

Certainly knowledge and wisdom are

perceived in the earth and in its plants and animals. And is not his power felt in the thunderstorm? The infinite variety of his creations testify to his being a prolific worker. They reveal him to be a supreme Designer with purpose in view. His quality of justice is shown in this: He designed creatures with certain needs; in justice he provided for the fulfillment of these needs. He goes beyond the requirements of justice—in love he showers his blessings even on the wicked. Jesus indicated this: "Continue to love your enemies and to pray for those persecuting you; that you may prove yourselves sons of your Father who is in the heavens, since he makes his sun rise upon wicked people and good and makes it rain upon righteous people and unrighteous."—Matt. 5:44, 45.

The first human pair had these qualities, or the capacity for acquiring them. In this sense they were in God's likeness. However, history shows that people have not always reflected these attributes, nor do they today. What has happened? Are they no longer in God's likeness?

SOME ATTRIBUTES OF GOD GIVEN TO THE FIRST HUMANS

JUSTICE

"All his ways are justice."—Deut. 32:4.

POWER

"He is the Maker of the earth by his power."—Jer. 10:12.

LOVE

"God is love."—1 John 4:8.

"God loved the world so much that he gave his only-begotten Son."—John 3:16.

WISDOM

"Jehovah himself gives wisdom."
—Prov. 2:6.

KNOWLEDGE

"A God of knowledge Jehovah is."
—1 Sam. 2:3.

PURPOSE

"Everything Jehovah has made for his purpose."—Prov. 16:4.

WORK

"How many your works are,
Jehovah!"—Ps. 104:24.





PEOPLE

What Happened To Them

"God made mankind upright, but they themselves have sought out many plans."
 "They have acted ruinously on their own part; they are not his children, the defect is their own."
 —Eccl. 7:29; Deut. 32:5.

SOME amusement parks have mirrors that are curved and thus distort the images that they reflect. People stand in front of them and laugh at what they see—their heads seem long, their bodies short and squat, their legs three times as long as they really are. Move closer to the mirror or farther away and the distortions change, but never does the image reflect the true bodily proportions. We would weep in despair if these horrible distortions were true reflections of ourselves. But it is all in fun and we stand there posturing and laughing at the ludicrous

images we see in the mirror. All of our bodily parts are there, but so distorted!

There is another image of ourselves that is not properly proportioned, but this one is real and no laughing matter. It is the image of our innermost selves, of what we are inside, "the secret person of the heart." (1 Pet. 3:4) This image should show the attributes of Jehovah God, in whose likeness man was originally created. We still have his attributes, but they have gotten out of their proper proportions, like the reflections of our physical image in the curved mirror.

Jehovah God created the first human pair with his attributes or with the capacity for developing them. They needed the qualities of justice and love, knowledge and wisdom, and the power to work with purposes and goals in view. They were assigned work that would give their lives purpose and meaning, and they were created with the abilities to perform the work. (Gen. 1:28; 2:15, 18) They also possessed free will, so they could choose their own course.—Josh. 24:15.

Adam and Eve were created upright and were told of the course that would mean life, but they 'sought out another plan, acted ruinously on their own, and became defective.' (Eccl. 7:29; Deut. 32:5) They misused their freedom of choice. Eve, in a selfish grab for knowledge, unwisely dis-

obeyed God. This disobedience showed a lack of love for the One who had given her life. "This is what the love of God means, that we observe his commandments." (1 John 5:3) Adam set aside his love for God to side with Eve in her rebellion. No longer were the divine attributes they had received in proper balance, but they were now incomplete, imperfect. And, true to God's warning, they were sentenced to death, and they passed on to their offspring imperfection and death.—Ps. 51:5; Rom. 5:12.

However, down to this day their descendants still have these divine attributes to a degree. For example, the desire for knowledge. Even a small child is hungry to know. As soon as he can talk his mind pours out streams of questions. He wants answers, craves food for thought. The endless outpouring amazes adults, sometimes baffles and exasperates them, and finally exhausts them. But the barrage is to satisfy a natural curiosity and hunger for knowledge. Why this? Why that? Why, why, why? Finally the besieged parent may cry out in desperation, "Go ask your mother!" or, "Go ask your father!" But this curiosity should not be discouraged in the young or be lost by the old. It is to satisfy our innate need to know.

"A man of knowledge is reinforcing power." (Prov. 24:5) Knowledge has accumulated until today man has the power to fly higher and faster than any bird, travel faster on land than any animal and surpass fish in the water. He can see and hear what is happening on the other side of the earth. He has gone to the moon and back. We are fascinated by power, we watch enthralled as a crane swings a steel ball into the side of an old brick building and brings it crashing to the ground. A charging rhino, an elephant stampeding through the jungle, a flash of lightning, a crack of thunder, a raging storm on the sea—we are awed by such power!

We have a sense of justice. Even children are sensitive to injustice and become very upset when they think that they have not been treated fairly. Adults also become righteously indignant when suffering injustice. In stories we want justice to triumph. We want the hero to win and the villain to get his just deserts. It is only justice for us to reap what we sow. It is justice and fairness that we do unto others as we would have them do unto us. (Gal. 6:7; Matt. 7:12) Even those without God's law have by nature a sense of right and wrong, and a conscience that accuses or excuses. We have guilt feelings when doing wrong, just as did Adam and Eve, who hid when they were guilty.—Gen. 3:8-10.

Many desire wisdom and seek it through study and meditation. It is not programmed into them, as it is in many other earthly creatures. Some animals possess a wisdom that amazes humans. By instinct they migrate, hibernate, aestivate, build and engage in other activities that reflect wisdom. As the Bible says, "They are instinctively wise." (Prov. 30:24) However, mankind has the capacity for gaining

**Even those without God's law
have by nature
a sense of right and wrong**

knowledge and using it in a wise way. By meditation he acquires insight and understanding. Man alone, of all earthly creatures, possesses this flexible wisdom.

Jehovah is a God of purpose, and man needs to have purpose in his life. He is distressed if he has no purpose, if his life has no meaning. To accomplish a purpose man must work. Work makes man feel useful. God made man to work, gave him work to do, putting him "in the garden of Eden to cultivate it and to take care of it." Jehovah's gift is that man should "see good for all his hard work." (Gen.

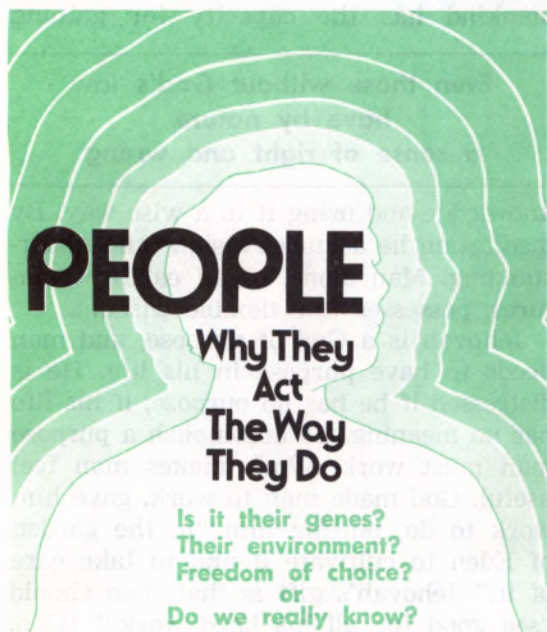
2:15; Eccl. 3:13) Work reflects the worker; it testifies to the worker's worth. It is satisfying to see work well done, finished, the purpose accomplished. Jehovah pronounced his creative work very good and was refreshed by its accomplishment. —Gen. 1:31; Ex. 31:17.

Above all, people need love. They need to love and be loved. Without it we shrivel up inside. Babies well cared for physically will be stunted and sometimes even die if unloved. Adults deprived of love feel lonely and their spirit becomes depressed and despondent. "The spirit of a man can put up with his malady; but as for a stricken spirit, who can bear it?" (Prov. 18:14) Love bears all things and endures all things; without it much of life becomes unbearable and unendurable. (1 Cor. 13:7) We hear of many shortages in these troubled times, but the greatest shortage on earth is that of love. Psychiatrists say it's behind most mental illnesses today.

And this brings us to the next step in

our quest for an answer to the question, What makes people tick? When the needs with which man was created go unfulfilled, there's trouble ahead. An automobile is designed with certain needs. If they are not fulfilled, the car will not run. If they are fulfilled poorly, the car may run, but poorly. So it is with people. The first pair was created with certain qualities that needed to be satisfied, and these same attributes are possessed by people today. When these needs are not met, or only partially so, the incredible human machine does not function properly. It sometimes runs amok and does incredibly inhuman things.

Warped personalities manifest human qualities in twisted and distorted ways, as the curved mirrors reflect physical bodies in grotesque ways. The divine attributes of justice, love, wisdom, power and others are still with us, but in our imperfection they no longer balance one another in their operation. With regard to these qualities, people have become unbalanced.



"IT'S my genes!" one person says in defense of his wrongdoing. It is true that heredity, or the genes, influence people's conduct. The Bible concurs in this: "Through one man sin entered into the world and death through sin, and thus death spread to all men because they had all sinned."—Rom. 5:12.

"It's my environment!" another wrongdoer pleads. That too is a factor. "He that is walking with wise persons," the Bible says, "will become wise, but he that is

having dealings with the stupid ones will fare badly." Also, "Do not be misled. Bad associations spoil useful habits."—Prov. 13:20; 1 Cor. 15:33.

Both inherited traits and environmental influences are powerful factors in shaping the individual. Nevertheless, responsibility for his actions cannot be shifted to genes or environment. Why not? Because people are free moral agents. Hence, "each of us will render an account for himself to God." Man was not made a robot, but he has a will of his own, and bears responsibility for its use.—Rom. 14:12.

Man has capacities for gaining knowledge and wisdom, for love, and a sense of justice. He has the power to do purposeful work, to give meaning to his life. But in fallen man these potentials are not developed to the full, nor are they properly balanced one with the other. Consequently, his needs are not met and he acts imperfectly—like the car the designed needs of which are unfulfilled.

Just as a small pebble in our shoe or a speck of dust in our eye gets our attention, so it is the bad that people do that makes the headlines. The rest of the body may be fine, and people may be doing much good, but it is the disturbance that gets the attention. So it is with the failures in view that the question is asked, Why do people act the way they do? What makes them tick?

The failures may be small. A need may be unfulfilled, a wish denied, a purpose frustrated, and in a bad mood the person snaps at others. Many times it is more serious. Discrimination may deny a person acceptance or recognition or work; frustration sets in; hostility then escalates into anger and erupts in violence. Greed for money or possessions drives many to run roughshod over others. "Me firsters," obsessed by their own desires, rob or rape

or kill to satisfy their lusts. Ambitious men and organizations and nations launch inquisitions and wars, commit horrendous atrocities, ruin the earth with poisonous chemicals and spread famine and pestilence and death to millions.

Why? They are no longer in God's likeness, no longer guided by his attributes. The gulf that separates men from animals narrows and, in extreme cases, makes men like "unreasoning brute beasts which are born to be caught and killed." (2 Pet. 2:12, *Phillips*) They pervert the divine at-

**More children killed in school violence
between 1970 and 1973
than soldiers in combat in Vietnam**

tributes. Knowledge is used evilly to increase power that corrupts and destroys. Wisdom deteriorates into worldly folly. Justice becomes harsh, cruel. Love turns inward upon self. Qualities with great potential for good are distorted to empower men to commit evils far greater than any of those possible by "unreasoning brute beasts."

People are surrounded by violence—in cities, in books, plays and movies, in their streets, in their living rooms. Television floods minds from infancy on with mayhem and murder. One study estimates that by age 14 the average American child has been exposed to 11,000 television murders. A Congressional subcommittee investigated violence in the schools and came up with this statement of historic import: "More children were killed in the schools, often in gun fights with other pupils, between 1970 and 1973, than soldiers in combat in Vietnam."

Evolutionary scientists assure us that all of this is natural. Aggression is innate, they say, handed down to us by animal

ancestors. Not true, other scientists contend. Anthropologist Ashley Montagu writes as follows:

"There are many societies that, far from engaging in aggressive behavior, are remarkably nonviolent and cooperative. Examples are the Tasaday of Mindanao, the Todas of southern India, the Tahitians, the Hadza of Tanzania, the Ifaluk of the Pacific, the Yamis of the Western Pacific, the Lapps, the Arapesh and the Fore of New Guinea. . . .

"When anthropologists study such non-aggressive societies, we observe that it is principally through their child-rearing practices that they produce cooperative, non-violent personalities. Great affection is lavished on children. From infancy on, small children are scarcely ever out of bodily contact with someone who is either cuddling or carrying them. . . .

"Aggression and nonaggression are each learned ways of behavior. Every society provides models for its preferred forms of behavior—models that are continually reinforcing the behavior of the individual. America sets before the child the most aggressive kinds of models, and then we wonder why we have such high rates of violent crime."

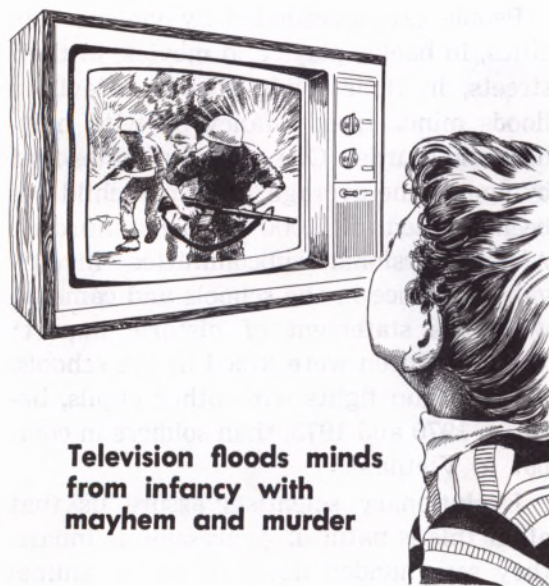
Dr. John Lind urges a return to the rocking of babies and the singing of lulla-



**Cuddling,
lullabies
help the
brain grow**

bies to them, because this "hastens the development of the brain." The magazine *Psychology Today*, December 1979, said that "during formative periods of brain growth, certain kinds of sensory deprivation—such as a lack of touching and rocking by the mother—result in incomplete or damaged development of the neuronal systems that control affection." "Since the same systems influence brain centers associated with violence," the article continued, "the deprived infant may have difficulty controlling violent impulses as an adult."

Dr. Richard Restak in his book *The Brain: the Last Frontier* (1979) makes these points: Experiments have "provided conclusive evidence that the limbic [marginal] system is the area of the brain most concerned with emotion," and to destroy or stimulate this area changes behavior. Electrical stimulation can cause either joy or rage. "The immature brain is dependent on sensory stimulation for normal growth," and "when an infant is rocked or cuddled, impulses are directed to the



**Television floods minds
from infancy with
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cerebellum that stimulate its development.” This is important, for the cerebellum controls movement and if it is deprived of these pleasurable impulses sufficient nerve synapses do not form, and development is abnormal. The result may be an impulsive, uncontrolled, violent personality.

The above two paragraphs show that not only genes and environments and models of behavior that society puts before us affect the way we act, but also the treatment we receive as helpless babies affects our brain development, our emotional states and resultant actions.

But still another factor is at work—one whose existence many people will not even acknowledge. *The Wall Street Journal*, however, does. In an editorial October 28, 1977, on “The Terrorist Impulse,” it wonders about the mindless rage and violence. The tendency is to blame society, but the editorial wonders about “deep and irrational impulses” in man for whom “evil has its own appeal.” Its concluding sentence: “You are less close to the truth if you blame society than you are if you blame Satan.”

The Bible calls Satan “the god of this

system of things,” identifies “wicked spirit forces in the heavenly places” as the real enemies, and declares woe for the earth “because the Devil has come down to you, having great anger, knowing he has a short period of time.” (2 Cor. 4:4; Eph. 6:12; Rev. 12:12) Satan was at the root of the trouble in Eden when he tempted Eve into abandoning God’s ‘image and likeness.’ He is still a mighty force today in causing people to act in mindless, raging violence.

Many known factors explain why people act the way they do. Genetics, environment, freedom of choice, unfulfilled needs—all of these influence conduct. Brain development during infancy plays an important role. However, man’s understanding of the brain is in its infancy. It is frequently called the most mysterious thing in our mysterious universe. Then there is also the Satanic influence.

So do we really know why people act the way they do? We know some details; many details we do not know. But we do know the basic reason: None of us perfectly reflect ‘the image and likeness of God.’

PEOPLE

Their Return To God’s Likeness

“Strip off the old personality with its practices, and clothe yourselves with the new personality, which through accurate knowledge is being made new according to the image of the One who created it.”—Col. 3:9, 10.

JEHOVAH created the earth to continue forever, to be inhabited forever. He has given it to the children of men, to be inherited by the meek ones of the earth. And as Jesus taught his followers to pray, God’s will shall be done on earth as it is

in heaven. From the beginning it was God’s purpose to have man serve as earth’s caretaker. It still is his purpose. Only those, however, who return to the likeness of God may enjoy this privilege.—Ps. 104:5; 37:29; 115:16; Matt. 6:9, 10.

Such ones must strip off the old personality with its practices and clothe themselves with the new personality. (Eph. 4: 22; Col. 3:9) How? Through accurate knowledge—knowledge of Jehovah and his divine qualities, and the putting of them into practice. Hence, a beginning in this is to follow the apostle Paul's advice at Philippians 4:8, 9: "Whatever things are true, whatever things are of serious concern, whatever things are righteous, whatever things are chaste, whatever things are lovable, whatever things are well spoken of, whatever virtue there is and whatever praiseworthy thing there is, continue considering these things. The things that you learned as well as accepted and heard and saw in connection with me, practice these; and the God of peace will be with you."

The advice is to think on these things. Thoughts create feelings, and when feelings become strong enough they move people to act. The Bible writer James indicated this when he said that as we dwell mentally on evil thoughts desire grows and eventually leads to sinful acts. This is stated at James 1:14, 15: "Each one is tried by being drawn out and enticed by his own desire. Then the desire, when it has become fertile, gives birth to sin; in

turn, sin, when it has been accomplished, brings forth death."

Jesus also indicated this regarding adultery: "I say to you that everyone that keeps on looking at a woman so as to have a passion for her has already committed adultery with her in his heart." (Matt. 5: 28) To keep on looking and thinking may make desire so strong that the adulterous act itself is committed.

The same principle works with good thoughts. They create good feelings that lead to good acts. So use freedom of choice wisely. Think on good things, desire them, do them.

The apostle Paul advised this. He certainly practiced it. But still he lamented: "What I wish, this I do not practice; but what I hate is what I do." He bewailed his inner conflict of flesh and spirit: "Miserable man that I am! Who will rescue me?" He had accurate knowledge, tried to return to God's likeness, tried to bring into a balance the various attributes of Jehovah that he had. In himself he failed, yet he did gain the victory. His cry tells us how: "Thanks to God through Jesus Christ our Lord!"—Rom. 7:15, 24, 25.

We may make a start in balancing harmoniously the divine attributes, but only God through Christ makes the return to his likeness complete.

"THE GREATEST OF THESE IS LOVE."—1 COR. 13:13.

WITHOUT LOVE

**JUSTICE IS HARSH
KNOWLEDGE INFLATES
WISDOM IS VAIN
POWER CORRUPTS**

They can sell you almost anything!

"Today's advertising industry is the most potent and powerful mass marketing and merchandising instrument ever devised by man."—Paul Stevens, writer of television commercials

MOST people think that advertising does not really affect their decisions. They think they ignore it and make up their own minds. Money-wise business executives know better. Throughout the world, these men hang their fortunes on tremendous advertising budgets. They build wants and sway our thinking in ways that we may not even realize.

Advertising messages strike our eyes and ears from all directions—from newspapers, magazines, television, radio, billboards, buses, subways, taxicabs, river barges, T-shirts, and from other sources too numerous to mention. It has been estimated that Americans encounter as many as 1,600 advertising messages a day.

"I would guess," mused Jack Smith, writer of a lighthearted column in the *Los Angeles Times*, "that the average American takes in more words every day from advertising than from any other source, including news, books, magazines, and his or her spouse."

World wide, manufacturers seek new ways to persuade you to buy. A single soap manufacturer, Procter & Gamble, spent \$460,000,000 on advertising in the United States alone in 1977—more than \$8 for every family in the nation! Such sums would not be spent if they did not produce results.

Paul Stevens, a television ad writer, said in his book *I Can Sell You Anything*: "Advertising tells you what to buy, how to buy, and why to buy any particular brand or product. The thing that amazes me is

that it continues to work." In his best-selling book *The Hidden Persuaders*, Vance Packard wrote: "The result is that many of us are being influenced and manipulated, far more than we realize, in the patterns of our everyday lives."

Such advertising is most effective when it deals with nonurgent needs. A man who is hungry does not need to be told that he needs food. But the man who already has a perfectly good car has to be tempted if he is to go into debt to buy a new one.

Unimportant Differences

Much advertising is truthful, direct, straightforward, honest. It can be amusing, charming, delightful. It can provide valuable information—telling you what a product will do, how much it costs, where to buy it at a lower price.

But advertisers must sell products that are little different from their competitors' products. There really is not a great deal of difference between many brands of gasoline, cake mixes, soaps, detergents or even automobiles. But manufacturers must sell *their* brand. Tremendous sums of money are involved. Thus, the advertising people are under great pressure to come up with successful campaigns.

How can they convince you that Brand X is better than Brand Y when the two brands are almost identical? They may



CAVEAT EMPTOR—Let the buyer beware!

say that owning Brand X is more pleasurable, that "nicer" people use it, or that it gives some vague and unspecified advantages.

Laboratory tests show that all brands of gasoline having the same octane rating perform essentially the same in an automobile engine. So one brand promises "happy motoring," while another advertises "fast starts." One major oil company bypassed the whole matter by advertising: "Put a tiger in your tank." Now, everyone knew they were not *really* selling tigers. But the slogan was translated into many languages, and sold a lot of gas.

Think about what the ads really say. Are they claiming that a product is "different"? Of course it is! Perhaps it has been dyed brown, while the competing product is blue. It may also have more important differences, but "different" does not necessarily mean "better."

What does "better" mean? Better than it was last year? Better than a competitor's product? Better than one that sells for only half as much? A claim that is not specific probably does not mean much.

Tricks with Words

There are tricky little words that advertisers hope you will overlook. Think, for example, of the wonderful little word "helps." A manufacturer says his product "helps keep you young." Why doesn't he say it "keeps you young"? Because it doesn't. He counts on your overlooking the little word "helps" and remembering only the promise of youth.

How often you have heard that word! "Helps prevent cavities." "Helps keep your house germ-free." "Helps stop . . ." "Helps overcome . . ." Advertisers know that most people overlook the qualifier.

Consider, too, the little word "like." Is

a glass of Portuguese wine really 'like taking a trip to Portugal'? Hardly! But you are transported in thought to a romantic foreign place. Moonlit nights and graceful dancers are not bottled in the wine, but that marvelous little word "like" can help an advertiser establish an aura that his product would not otherwise have had.

What does a promise of "as much as 20 per cent more mileage mean"? Advertisers know that most people hear the "20 per cent," not the qualifier. They are not promising *you* 20 percent, or even one percent. The problem is that we *want* to get 20 percent more mileage, and that is what we hear.

Why You Buy

Advertising agencies have spent a great deal of money learning why you make certain decisions. They play on secret miseries and self-doubts. They try to manipulate guilt feelings, fears, anxieties, feelings of loneliness and inner tensions in order to influence your decisions. They think they can persuade you in ways you may not even recognize. This study is called Motivation Research, or MR.

An advertising executive explained why a woman will pay 10 times as much for skin cream as for soap. The soap promises to make her clean, but the skin cream offers to make her beautiful. In effect, the customer is not buying skin cream, but hope. She does not buy fruit, but vitality. She is not sold shoes, but lovely feet. Her husband does not really buy a car for its technical aspects, but for prestige, and for the personality it projects. Manufacturers know that when he says "that is not *my* kind of car," he does not mean that it will not provide good, comfortable transportation. Instead, he means it will not transmit the aura of distinction, prosperi-

ty, youth, sportiness, masculinity or maturity that a manufacturer has built around the car of his choice. Cars are not just means of transportation; manufacturers have made them into symbols. Does a man feel "big" in a bigger car, or "sporty" in a sportier one? If you doubt this, just compare the names Porsche, Mercedes, Volkswagen and Honda, and see if cars have not been given traits far beyond the need for transportation.

Even household cleansers are sold in this way. Many housewives consider cleaning to be an unrewarded and unappreciated drudgery. Soap ads build their feeling of "worth and esteem," exalting the wisdom and competence of the housekeeper.

Television ad writer Paul Stevens says about the picture detergent commercials convey: "There's father, the titular head of the household. There's mother, the real head, the one who makes the ultimate decisions, and around whom everything else revolves. . . . Don't kid yourself, that's why you buy it. It isn't the mysterious additive or the three kinds of cleaners that gets you. It's mother emerging the all-knowing and all-wise, always right in the end."

Another commentator said of commercials for certain specially prepared frozen foods: "As shown on TV, when a housewife serves these to her family orchestras play in the background and she draws admiring glances. But if her husband stops to figure out the cost, the sounds she hears may not be those of an orchestra."

Can You BUY Happiness?

Advertisers often try to make you dissatisfied with what you have. They preach the doctrine of obsolescence—that what you have is old, outmoded, to be discarded. They try to persuade you that you must have more and more and more and newer and newer and newer things—new clothing, new appliances, new automobiles. And how often you see long-familiar products

in packaging proclaiming "new and improved"!

They promise happiness through possessions. They urge you to *spend*, suggesting that spending will make you happy and envied, and that their products will make you popular, beautiful or handsome. They want to convince you to pass your time in expensive activities—driving the newest car, taking pictures with the most expensive camera, or being entertained by the largest television set.

This prompts a "thing" culture. The idea is that *things* will bring you happiness. Our closets and our garages are filled with things, but we are told: 'Buy more things, *then* you will be happy.'

But buying is not a solution to disillusionment with life. It does not change the state of the world. Real problems are not solved in this way.

Realizing this, you can be on your guard. You can screen out unwanted ads. You can recognize that many advertisers champion a materialistic goal. They want you to imagine having things you do not have, and, if necessary, even to be willing to go into debt to get them.

But if you do that, you may have less time for things that really matter. You may work harder, spend fewer hours with your family, and sink deeper into the problems of our modern "things"-oriented society.

Long ago the greatest Leader earth has ever known gave a warning that is most appropriate today. He said: "Keep your eyes open and guard against every sort of covetousness, because even when a person has an abundance his life does not result from the things he possesses." —Luke 12:15.

**"Valuable things will be of no benefit on the day of fury, but righteousness itself will deliver from death."
—Prov. 11:4.**

each cell like a walled city



A RECENT issue of "Newsweek" magazine explored the microscopic domain of human cells. The writers marveled at the tremendous variety of functions accomplished in such a small space: "Each of those 100 trillion cells functions like a walled city. Power plants generate the cell's energy. Factories produce proteins, vital units of chemical commerce. Complex transportation systems guide specific chemicals from point to point within the cell and beyond. Sentries at the barricades control the export and import markets, and monitor the outside world for signs of danger. Disciplined biological armies stand ready to grapple with invaders. A centralized genetic government maintains order."

Another fascinating operation of this diminutive "government" is its "postal service" that sees to it that manufactured proteins reach their proper destinations within the cell. "We think there is a zip-code system in the cell as there is in the Postal Service," says a Rockefeller University scientist. Proteins manufactured by

cell ribosomes are thought to be "addressed" with a code of 20 to 50 amino acids. The scientist says that "the surface of the correct organelle [cell part] recognizes the address and lets the protein in, like agents who recognize a visa and let you across a border."

The magazine repeatedly commented on how little science knows about how cells accomplish what they do. For example, it points out that "researchers remain baffled by the arcane chemical mechanism that enables particular genes in different cells to switch themselves on and off and perform differently in varying circumstances." The article also quotes Nobel prize-winner Christian de Duve of Rockefeller University: "What we have today is a description of what happens in the cell, not an understanding of how it happens."

Throughout the article appear expressions such as: "The human cell and its organelles or interior parts still guard many secrets." "Nothing mystifies biologists so much as regulation. Pancreas and eye cells, for example, both contain a gene that can produce insulin, but pancreas cells make insulin and eye cells do not." Speaking of the way some genes seem to be held in a chemical grip so that they do not function in cells where they are not needed, it asks: "Why is one gene gripped tightly and another not? Scientists have no answer yet." The article concludes: "Each answer seems to pose a new, more complex question about the cell. . . . if anything is certain in the minute and mysterious world of cells, it is that the human cell will never surrender all of its secrets."



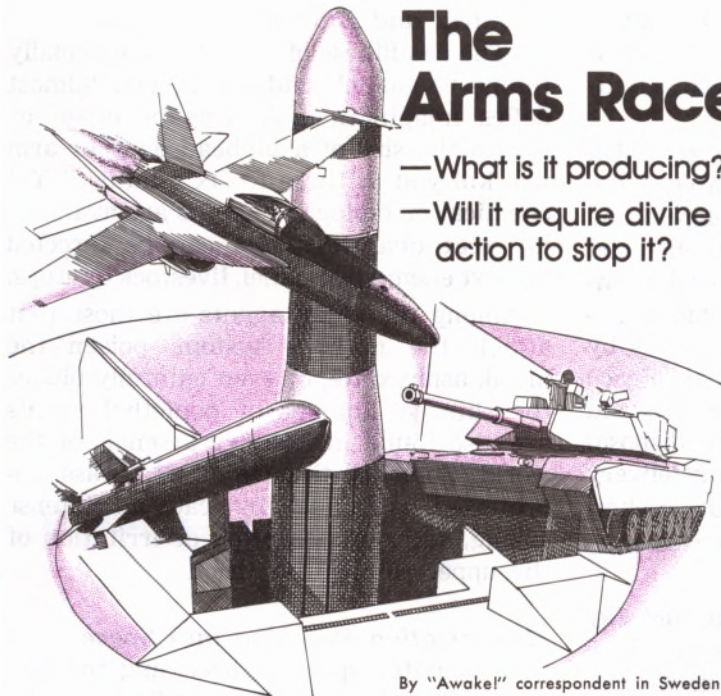
looking into the infinitesimal

**"The Rock
[the Creator],
perfect is
his activity."
—Deut. 32:4**

Roman Vishniac, who pioneered microscopic photography (photomicrography), says of the miniature living world he peers into: "Nature, God, or whatever you want to call the creator of the universe, comes through the microscope clearly and strongly. Everything made by human hands looks terrible under magnification—crude, rough and unsymmetrical. But in nature, every bit of life is lovely. And the higher the magnification we use, the more details are brought out, perfectly formed, like endless boxes within boxes."

The Arms Race

- What is it producing?
- Will it require divine action to stop it?



By "Awake!" correspondent in Sweden

THE attention of the world was focused on Vienna, Austria, for three days in June 1979. Two men, surrounded by aides, soberly faced each other across a massive 25-foot (8-m)-long table. They eventually signed a treaty said to "reduce substantially the dangers of nuclear holocaust"—the feared finale of today's arms race.

These men, Leonid Brezhnev of the Soviet Union and Jimmy Carter of the United States, represented the front-runners in the international arms race that, in recent years, has reached lightning speed and created hideous means of mass destruction. Nearly \$400 billion (U.S.) a year is used for military expenditures. Some 26 million persons around the world are in the armed forces.

The agreement signed in Vienna was labeled by Carter as "the most detailed, far-reaching, comprehensive treaty in the history of arms control." Will it finally stop the maddening arms race? No! That is not even its expressed purpose. The Strategic Arms Treaty (widely known as SALT II) basically *limits* to a set number only certain types of weapons considered vital in the event of inter-continental warfare. And those limits are considerably higher than either country has yet attained. So they

are really new goals toward which to reach.

Seven years ago these same governments signed an agreement that limited, among other things, the number of missile launchers. What was the result? Both powers, according to the *New York Times*, "learned to make the limit obsolete by loading a whole batch of weapons aboard each launcher." The report concluded: "The fact is that the treaty [of 1979] does not prevent either side from building any weapon that it really cares to build."

Though many feel that *some* control is better than *no* control, are such arms-limitation treaties really the answer to the problem? Will the nations, on their own, ever stop stockpiling weapons? Or will it require action from a source higher than man? Yes, is *divine action* needed? Think about those questions as we review what the nations already have developed in strategic arms and what they are now devising.

Arsenals of Nuclear Weapons

In the field of nuclear weapons alone, the destructive power is enormous. Arsenals contain tens of thousands of sophisticated nuclear warheads with a

total explosive power equivalent to that of one million Hiroshima bombs. If only a fraction of these were used in war, civilization would cease to exist.

To reach distant targets quickly with nuclear weapons, so-called strategic delivery systems have been developed and have increased enormously in number and capability. According to a publication entitled "Armaments or Disarmament?—The Crucial Choice," released in 1979 by SIPRI (Stockholm International Peace Research Institute), the United States and the Soviet Union have at their disposal a total of 4,796 strategic nuclear-delivery systems, including land-based rocket-propelled missiles, submarine-carried missiles and strategic bombers.

These arsenals are now so huge that any further increase in number is meaningless. However, improvements are constantly being made in quality, particularly as regards accuracy and reliability. The SIPRI publication states:

"New warheads for the US Minuteman intercontinental ballistic missile, for example, are so accurate that 50% should fall within 200 metres [656 feet] of the intended target at intercontinental ranges. The next generation of these missiles will be accurate to within a few tens of metres. All military targets would be vulnerable to such weapons."

Is there a realistic chance that such accurate weapons will be used? "Such precision, together with other advances," warns the same publication, "may give military decision-makers misplaced confidence that they may actually fight and 'win' nuclear wars, rather than simply deter them. . . . The temptation to strike first will increase dangerously, and the risk of nuclear war by miscalculation, accident or madness will increase correspondingly."

But that is not all. There are yet other weapons in the arsenals.

Chemical and Biological Weapons

"The deadliness of the agents, especially the nerve gases," said one expert, "almost defies imagination. A drop of tabun or soman the size of a pinhead on your arm will kill you in three to six minutes." Yet chemical or biological agents are available in great quantities and can be directed against enemy personnel, livestock or crops.

Among the lethal agents are those that attack the nervous system, poison the blood, asphyxiate, or even painfully blister the skin. A number of nonlethal agents are also found in military arsenals of the world. Some of them aim to harass unprotected personnel by causing intense crying, sneezing, vomiting or irritation of the upper respiratory tract.

Militarization Reaching into Space

Even outer space is becoming increasingly militarized. Between 1963 and 1978 a total of 1,536 satellites *serving military purposes* were launched into space. This is about 75 percent of all satellites launched. In 1978 alone, 112 military satellites were launched—about one every three days! Such satellites are used for reconnaissance, early warning of attack, and communications, and are especially important for navigation.

Researchers believe that soon, by means of a satellite-based navigation system, it will be possible to guide a weapon anywhere on earth to within 10 m (33 feet) of its target!

Further Projects for Mass Destruction

Besides all of this, men are still looking for new means of mass destruction. SIPRI states in the book *Weapons of Mass Destruction and the Environment*: "Increasing attention is being paid to the manipulation of geophysical or environmental forces for hostile purposes." The harrowing report on this research says that a

tampering with the atmosphere has been suggested for military purposes. This includes juggling the electrical properties of the ionosphere or troposphere to disrupt enemy communications, radar systems, navigation and missile-guidance systems.

The SIPRI report also suggests that techniques for initiating hurricanes or cyclones—or for redirecting natural ones—would make an immense destructive force available to the military. Another military aim is to learn how to control cloud-to-ground lightning for attacks.

The layer of ozone within the lower stratosphere, and which shields us from harmful amounts of ultraviolet radiation, is also viewed as a potential “weapon.” How so? An article in the *New York Times* quotes Dr. Michael B. McElroy of Harvard University as saying that the chemical element bromine appears to be so effective at ozone depletion that it could be used as a weapon. If injected into the stratosphere it would purge the ozone, permitting ultraviolet radiation to reach the ground with sufficient intensity to destroy crops and incapacitate the inhabitants. The SIPRI report says: “It is perhaps already within our capacity to open a ‘window’ in this ozone layer over an enemy territory by injecting into it a bromine compound via controlled releases from an orbiting satellite.”

Even the land could be used against an enemy. For example, if an enemy region happens to be located above or near some weak spot in the formation of the earth's crust, it might become possible to trigger an earthquake there. Similarly, “sleeping” volcanoes situated in enemy territory could be stimulated into destructive activity. Some landforms might well be suitable to disruption through the triggering of avalanches or landslides.

Fire also is a contemplated means of mass destruction. Great areas of impor-

tance to the enemy may be devastated by wildfires initiated by military action. With the employment of high-efficiency delayed-action incendiary devices and scattered antipersonnel mines, fighting a wildfire could be made virtually impossible.

Rainmaking is still another environmental weapon *already used* in modern warfare. In the recent Indochina war, aircraft seeded the clouds with such agents as silver iodide and lead iodide. The resultant rains ruined enemy lines of communication, hampered enemy offensives, aided bombing missions and created generally disruptive floods.

The list of “doomsday” weapons is endless, and this despite disarmament talks and peace agreements. Is it not obvious that the nations will never stop the arms race on their own?

When the Soviet armies invaded Afghanistan, all the fanfare over the signing of SALT II ended abruptly without a ratification of the treaty. The United States increased its military budget, and many fear a third world war.

Divine Action Foretold

Happily the Bible foretells that God will not allow man to destroy our earth completely. The heartwarming prophecy at Revelation 11:18 assures us that God will “bring to ruin those ruining the earth.” By a display of his awesome power, he will remove all instigators of war and forever stop today's arms race. Note the details at Psalm 46:8, 9:

“Come, you people, behold the activities of Jehovah, how he has set astonishing events on the earth. He is making wars to cease to the extremity of the earth. The bow he breaks apart and does cut the spear in pieces; the wagons [war chariots] he burns in the fire.”—See also Daniel 2:44, 45 and Revelation 19:11-21; 21:3-5.

Can We Rely on Bible Prophecy?

"But those prophecies were written down centuries ago," some might be thinking. "How can we be sure they will come true and that God will act?"

Well-established facts of history have confirmed the accuracy of Bible prophecy. For instance, did you know that the Bible foretold *in detail* the tragic destruction of one of the most influential cities of the ancient Mideast, Jerusalem? The fulfillment of that prophecy in 70 C.E. resulted in one of the greatest acts of destruction in the ancient world—1,100,000 killed!

Thirty-seven years in advance, Jesus Christ, because of the moral corruption of the city, foretold:

"Furthermore, when you see Jerusalem surrounded by encamped armies, then know that the desolating of her has drawn near. Then let those in Judea begin fleeing to the mountains, and let those in the midst of her withdraw, and let those in the country places not enter into her."—Luke 21:20, 21.

Thirty-three years later, Roman armies under Cestius Gallus "surrounded" Jerusalem and almost conquered it. However, according to an eyewitness, historian Josephus, the Roman general "recalled his soldiers" and "retired from the city, without any reason in the world." At least that is how it appeared from a human standpoint. But this move allowed first-century Christians in Jerusalem to "withdraw" to safety, in harmony with Jesus' prophecy.

Yet others in the city began to prepare feverishly for another siege. Josephus reports:

"Now in Jerusalem the [people] . . . both repaired the walls, and made a **great many war like instruments**, insomuch that in all parts of the city, darts and all sorts of armour were upon the anvil."—"Wars" II, 19, ¶7.

War machines taken from the fleeing Romans were hauled inside the city and put

to use. They armed themselves to the teeth! Yet such weapons, though imposing, were unable to prevent the fulfillment of Jesus' prophecy.

Jesus added an unusual detail by saying: "The days will come upon you [Jerusalem] when your enemies will *build around you a fortification* with pointed stakes and *will encircle you* and distress you from every side." (Luke 19:43) In 70 C.E. the Romans returned and General Titus, who was not a disciple of Jesus and had no interest in fulfilling Bible prophecy, proposed the very tactic that had been foretold, saying: "They [the Roman soldiers] must build a wall round the whole city." In three days a massive four-and-a-half-mile (7-km) wall totally surrounded the city. This "incredible" feat, as Josephus called it, directly fulfilled Jesus' words. The city was soon taken. The prophecy was accurately fulfilled.

This is but one example of hundreds of Bible prophecies that were precisely fulfilled. On this basis we can be assured that those concerning the destruction of persons "ruining the earth" will also come true—and soon! Why so?

Well, for the first time in history our generation holds within its grasp the means to reduce this earth to a lifeless sphere, and that by a number of ways! If ever there is a time for God to act, it is now during our lifetime.

Would you not enjoy living in a world without the fear of nuclear holocaust? Think of the relief to have removed the burden of financing an arms race. Consider the blessings to this earth when peace-loving individuals direct their energies and resources toward beautifying our earthly ball rather than destroying it. Jehovah's Witnesses will be glad to show you from the Bible just how near such conditions are and what the Bible says you must do to enjoy them.

THE scientific name is microprocessor. "A MICROPROCESSOR? What's *that*?" you may rightly ask. And how can something have much effect on daily life when most people do not even know what it is?

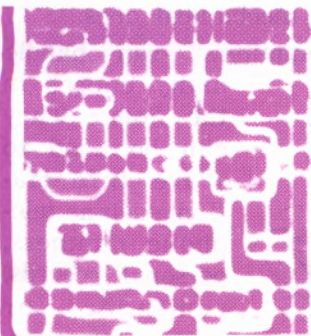
But its effects touch the lives of more and more people throughout the world. In fact, today microprocessing is a billion-dollar industry!

This technology is used in so many products now that a British government spokesman said: "There is no certainty about job loss if we do apply the microelectronic technology. There is absolute certainty about job loss if we do not." Without using this new technology, a company or even a country would find it difficult to compete with the products of those who do use it.

But just what is a microprocessor? How has this relatively new technology, which has been called "a revolution," affected our lives?

The Microprocessor

A typical microprocessor is made of silicon, one of the most common elements in the earth's



Part of a "chip" enlarged over 100 times to show how complex it is

How "CHIPS" make your LIFE EASIER

By "Awake!" correspondent in the British Isles



crust. And a hint of the size of a microprocessor comes from the prefix *micro*, meaning *very small*. A microprocessor is usually just a "slice," or "chip," of silicon about one quarter of an inch (6 mm) square!

However, its size belies its significance. Contained in this very small chip are many of the vital functions of a computer! Just one of today's microprocessors is the equivalent in circuitry of most of the vital functions of the bulky computers of 25 years ago. Many thousands of circuits can be fitted onto one chip, and their capacity is constantly being improved. Indeed, one such circuit as small as a pinhead can do the work of many conventional circuits.

Microprocessors are relatively inexpensive to make. This means that computerlike functions can be put into a vast range of *everyday* products previously only within the range of expensive computers.

Its History

The earliest computers had *tubes* as key components. These were large, expensive and unwieldy to produce. But in 1948 the *transistor* was invented, replacing tubes. It was much smaller, more reliable and cheaper.

At first, transistors were made with germanium. Within a few years, though, silicon replaced germanium to make transistors more efficient. This led to the next step of the 'semiconductor integrated circuit,' a technique for making whole circuits with key components (such as transistors) on a single

wafer, or "chip," of silicon. This process made miniaturization possible.

Then, space exploration and military agencies had a need for very small, light, power-conserving and yet complex electronic controls for their satellites and missiles. Thus, research was done in this direction. It succeeded. Whereas in 1963 one silicon chip could hold the equivalent of eight transistors, by 1978 a single chip could hold one quarter of a million of them!

Thus, by the early 1970's miniaturization techniques had advanced enough to put an entire computer onto just a few tiny chips. The microprocessor "revolution" was born, and uses for these chips have mushroomed since.

How They Are Made

The making of microprocessors is an extremely painstaking matter. Due to their minute size even a speck of dust can ruin a chip. Thus, although the most exacting procedures are used, a high proportion of the chips made are scrapped.

The process starts with a slice of pure silicon about half a

millimeter thick, and a few inches wide. On this, several hundred microprocessors are made simultaneously, and later they are separated.

Intricate design drawings are made of the circuitry to be etched onto the layers of the chip. These are reduced by computer to one ten-thousandth of their original size, and then made into a photographic printing "mask." This is somewhat like a photographic negative, and is used to etch the circuit patterns onto the surface of the silicon slice. Further layers are built up on the silicon in a similar manner.

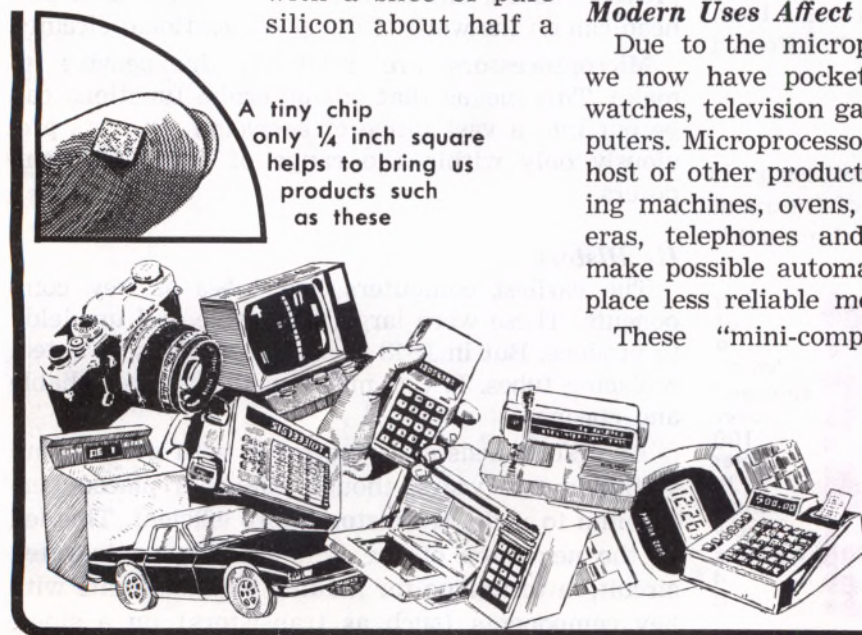
On completion, a computerised probe checks the chips to establish their usability. The acceptable ones are then sealed in a protective cover, ready for use.

Of course, credit must be given to the inventors of these amazing chips. But credit must also be given to the One who made the human brain, the materials used and the natural laws involved. All these more difficult things were made by a far greater "inventor," the Creator, Jehovah God.

Modern Uses Affect Our Lives

Due to the microprocessor revolution, we now have pocket calculators, digital watches, television games and hobby computers. Microprocessors can be found in a host of other products too, such as washing machines, ovens, food blenders, cameras, telephones and automobiles. They make possible automatic controls that replace less reliable mechanical ones.

These "mini-computers" can handle many chores in the home. They can be used to store information, such as telephone numbers, personal records, reminders for paying bills, rec-



Credit must go not only to the inventors of these amazing chips, but also to our Creator, who gives the unique ability to produce such things

ipes and many other things. All of these can be called up at the touch of a button, or in response to a spoken command.

One manufacturer has marketed "the first sewing machine with an electronic brain." Instead of the seamstress having to make many tricky adjustments by hand, with this machine all she has to do is press the appropriate buttons for it to produce many complicated stitches. The skilled job of making a buttonhole, for example, becomes easy: just place a button in the machine's holder, and it does the rest itself!

In the past few years, *shops* have undergone notable changes. You may have noticed that modern cash registers are quite complex devices. If you see a display similar to that of an electronic calculator, then a microprocessor is in use. As well as totalling your bill, it can note the type of product you buy so that automatically a list is being built up of items the store needs to restock. And if you use a credit card to pay, it can be automatically checked with your bank.

In *offices*, "desk-sized computers will become nearly as common as typewriters," predicts *Scientific American*. They will store details of information needed for each person's job and will be far easier to handle than bulky files, ledgers and reference books.

"Word-processors" are an application of chip technology to typewriting. They take over a number of the repetitious aspects of typing. Many businesses send letters to their clients, and these letters often consist of standard paragraphs. A word-processor stores such basic paragraphs and types them automatically. It can also regu-

late line lengths, layout and even correct simple spelling errors. If the text has to be rearranged, the word-processor will do this and allow for other alterations. Two or three such devices can do the work of many more typists.

Factories have already become quite automated. In the past, the problem was to know how to teach a machine the complicated movements that come easily to a human worker. Microprocessors have largely overcome this problem and are being used to control robot arms.

Similar principles are being applied to *farm work* so that, for instance, ploughing can be performed by a driverless tractor, working continuously day and night.

Causes for Concern

This newfound electronic help is making more and more of man's tasks easier, with increased efficiency. It has helped to eliminate many boring and dangerous jobs, freeing people from much physical effort and saving them time.

However, freeing people from physical effort and giving them more time can be a mixed blessing. If the time is used unwisely, simply for seeking pleasure, it will not necessarily improve a person's life. It can do the opposite—degrade it. And having machines doing too much of our physical work can prove detrimental to our physical health.

For any of the advancements in technology to be used wisely, the knowledge needs to be balanced with appreciation of spiritual values. It needs to go hand in hand with unselfish concern for one's fellowman and a greater awareness of our Maker, since any good thing comes from his giving us life and the ability to improve it.



KICKING THE HABIT

WHILE IT'S DOWN

THE tobacco habit has suffered some serious setbacks in recent months. In fact, it has been implicated in so many diseases and disorders that an editorial in the "Journal of the American Medical Association" said that "one cannot help but feel self-conscious when commenting on yet more accusing fingers," fingers that "turn, as it were, into feet that kick someone who is already down." But the editorial went on to do just that, linking smoking to malignant hypertension and cranial hemorrhage.

Some other "kicks" to the tobacco habit have appeared in recent news items:

- "For every cigarette the mother smokes—especially during labor—the fetus is in effect smoking two or three," according to a report in "Medical Tribune" on the research of Dr. Claude Par of the University Health Center at Sherbrooke, Quebec. He found that many such infants suffer from hypoxia (oxygen deficiency), and this "could help to explain studies which have correlated the use of cigarettes by the mother with spontaneous abortion, abruptio placentae [detachment of the placenta] and premature labor."

- The State Mutual Life Assurance Company in Massachusetts says that smokers should be charged higher life insurance premiums because of death rates at all ages that are more than twice as great as for nonsmokers. The insurance company's own study of the matter concluded that life expectancy differences—over seven years for a 32-year-old man—"are too large to be ignored . . . in individual life insurance underwriting and pricing." More than 30 insurance companies offer lower rates to nonsmokers.

- A Harvard Medical School researcher says that nonsmoking children are definitely harmed by their parents' cigarette smoking. His work indicates that they "may be at a higher risk of developing lung disease later in their lives."

- "Cigarette smoking causes immediate and damaging changes in teen-agers' blood," reports the "Washington Post" on findings by University of Cincinnati scientists, "the kind of changes that lead to early artery problems and heart disease."

- The American Cancer Society recently released the results of its massive 20-year study of the lives of over 1,000,000 Americans. The most important finding? "We were able to show, effectively and incontrovertibly, the relationship between smoking and cancer," said a Society official. "It is clear that, on the average, a nonsmoker will live six years longer than a smoker, and eight years longer than a heavy smoker."

- The American Cancer Society also reports in its annual "Cancer Facts and Figures" that lung cancer has just become second only to breast cancer as a cancer killer of women. In 1961, lung cancer was ranked only eighth. An official said in explanation that "women didn't begin smoking in earnest until much later than men, but now their lung cancer statistics are matching the earlier rise among males."

- A confidential public opinion poll commissioned by the Tobacco Institute backfired on the industry when it was mistakenly released by the Federal Trade Commission. The poll revealed that more and more nonsmokers are becoming fearful of inhaling smoke in the air around them, so much so that the study says it is "the most dangerous development to the viability of the tobacco industry that has yet occurred." The study also forecasts that, in public places, "pressure for segregated facilities [for smokers and nonsmokers] will change from a ripple to a tide."

- The world's greatest tobacco producer, the People's Republic of China, has announced a reversal of government policy and will now campaign to warn the people about tobacco. This is the first time China has acted against the cigarette industry, a government monopoly.

- Nicotine's addictive properties as a drug are causing government drug officials "to view tobacco with more alarm," reports the New York "Daily News." Research by the National Institute of Drug Abuse is said to indicate that "nicotine is a more powerful addiction [than] heroin or alcohol," and that "one no longer smokes to feel good, but to keep one's self from feeling bad."

With tobacco and those who use it on the retreat, their only solace from these proliferating barbs of truth is in each other, as the AMA Journal editorial quoted earlier concluded: "If misery likes company, it need never feel lonely behind the clouds of cigarette smoke."

RAIDING MONKEYS,



FRUSTRATED FARMERS

By "Awake!" correspondent in the Leeward Islands

A WEST INDIAN farmer stood viewing the remains of half an acre of uprooted potatoes, representing months of labor. Like many an island farmer, he had become the victim of a monkey ambush. Having surprised a troop of 50 or 60 screeching monkeys in his garden that morning, he had pursued them into the forest to locate their den. Upon returning a short time later, he had discovered that another raiding band had invaded his garden from the opposite side of the field.

Such incidents highlight the centuries-old clash between frustrated farmers and marauding troops of Western green monkeys. Large quantities of cane, cucumbers, carrots and other produce are destroyed annually as these raiders sweep down from the mountains on St. Kitts and Nevis in the West Indies. The forays date back to the mid-17th century. By that time they had become so destructive that legislation had been passed declaring them vermin and giving bounties for each monkey destroyed. The problem is similar to what has taken place in many parts of the earth as spreading humanity forces wildlife into

areas that do not offer an adequate food supply for them.

The angry farmers fight back. Elaborate scarecrows, concealed snares, watchdogs, crop guards, bounty hunters—these are but a few of the devices employed to curb the monkey invasions. But alas! they are not very successful.

Scarecrows left in the field to ward off the invaders are cautiously approached. For several days the monkeys throw stones at the scarecrows, gradually coming closer. Finally, they close in and rip them to pieces. One bounty hunter wrapped himself in green branches, but to his disgust the monkeys penetrated his disguise long before he came within range of them. One farmer tied his dog in the garden, trusting that its barking would keep the monkeys at bay. When he returned he was dismayed to find that the monkeys had devoured all his young corn and the dog was peacefully snoozing nearby!

The monkeys employ several clever strategies. Before approaching a prospective garden, they deploy a lone monkey to reconnoiter. This lookout climbs a tall tree.

As he makes the all-clear call, the males approach the site, followed by the females. All then rip and tear and uproot the crop until stuffed. After the troop has gorged itself, the watchman is taken his share of food. However, if this lookout has failed to give adequate warning upon the approach of the farmer, the males of the troop will kill him.

When feeding in a garden, mother monkey does not bring her infant into the feeding area. She leaves it concealed in the tall grass alongside her escape route. At a danger signal from the lookout, she scampers from the field giving an alarm call to her baby. As she races toward the little fellow, it leaps onto her side, clinging there desperately. Sometimes the baby in the confusion misses, or leaps to the wrong mother, and is left behind. When this happens the farmer will often take the baby as a pet for his children.

Sometimes, when cornered, a mother monkey has been known to plead for mercy. She will hold up her baby as a reason for showing compassion for the helpless. Or, if pregnant, mothers have been known

to pat their stomachs to call attention to their pregnancy. When born, baby monkey resembles a small rat without hair. Its skin color is a lovely light-bluish green (observable for one or two years), and is apparently the reason for its designation "green monkey." In adult stages it is grayish yellow, with chest and parts of legs and arms white. When fully grown, adults weigh 15 pounds (6.8 kg).

Who is ahead in the running conflict between monkey and farmer? It is not easy to determine. However, recent field observations being carried out by members of the Behavioral Science Foundation under Dr. Frank Ervin indicate that between seven and 12 thousand St. Kitts green monkeys inhabit the island at present. The report suggests 34,000 monkeys as a maximum number the island could feed throughout the year if they continued to live only in the areas now occupied. This figure indicates that almost as many monkeys as people could dwell comfortably on the island.

But with this the frustrated farmers may disagree.

new aviation fuel?

- Liquid hydrogen is now being seriously considered as an alternative to petroleum fuels for aviation. A spokesman for Lockheed Aircraft Corporation told an international symposium on the subject at Stuttgart, Federal Republic of Germany, that such fuel would be the "biggest step in aircraft efficiency" possible. He also said that liquid hydrogen "promises an advance even more important than when we moved from piston to jet engines."

- According to the report in Britain's **New Scientist** magazine, "liquid hydrogen produced by the cheapest method—using Canadian hydroelectric power to electrolyse water—is already competitive with petroleum-based fuels and will become significantly less expensive as oil production declines in the 1990s." Airline representatives at the symposium were so impressed that a proposed "demonstration phase" using hydrogen to fuel cargo aircraft may not be necessary. An optimistic estimate of 1985 for the flight of a hydrogen-powered airliner was even discussed.

==A Catholic Priest== ==Makes A Change==



THE following letter, addressed to the headquarters of Jehovah's Witnesses in Brooklyn, New York, was received in July 1979:

"To whom it may concern:

"This is just a note of thanks for your publications that are so full of vital and enlightening information. It was through your publications with the aid of one of your preachers from Newark, N.J., that I was able to find the real TRUTH. If there is a merit badge it should be issued to this little practitioner of the truth, Ms. Janet Jones. I was at one time a very prominent Catholic priest and it was through this young woman that I learned that I indeed did not have the real hold on the truth but that what she showed me was. Again I want to say thank-you and if it be Jehovah's will, I, too, shall become a preacher of Jehovah our loving Creator."

At the "Living Hope" District Convention of Jehovah's Witnesses in Giants Stadium, New Jersey, this past summer, it was related how Janet Jones became acquainted with this priest. She explained:

"Last year I worked as a secretary at Seton Hall University. With patient witnessing I was able to start a Bible study with a young student, a woman who at one time had contemplated suicide. She progressed rapidly in her studies. Soon she advised me she would resign from her church. All along, unknown to me, she had been giving her priest photocopies of the material we were covering each week.

"The priest was very upset when he learned she had resigned from the church, and tried his best to persuade her to change her mind. Shortly thereafter, she returned to her family's home in Florida, where she continued progressing spiritually.

Meanwhile, the priest found out that I was the person with whom she had studied and requested to see me. He asked for copies of the books from which our study material had come—*The Truth That Leads to Eternal Life* and *Is This Life All There Is?* He told me that I had committed a grave sin by turning the young woman away from the Catholic Church.

"When I saw him a few times after that, he said that he knew there were many flaws in these books and that he would bring them all to my attention as soon as he finished going over the material. His many questions required much research on my part to answer him. Without telling me, he began visiting several Kingdom Halls and speaking with Witnesses who were in the preaching work, asking them the same questions he had asked me. He would receive the same responses again and again. I didn't see or hear from him for approximately three to four months. Then I changed my secular job, moving to a different location. A few weeks later I received a letter from the priest, dated June 22, 1979. He wrote:

"I would like to thank you for the insight that you helped me to attain through those publications, "Is This Life All There Is?" and also "The Truth That Leads to Eternal Life." I must admit that after that first meeting with you I did ask myself several questions as to the basis of my faith and I found that it was not on as solid foundation as yours is. So I examined it as you suggested and asked several questions of my superiors, who were unable surprisingly to

One priest said: "You don't know what you're talking about." But an older priest said: "Yes, she does. She speaks the truth"

give me a response as well as you did. It was at this point that I realized that there was something definitely missing in my life and I wanted to find answers. There is one of your houses of worship in Irvington that I frequented and it was there that I heard what I was searching for, "The Truth." I also wanted to see if it was all that you said it would be. Well, my dear, you underestimated it!

"By the time you receive this memo I will have resigned being a man of the cloth, as you call it, and will probably be on my way back home to search out one of your kingdom halls so that I might attain more of this truth. You were like a bright light in a long dark tunnel shining ever so brightly, even to old dark tunnels like me. Whatever you do, keep shining. Never let anyone or anything stop you because I can truthfully say that God must truly be working with you.

"My superiors were surprised when I told them that after 33 years of service I would be leaving, but when they found out why they requested that I leave immediately if not sooner. But you know what's funny, a few years ago one of the others left for the same reason and I vowed that I would never let anything come between me and the church. Now look at me! I feel as if a huge weight has been lifted from my shoulders and as if I'm smelling fresh air for the first time in 33 years. How sweet and glorious

and loving the Creator is, our God Jehovah!

"I do not know if we shall ever see each other again, but be assured that you will be in my thoughts and in my prayers always."

"After he resigned, one day I was approached at the office where I worked at the University by two of his colleagues. One asked if it would be all right if they came back to ask me a few questions. I agreed.

"A little later the two priests returned along with eight others, all dressed in their traditional garb. The priests ranged in age, I would estimate, from their early forties on up; the oldest probably being in his seventies. I am only 25.

"The priests seated themselves in the office and the discussion began. They questioned me regarding my belief in Christ, his death and about his being God's son. The subject of the Trinity seemed to be of special interest to them. One of the priests told me that because of what I had done in turning others from the Catholic faith I'd be forever tormented in hell. I pointed out from the Bible that in 'hell' a person is conscious of nothing at all, and so could not experience torment.—Ps. 139: 8; Eccl. 9:5, 10.

"During the entire discussion I noticed that the older priest didn't seem to have any questions. He just leaned on his cane and gazed at me intently, especially when I used the Bible to try to answer the inquiries of the others.

"Finally one very exasperated priest said: 'You don't know what you're talking about. You're telling lies and wouldn't know the truth if it walked up to you.' With that the old priest stood up, and said: 'Yes, she does. She speaks the truth, something we ourselves refuse to accept.'"

—Contributed.

In Future Issues

- **Drawing Oil from Turbulent Waters**
- **Are Horoscopes Reliable Guides?**
- **In a Fear-inspiring Way I Am Wonderfully Made**

Watching the World



Rome Rehabilitates Galileo

◆ After more than 300 years, Pope John Paul II "asked Catholic scholars, historians and theologians to work for the rehabilitation of Galileo," reports *The Guardian* of London. The pope told a group of cardinals and scientists that "Galileo was made to suffer much—and we cannot hide it—by the men and the organisations of the Church." After Galileo had ignored a Vatican order in 1616, forbidding him to teach that the earth revolves around the sun, he was brought to Rome and forced to recant or be tortured.

Dismal "Year of the Child"

◆ The United Nations' Children's Fund (UNICEF) indicated that children in developing nations did not fare well during 1979, the "Year of the Child." The agency's report says that 200 million youngsters in those countries are malnourished, and of 15 million annual deaths under age five, half could be attributed to malnutrition. Fifteen of the 100 children born each minute in these countries die before the end of their first year. Fewer than 40 percent finish elementary school. Commenting on the UNICEF report, an *Indian Express* newspaper editorial complained that the year had turned out to be a "cruel joke." The paper noted that during the next year in

India, "some two and a half million children will become blind due to malnutrition. At least 12 million children are known to be beggars."

"New Hospital Thinking"

◆ Flinders Medical Center of Adelaide, South Australia, has drastically cut its use of blood transfusions in a move to save money and patients. "The change in transfusion procedures reflects new hospital thinking on the need for transfusions," reports the *Adelaide News*. A hospital spokesman explained: "In the past there was a tendency for doctors to use blood just because it was there waiting. But many people don't realise there is a risk involved in every transfusion. We make it as safe as possible, but a transfusion introduces a foreign substance into the body and there is always the risk of an allergic reaction or an infection in the blood."

The doctor also pointed out another advantage of the new policy: "New surgical techniques have also helped because patients lose less blood during some operations than before. Even so, patients themselves must realise the risks involved in transfusions. Many of them still believe they need a transfusion to make them feel good and strong after an operation. That just is not true."

Life Without Photosynthesis

◆ The research submersible *Alvin* has discovered numerous geyserlike vents deep down on the ocean floor. According to a report in *Science News*, the "chimneys" are "spewing blackened, mineral-laden, hot (350° to 400° C [660° to 750° F]) water onto the sea floor." Unexpectedly, such creatures as giant tube worms, blind crabs and large clams were found two miles (3.2 km) below the surface thriving around the vents, where light does not reach. The researchers believe that this is the first community of animals to be discovered whose food is not based on plant photosynthesis. "An analysis of the sulfurous vent water and the stomachs of some of the animals reveals the secret—sulfur-oxidizing bacteria," explains *Science News*.

Discipline Disarmed

◆ On January 1, the Federal Republic of Germany joined Sweden in restricting parents' authority to discipline their children. (See *Awake!*, 6/22/79, p. 29.) Parents are forbidden to use "degrading upbringing measures," such as spanking, when children disobey. The little ones can take parents to Family Court if they should violate the new law. The government argues that children lose their "human dignity" when they are spanked. However, under the new law, "human dignity" may well be replaced with childish arrogance.

Firecracker Fatalities

◆ The People's Republic of China had a rash of explosions on its railroads early this year—six before the end of January. According to the New China News Agency the sixth explosion occurred in a passenger car, killing or injuring 20 people and destroying the car. A previous explosion of 44,000 firecrackers in a Shandong Province railroad

waiting room was said to be the most spectacular. In response, officials have forbidden passengers to carry combustibles or firecrackers.

Heroin Hurting Europe

◆ Heroin from the Mideast is reportedly inundating Europe at a wholesale price one seventh of that in the United States. Yet the lower-priced heroin is much more pure—an average of 20 percent, compared to 3.5 percent in the U.S. As a result, says a narcotics official for the Federal Republic of Germany, “heroin in Germany is so plentiful and so potent that we’ve had 595 overdose deaths, almost twice the American total, in 1979, although we have only one-fourth the population.”

Courts Undermine Parents

◆ When a California mother found marijuana in her 17-year-old son’s bedroom, she gave it to Los Angeles police, who came to the house. The boy’s father gave them permission to search his son’s room, and they found nine more bags of the drug. But the California Supreme Court, later upheld by the U.S. Supreme Court, ruled that the warrantless search was illegal, and the evidence could not be used against the apparent dope dealer. California’s Attorney General commented that “parents will in many cases be legally precluded from preventing their children from engaging in criminal activity within the family home.”

Fund-raising Fervor

◆ When their mothers failed to sell enough \$3 tickets for a parochial school fund-raiser, two cousins in Kansas City, Kansas, were expelled from Our Lady and St. Rose School. According to the *National Catholic Reporter*, school authorities said that, by failing to sell a full 10 tickets each, the mothers violated a signed agreement to participate in

two fund-raising events. One sold five and the other six. The school principal “told me either to send money for the rest of the tickets or come pick him [her son] up,” said one of the mothers. A county judge ordered the school to take the children back.

‘Clear-cut Bible Answers’

Wanted

◆ A Protestant church paper published in Germany, the *Evangelisches Gemeindeblatt für Württemberg*, said in an article about Jehovah’s Witnesses: “The Watchtower teaching has an answer for every question; it points out how a real Witness of Jehovah should think and act. This is exactly what many people in our pluralistic society are looking for; especially the common man who wants clear-cut answers. Does our Church dare to give clear answers in matters of faith? Or does her questioning and searching lead to declarations all too sophisticated and therefore unclear?” Evidently Jehovah’s Witnesses are getting something that the Lutheran Church in Germany is not giving its members: clear Biblical answers to their questions so as to build strong faith.

‘Black Day for Swedes’

◆ Late last year, the Swedish government stiffly increased taxes on liquor and cigarettes, prompting the Stockholm news headline above. Officials reportedly hope that this will help stem the tide of public drunkenness, which resulted in over 60,000 arrests in six months. Encouragingly, after the tax increase, police in Göteborg said that, instead of the usual daily 25, they “only picked up four drunks.”

Wine Enhances Absorption

◆ Scientists at the Human Nutrition Laboratory of the University of California, Berkeley, recently made a study of

wine’s effect on absorption of minerals. For 75 days six men were served either wine, de-alcoholized wine, alcohol solution in water or plain deionized water during meals. The study revealed that the absorption of the minerals calcium, phosphorus, magnesium, zinc and iron was improved when wine was taken with a meal. Was alcohol the key ingredient that improved absorption of minerals? Apparently not, because both regular wine and de-alcoholized wine had the same good effect, but the alcohol solution did not. The researchers believe that it must be one of the other hundreds of components in a glass of wine that enhances absorption.

Cancer Discovery

◆ According to a report in *The Daily Yomiuri*, researchers in Japan have isolated the structure of the carcinogenic gene in a group of viruses that cause cancer in rats. “Although [these] viruses do not cause cancer in humans it is believed the discovery may eventually lead researchers to a similar discovery about the mechanism of cancer in humans,” said the report. This is termed a major breakthrough in the war against cancer. To what extent it will really prove helpful only time will tell.

Alligator on the Menu?

◆ The alligator population in the state of Louisiana is the largest in the United States, there being about 250,000 in the main coastal areas of that state. Because of its growing numbers, the alligator has been removed from the endangered category in these places and hunting these giant reptiles became legal. The legislature of that state recently passed a law legalizing the sale of alligator meat in stores. To enlighten people as to various ways of preparing the meat, the Festival of Alligator Cuisine was held. During this

festival, it was pointed out that the meat is nutritious, has a low fat content and can be used in quite a number of tasty dishes.

Herbal Treatment for

Cirrhosis

◆ A report from the New Chinese News Agency asserts that Chinese herbal medicine has cured or decidedly improved patients with cirrhosis of the liver. During a seven-year experiment, 105 patients were treated with herbs. Complete recovery was claimed in 67 patients, marked improvement in 14, improvement in 17 and no change in seven. China's herbal preparation was developed from another medicine that is being used for treating patients with chronic hepatitis.

Smokers' Odds

◆ The State Mutual Life Assurance Company of America released a study of 105,000 policy holders, comparing smokers with nonsmokers. The study revealed that smokers have 2.6 times as many fatal accidents as nonsmokers. Generally, smokers are more than twice as likely to have an accident or to become ill. The study further disclosed that smokers are nine times more apt to commit suicide.

Samaritans and the Law

◆ Harvard University professor of Semitic languages Frank M. Cross has reconstructed and translated fragments of papyrus rolls found in a cave north of Jericho. They are said to date from the fourth century B.C.E. Samari-

tan noblemen took the scrolls into the cave as they were fleeing from Alexander the Great's soldiers after rebelling against his rule. The rolls were legal business documents containing contracts for loans and sales of slaves and property.

Cross notes that "there is no reference in these slave contracts to the biblical orders that Hebrew slaves should be freed after the seventh year, which is in the Pentateuch, which the Samaritans used as their basic religious text." The professor speculates that this failure to honor God's law "is evidence that the rich noblemen felt they were above the law and ignored it. They didn't want to give away their slaves; they wanted to keep them forever."

