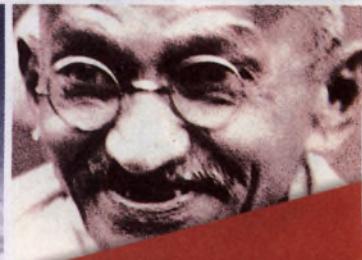


Awake!

December 8, 1999



THE 20TH CENTURY CRITICAL YEARS OF CHANGE



1901

Queen Victoria
dies after
64-year reign

World
population at
1.6 billion

1914

Archduke Ferdinand is
assassinated. World War I erupts



The 20th Century —Critical Years of Change 3-12

Many dramatic changes have taken place during the 20th century. However, one of the most significant changes of all has generally been overlooked. What is it?



Delightful Duet Singers 16

Read about birds that sing together with exquisite harmony.



From a Life of Crime to a Life of Hope 18

What caused such a dramatic change in one man's life?

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'THE MOST PROFOUND CHANGES'



The last czar, Nicholas II,
with his family

1917

1919

Lenin leads Russia
into revolution

The League
of Nations
is formed

"The 20th century has witnessed the most profound
and wide-reaching changes of any century in human history."

—*The Times Atlas of the 20th Century.*

WHEN reviewing the 20th century, many will no doubt agree with Walter Isaacson, managing editor of *Time* magazine, who said: "As centuries go, this has been one of the most amazing: inspiring, at times horrifying, always fascinating."

Gro Harlem Brundtland, former prime minister of Norway, likewise says that this century has been called "the century of extremes, . . . in which human vices reached unfathomable depths." She notes that it has been "a century of great progress [and in some places of] unprecedented economic growth." At the same time, however, poor urban areas face a bleak future of "overcrowding and a disease pattern linked to poverty and an unhealthy environment."

Political Upheavals

When the 20th century began, the Manchu dynasty in China, the Ottoman Empire, and several European empires controlled much

of the world. The British Empire alone covered one quarter of the globe and ruled over as many as 1 out of every 4 persons on earth. Long before the end of the century, all these empires had been relegated to the history books. "In 1945," says *The Times Atlas of the 20th Century*, "the age of imperialism was dead."

The demise of colonialism permitted the wave of nationalism that swept Europe between the 17th and 19th centuries to move into other parts of the world. *The New Encyclopaedia Britannica* says: "After World War II nationalist fervour died down in many European nations . . . In Asia and Africa, however, nationalism grew rapidly, chiefly as a reaction against colonialism." Finally, according to *The Collins Atlas of World History*, "the Third World had made its appearance on the historical scene, and an era begun five centuries before with the dawn of European expansion had now come to an end."

As empires crumbled, independent nations took their place—a goodly number of them with democratic-style governments. Often, democratic rule met with stiff opposition, such as from powerful totalitarian governments in Europe and Asia during World War II. These regimes restricted personal freedom and maintained strong control over the economy, the media, and the armed forces. Their attempts to achieve world domination were finally halted, but only after a tremendous expenditure of money and human lives.

A Century of War

Indeed, what particularly sets the 20th century apart from all previous centuries is war. Regarding World War I, German historian Guido Knopp writes: "August 1, 1914: No

one suspected that the 19th century, which had presented Europeans with a long period of peace, ended on that day; and no one noticed that the 20th century actually began only at that time—with a time of war lasting three decades and demonstrating what men can do to fellow humans."

Hugh Brogan, a professor of history, reminded us that "the impact of that war on the United States was immense, appalling, and is still felt today [in 1998]." A professor of history at Harvard University, Akira Iriye, wrote: "The First World War was a landmark in the history of East Asia and of the United States in many ways."

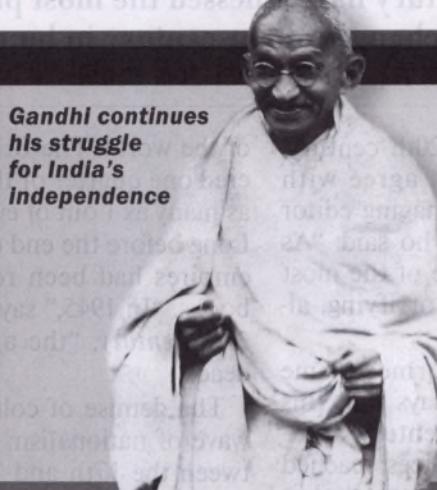
Understandably, *The New Encyclopædia Britannica* designates the first and second world wars as "the great watersheds of 20th-century geopolitical history." It notes

1929



Gandhi continues his struggle for India's independence

1939



Adolf Hitler invades Poland, beginning World War II

Winston Churchill becomes prime minister of Great Britain in 1940



Awake!

Why Awake! Is Published *Awake!* is for the enlightenment of the entire family. It shows how to cope with today's problems. It reports the news, tells about people in many lands, examines religion and science. But it does more. It probes beneath the surface and points to the real meaning behind current events, yet it always stays politically neutral and does not exalt one race above another. Most important, this magazine builds confidence in the Creator's promise of a peaceful and secure new world that is about to replace the present wicked, lawless system of things.

Would you welcome more information? Write Watch Tower at the appropriate address on page 5. Publication of *Awake!* is part of a worldwide Bible educational work supported by voluntary donations.

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Too Early or Too Late?

MUCH is currently being said about the start of the 21st century and the third millennium after the birth of Jesus Christ. Newsweek magazine said that "the 20th century, which began as the Century of Total War and grew into the Atomic Era, seems to be ending as the Age of Entertainment." In its issue of January 22, 1997, it reported: "Hotels around the globe are already fully booked" for celebrations on New Year's Eve, December 31, 1999.

However, some people say that the celebrations are taking place too soon. They point out that contrary to the belief of many, the 21st century and the new millennium do not begin on January 1, 2000, but on January 1, 2001. Since there was no year 0, the first century ran from year 1 through 100, the second century from 101 through 200, and so forth. Thus it is argued that the 20th century, which began on January 1, 1901, and the second millennium, which began on January 1, 1001, will not end until December 31, 2000.

There is an additional point to consider. Our calendar divides time on the basis of being either before or after the birth of Christ. Scholars now recognize that Jesus was born earlier than previously thought, thus making the calendar's pivotal point inaccurate. Opinions differ as to when Jesus was born, but Bible chronology points to the year 2 B.C.E. By that reckoning, the third millennium after Christ's birth actually began in the fall of this year! Further information can be found in the Awake! issues of May 22, 1997, on page 28, and of December 22, 1975, on page 27.*

In any event, it is wise to avoid stating dogmatically that the 21st century and the new millennium will start in just a few weeks. Nevertheless, in view of popular viewpoints, Awake! feels it appropriate at this time to discuss the subject "The 20th Century—Critical Years of Change."

* See also the November 1, 1999, issue of *The Watchtower*.

The Holocaust

1941



Japan bombs Pearl Harbor

1945

United States drops atom bombs on Hiroshima and Nagasaki. World War II ends

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that "World War I led to the fall of four great imperial dynasties . . . , resulted in the Bolshevik Revolution in Russia, and . . . laid the groundwork for World War II." It also tells us that the world wars were virtually "unprecedented in their slaughter, carnage, and destruction." Guido Knopp likewise says: "Cruelty and human brutality exceeded the worst expectations. In the trenches . . . seeds were sown for an era in which humans were viewed as material, not as individuals."

To prevent more catastrophic wars like these, the League of Nations was formed in 1919. Failing in its goal to preserve world peace, it was replaced by the United Nations. Although successful in preventing a third world war, the UN was unable to prevent the Cold War, which for decades threatened to escalate into a nuclear holocaust. Nor has it prevented smaller conflicts throughout the world, such as in the Balkans.

As the number of nations in the world has increased, so also has the difficulty in preserving peace among them. A comparison of a pre-World War I map with a modern one reveals that at the beginning of the century, at least 51 African and 44 Asian nations that exist today did not even exist as such then. Of the present 185 members of the United Nations, 116 did not exist as independent states at its founding in 1945!

"One of the Most Dramatic Spectacles"

As the 19th century drew to a close, the Russian Empire was the largest land power in the world. But it was rapidly losing its support. According to author Geoffrey Ponton, many people thought that "revolution rather than reform was necessary." He adds: "But it took a major war, the First World War, and the consequent chaos, to precipitate the revolution proper."

The assumption of power in Russia by the Bolsheviks at that time laid the basis for a new empire—world Communism sponsored by the Soviet Union. Although born in the midst of global war, the Soviet Empire did not expire in a hail of bullets. *Down With Big Brother*, a book by Michael Dobbs, claims that by the late 1970's, the Soviet Union was "a vast multinational empire already sinking into irreversible decline."

Still, its downfall was sudden. The book *Europe—A History*, by Norman Davies, comments: "The speed of its collapse has exceeded all the other great landslides of European history," and "it happened through natural causes." Truly, "the rise, development and collapse of the Soviet Union," says Ponton, was "one of the most dramatic spectacles of the twentieth century."

Actually, the collapse of the Soviet Union was just one of a series of profound changes in the 20th century that have had far-

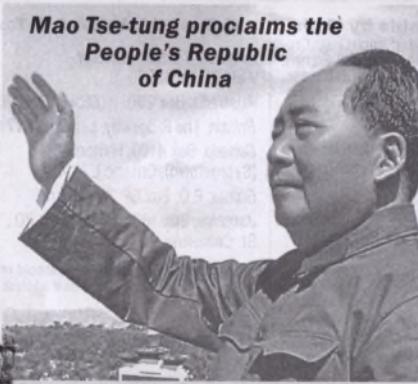
1946

**United
Nations
General
Assembly
holds first
meeting**



1949

**Mao Tse-tung proclaims the
People's Republic
of China**



1960

**Seventeen new
African nations
are created**



reaching consequences. Of course, political changes are nothing new. They have been taking place for thousands of years.

However, one change in the field of government during the 20th century is especially significant. What this change is and how it affects you personally will be discussed later.

First, though, let us examine some of the

achievements of science in the 20th century. Regarding these, Professor Michael Howard concludes: "The peoples of Western Europe and North America seemed to have every reason to greet the twentieth century as the dawn of a new and happier age in the history of mankind." Would these advances lead to what is called the good life?

IN SEARCH OF THE GOOD LIFE

"As the twentieth century progressed, daily life for many people . . . was changed by scientific and technological development."

—The Oxford History of the Twentieth Century.

ONE of the great changes in this era has had to do with population. No other century has had such a sharp rise in world population. It reached about one billion in the early 1800's and about 1.6 billion by 1900. In the year 1999, world population reached six billion! And more of this growing population has wanted the so-called good things in life.

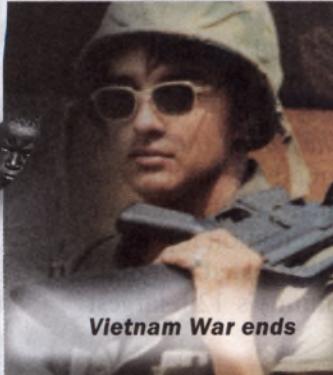
Progress in medicine and a greater availability of health care contributed to this population increase. Average life expectancy increased in such places as Australia, Germany, Japan, and the United States—from under 50 years at the beginning of the century to well over 70 years now. However, this pos-

itive trend is less apparent elsewhere. People living in at least 25 countries still have life expectancies of 50 years or less.

'What Did You Do Before . . . ?'

Youngsters are sometimes at a loss to understand how their forefathers got along without airplanes, computers, televisions—things now generally taken for granted and even viewed as necessities by people in wealthier lands. Consider, for example, how the automobile has changed our lives. It was invented at the end of the 19th century, but *Time* recently noted: "The automobile is one of the inventions that defined the 20th century from start to finish."

1975



1989



The Berlin Wall Is torn down as Communism loses its hold

Vietnam War ends

1991



Soviet Union breaks apart

Marconi sends first transatlantic radio signal



1901

Einstein publishes his special theory of relativity

1905



1913



Commercial TV is born

1941

In 1975 it was estimated that every tenth person in the European work force would be jobless if motor vehicles suddenly vanished. Besides the obvious effect on the automotive industry itself, banks, shopping malls, drive-in restaurants, and other establishments dependent upon mobile customers would close their doors. Without a way for farmers to get their goods to market, food distribution systems would grind to a halt. City workers living in the suburbs would be cut off from their jobs. Superhighways that crisscross the landscape would fall into disuse.

To boost automobile production and to cut costs, assembly lines, now common in most industries, were introduced early in this century. (Assembly lines made possible the mass production of other products, such as kitchen appliances.) At the turn of the century, the horseless carriage was a toy of the wealthy in just a few lands, but it is now the means of transport for the common man in much of the world. As one author expressed it, "life in the late 20th century is almost inconceivable without motor vehicles."

In Pursuit of Pleasure

Traveling used to mean going where you *had to go*. But during the 20th century, things changed—especially in developed lands. As well-paying jobs became more available and

Ford opens his Model-T car assembly line

as the workweek shrank to 40 hours or less, people had the money and the time to travel. Traveling now meant going where you *wanted* to go. Cars, buses, and airplanes made it easier to pursue recreation in far-off places. Mass tourism became a major business.

According to *The Times Atlas of the 20th Century*, tourism "had a dramatic impact, both on those countries receiving tourists and on their home countries." Some of the impact has been negative. Tourists have too often contributed to ruining the very attractions they were drawn to see.

Now people also had more time to pursue sports. Many became participants; others settled for becoming ardent, and sometimes rowdy, fans of their favorite teams and athletes. With the coming of television, sports events became available to almost everyone. Domestic as well as international sports events drew hundreds of millions of enthusiastic television viewers.

"Sport and film established the contours of the mass leisure industry, which is now one of the world's largest employers and biggest earners," says *The Times Atlas of the 20th Century*. People annually spend billions of dollars on entertainment, including gambling, a favorite form of recreation for many. For example, a study in 1991 listed gambling as the European Community's 12th-largest



**Man walks
on the moon**

1969

**Mass tourism becomes
a major business**

**The Internet soars
in popularity**



1999

**World population
reaches six billion**

industry, with an annual turnover of at least \$57 billion.

As such recreation became commonplace, people started reaching out for new thrills. Their experimentation with drugs, for example, was so widespread that as of the mid-1990's, the illegal drug trade was worth an estimated \$500 billion a year, making it, as one source says, "the single most lucrative business sector in the world."

"Amusing Ourselves to Death"

Technology helped turn the world into a global village. Political, economic, and cultural changes now influence people worldwide almost instantly. "Clearly, there have been other lifetimes in which epochal upheavals occurred," said Professor Alvin Toffler, author of *Future Shock*, back in 1970. He added: "But these shocks and upheavals were contained within the borders of one or a group of adjacent societies. It took generations, even centuries, for their impact to spread beyond these borders. . . . Today the network of social ties is so tightly woven that the consequences of contemporary events radiate instantaneously around the world." Satellite television and the Internet have also played a part in influencing people the world over.

Some say that television has been the most influential medium of the 20th century. A writer commented: "While some people cri-

ique its content, no one debates television's power." But television is no better than the individuals who produce the programs. So along with its power to influence for good, it has power to influence for bad. While programs of shallow content, filled with violence and immorality, have given some people what they want to see, such programs failed to improve human relationships and too often worsened them.

Neil Postman, in his book *Amusing Ourselves to Death*, mentions another danger, saying: "The problem is not that television presents us with entertaining subject matter but that all subject matter is presented as entertaining . . . No matter what is depicted or from what point of view, the overarching presumption is that it is there for our amusement and pleasure."

As people gave greater priority to pleasure, spiritual values and morals plummeted. "In much of the world organized religion has lost power during the 20th century," says *The Times Atlas of the 20th Century*. While spirituality declined, pleasure-seeking became a priority far out of proportion to its real value.

"All That Glitters . . ."

Many positive changes characterize the 20th century, but, as the saying goes, "All that glitters is not gold." Although

individuals have benefited from a prolonged life span, the increase in world population has produced huge new problems. *National Geographic* magazine recently noted: "Population growth may be the most pressing issue we face as we enter the new millennium."

Automobiles are useful and enjoyable but also deadly, as proved by the estimated quarter of a million annual deaths from traffic accidents worldwide. And cars are a major producer of pollution. The authors of *5000 Days to Save the Planet* say that pollution "is now global, destroying or undermining the viability of ecosystems from pole to pole." They explain: "We have gone beyond simply damaging ecosystems and are now disrupting the

very processes that keep the Earth a fit place for higher forms of life."

During the 20th century, pollution has become a problem former centuries scarcely knew. "Until recently no one thought that human actions could affect the world on a global scale," says *National Geographic*. "Now some scientists believe that for the first time in recorded history such changes are occurring." It then warns: "Humankind's collective impact is such that mass extinctions could occur within one human generation."

Truly, the 20th century has been unique. People, blessed with unprecedented opportunities to enjoy the good life, now find life itself in jeopardy!

A REMARKABLE CHANGE FOR THE BETTER

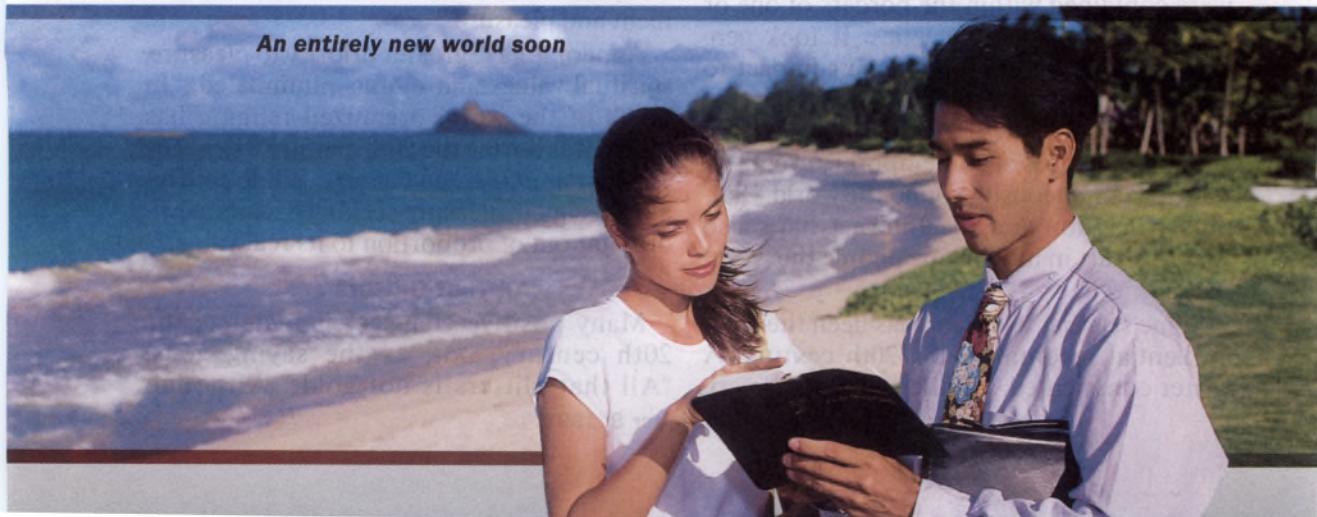
"The world in 1900 was poised on the threshold of one of the most remarkable periods of change in human history. An old order was giving way to a new."—*The Times Atlas of the 20th Century*.

EARLY in the 20th century, "the world entered upon an era of exceptional turbulence and violence," says the above-quoted atlas. This century was

to see more wars than any other century, with over 100 million killed.

In this era, wars have killed more civilians than ever before. In World War I, 15 per-

An entirely new world soon



cent of the dead were civilians. But in World War II, in some countries civilian dead surpassed the military dead. Of the millions killed in wars since then, most were civilians. All this violence has fulfilled Bible prophecy about the rider on "a fiery-colored horse," who "was granted to take peace away from the earth."—Revelation 6:3, 4; Matthew 24: 3-7.

Change in Values

The 20th century has fulfilled the prophecy at 2 Timothy 3:1-5, which says: "In the last days critical times hard to deal with will be here. For men will be lovers of themselves, lovers of money, self-assuming, haughty, blasphemers, disobedient to parents, unthankful, disloyal, having no natural affection, not open to any agreement, slanderers, without self-control, fierce, without love of goodness, betrayers, headstrong, puffed up with pride, lovers of pleasures rather than lovers of God, having a form of godly devotion but proving false to its power."

To a certain degree, imperfect humans have always shown those characteristics. During the 20th century, such attitudes have intensified and spread. People who conduct themselves in the above-described ways were once considered antisocial—if not downright wicked. Now even people "having a form of godly devotion" increasingly view such behavior as normal.

At one time religious people considered it unthinkable for couples to live together outside marriage. Unwed motherhood was regarded as shameful, as were homosexual relationships. For most people abortions were out of the question, and so was divorce. Dishonesty in business was reprehensible. But today, as one source notes, "anything goes." Why? For one thing, "it serves the self-interest of those who do not want to be told by others what not to do."

The abandonment of high ethical standards in this century has caused priorities to change. *The Times Atlas of the 20th Century* explains: "In 1900 nations and individuals still measured their worth in non-monetary terms. . . . By the end of the century nations measured their success in almost entirely economic terms. . . . Similar changes occurred in the way people thought about wealth." Today widespread gambling fosters a love of money, while radio, television, movies, and videos encourage material desires. Even game shows and advertising contests send the message that money is, if not everything, at least almost everything.

Together but Apart

At the beginning of the 20th century, most people lived in rural areas. It is said that early in the 21st century, more than half the population will live in cities. The book *5000 Days to Save the Planet* says: "The task of providing a decent standard of living for today's city dwellers, let alone those of future generations, poses seemingly insurmountable problems." The UN magazine *World Health* observed: "The proportion of people in the world living in cities is escalating. . . . Hundreds of millions . . . are now living in conditions that are detrimental to their health and even endangering their lives."

How paradoxical that while moving closer together in cities, people are also moving apart! Television, telephones, and the Internet, along with on-line shopping, although useful, bypass face-to-face relationships. The German paper *Berliner Zeitung* therefore concludes: "The 20th century is not only the century of overpopulation. It is also the century of loneliness."

This leads to tragedies like the one in Hamburg, Germany, where the body of a man was found in his apartment five years after he died! "No one missed him, neither

the relatives nor the neighbors nor the authorities,” said *Der Spiegel*, adding: “For many citizens this symbolizes the appalling extent of the everyday anonymity and lack of social contact of the big city.”

The fault for such deplorable conditions does not lie just with science and technology. It lies mainly with people. This century has produced more people than ever before who are “lovers of themselves, lovers of money, . . . unthankful, . . . having no natural affection, not open to any agreement, . . . without love of goodness, . . . lovers of pleasures rather than lovers of God.”—2 Timothy 3:1-5.

1914, a Marked Year

According to Winston Churchill, “the dawn of the twentieth century seemed bright and calm.” Many thought that it would bring an era of unprecedented peace and prosperity. Yet, in 1905 the *Watch Tower* of September 1 warned: “There will be more war ere long,” also stating that a “great calamity” would start in 1914.

In fact, as early as 1879, that publication pointed to 1914 as a significant date. In later years it noted that Bible prophecies in the book of Daniel pinpointed that date as the time when God’s Kingdom was established in heaven. (Matthew 6:10) While 1914 was not the time for the Kingdom to take complete control of earth’s affairs, it was the time for it to begin its rule.

Bible prophecy foretold: “In the days of those kings [existing in our time] the God of heaven will set up a kingdom [in heaven] that will never be brought to ruin.” (Daniel 2:44) That Kingdom, with Christ as King, started gathering here upon the earth God-fearing people who were desirous of being its subjects.—Isaiah 2:2-4; Matthew 24:14; Revelation 7:9-15.

Coinciding with what happened in heaven, 1914 saw the beginning of “the last days,”

the beginning of a time period that would end with the destruction of the system of things now prevailing. Jesus foretold that the start of this period would be marked by world wars, food shortages, disease epidemics, devastating earthquakes, and increased lawlessness as well as the cooling off of people’s love for God and man. All these things, he said, would mark the “beginning of pangs of distress.”—Matthew 24:3-12.

An Entirely New World Soon

We are now 85 years into “the last days,” and we are swiftly nearing the end of this present unsatisfactory system of things. Soon God’s Kingdom, under Christ, “will crush and put an end to all these kingdoms [now existing], and it itself will stand to times indefinite.”—Daniel 2:44; 2 Peter 3:10-13.

Yes, God will wipe out wickedness from the earth and usher righteous-hearted people into an entirely new world. “The upright are the ones that will reside in the earth, and the blameless are the ones that will be left over in it. As regards the wicked, they will be cut off from the very earth.”—Proverbs 2:21, 22.

What a joyful message—certainly one that deserves to be proclaimed far and wide! God’s Kingdom will soon solve the problems that the 20th century has only intensified: war, poverty, sickness, injustice, hatred, intolerance, unemployment, crime, unhappiness, death.—See Psalm 37:10, 11; 46:8, 9; 72:12-14, 16; Isaiah 2:4; 11:3-5; 25:6, 8; 33:24; 65:21-23; John 5:28, 29; Revelation 21:3, 4.

Does the prospect of living forever in a righteous world of indescribable happiness appeal to you? Ask Jehovah’s Witnesses for more information. They will show you from your own copy of the Bible that the critical years of change that marked the 20th century will soon end and that you can thereafter enjoy unending blessings!

CROSSWORD PUZZLE

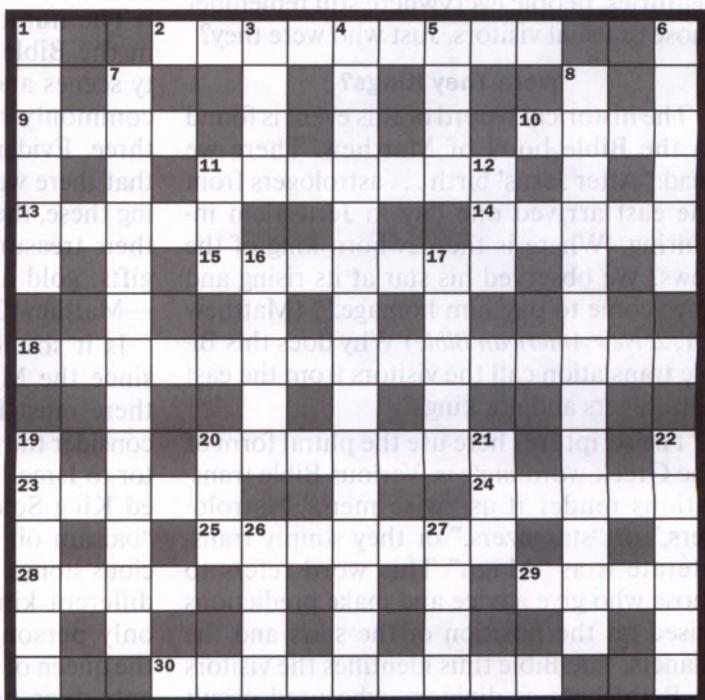
Clues Across

2. It is "reserved forever" for ungodly men and apostates (Jude 13)
9. Because this had not occurred, God caused a mist to water the ground (Genesis 2:5, 6)
10. An ancestor (probably the grandfather) of Judge Tola (Judges 10:1)
11. Totter (Proverbs 10:30)
13. This son of Shiza was in charge of 30 other Reubenites in David's army (1 Chronicles 11:42)
14. The Israelites' next place of encampment after Jehovah punished rebellious ones by sending poisonous serpents among them (Numbers 21:10)
15. In the absolute sense, only Jehovah is said to be this (Psalm 18:30)
18. Love does not rejoice over this (1 Corinthians 13:6)
20. A period of dryness (Jeremiah 17:8)
23. One of three men who brought much-needed supplies to David when he had to flee Jerusalem on account of Absalom's rebellion (2 Samuel 17:27)
24. A son of Tola and a paternal head of the tribe of Issachar (1 Chronicles 7:2)
25. Distinguished (Ruth 4:11)
28. What Jehovah is called because he is the secure height and refuge of his people (Psalm 62:7)
29. Site near Ramah, noted for its great cistern (1 Samuel 19:22)
30. A subdivision of the family of Kohathites (Numbers 3:27)

Clues Down

1. His name means "With Calamity," as he was born after the men of Gath killed his older brothers (1 Chronicles 7:20-23)
3. The wife of one's uncle (Leviticus 18:14)
4. A ruler west of the Jordan whom Joshua and the sons of Israel defeated [3 words] (Joshua 12:10)
5. To give relief (1 Samuel 24:3)
6. After saying that God does it for the vegetation, Jesus said that God will certainly do it for his servants (Luke 12:28)
7. That of Zerah the Ethiopian numbered one million men [2 words] (2 Chronicles 14:9)
8. Warning phrase used several times by the apostle Paul [4 words] (1 Corinthians 15:33)
11. The fluid part of a plant (Job 8:16)
12. What will happen to "the very name of the wicked ones" (Proverbs 10:7)
16. A city in the Shephelah allotted to the tribe of Simeon (Joshua 19:7)
17. What God's Kingdom will do to all man-made kingdoms (Daniel 2:44)
19. One of four sons of Jehallelel of the tribe of Judah (1 Chronicles 4:16)
20. A loud, continued noise (Isaiah 17:12)
21. Fasten (Joshua 2:18)
22. Tactical maneuver by which Ai was captured by Joshua (Joshua 8:21)
26. The dry measure of manna that Jehovah commanded Moses to keep for future generations (Exodus 16:32)
27. Destroyed physically (Acts 27:22)

Crossword Solutions Page 27



Did Three Kings Visit Jesus in Bethlehem?

AFTER Jesus was born, notable persons from the Orient arrived in Bethlehem to pay him homage as king of the Jews. To this day many people throughout the world who celebrate Christmas commemorate that visit.

In some areas people build Nativity scenes that depict the Oriental visitors as three kings approaching the newborn Jesus with gifts. In other lands, children parade around their neighborhoods wearing the costumes of "the Holy Kings." Even after 20 centuries, people everywhere still remember those unusual visitors. Just who were they?

Were They Kings?

The historical record of this event is found in the Bible book of Matthew. There we read: "After Jesus' birth . . . astrologers from the east arrived one day in Jerusalem inquiring, 'Where is the newborn king of the Jews? We observed his star at its rising and have come to pay him homage.'" (Matthew 2:1, 2, *New American Bible*) Why does this Bible translation call the visitors from the east astrologers and not kings?

The scriptures here use the plural form of the Greek word *ma'gos*. Various Bible translations render it as "wise men," "astrologers," or "stargazers," or they simply transliterate it as "Magi." This word refers to those who give advice and make predictions based on the position of the stars and the planets. The Bible thus identifies the visitors to Bethlehem as diviners, who used occult

practices disapproved by God.—Deuteronomy 18:10-12.

Were they also kings? If they were, it is reasonable to expect that the Bible would have identified them as such. Matthew 2:1-12 uses the word "king" four times, once referring to Jesus and three times to Herod. But not once does it call the Magi kings. On this point *The Catholic Encyclopedia* states: "No Father of the Church holds the Magi to have been kings." Neither does the Bible.

Were There Three?

The number of Magi is not mentioned in the Bible record. Nevertheless, Nativity scenes and Christmas songs espouse the commonly held tradition that there were three. Evidently this springs from the fact that there were three types of gifts. Regarding these, the Bible says: "They also opened their treasures and presented [Jesus] with gifts, gold and frankincense and myrrh." —Matthew 2:11.

Is it sound reasoning to conclude that since the Magi gave three different gifts, there must have been three Magi? Let us consider the account of another notable visitor to Israel. The queen of Sheba once visited King Solomon and presented him with "balsam oil and very much gold and precious stones." (1 Kings 10:2) Although three different kinds of gifts are spoken of, the only person mentioned as giving them is the queen of Sheba. The number of her presents does not indicate that three people

approached Solomon on that occasion. Similarly, the three gifts made to Jesus have little to do with the number of people who brought them.

The Catholic Encyclopedia notes: "The Gospel narrative omits to mention the number of the Magi, and there is no certain tradition in this matter. Some Fathers speak of three Magi; they are very likely influenced by the number of gifts." It goes on to mention that various works of art show two, three, four, and even eight visiting Jesus. Some traditions favor up to 12. There is simply no way to verify the number of the Magi.

A Popular but Inaccurate Story

Contrary to popular belief, the Magi first arrived, not in Bethlehem, but in Jerusalem, after Jesus was born. They were not present at the time of Jesus' birth.

Later, when they went to Bethlehem, the Bible says that "when they went into the house they saw the young child." (Matthew 2:1, 11) So, it is clear that by the time the Magi visited Jesus, his family had moved into a normal dwelling. They did not find him lying in a manger.

In the light of the Scriptures, the popular story of three kings honoring Jesus at the time of his birth is not accurate. As mentioned above, the Bible teaches that the Magi who visited Jesus were not kings but astrologers who practiced the occult. The Scriptural record does not say how many there were. Also, they did not visit Jesus at



"Adoration of the Magi"

the time of his birth, when he was placed in a manger, but, rather, sometime later, when his family was living in a house.

The popular narrative of the three kings and other traditional Christmas stories, although Scripturally inaccurate, are generally viewed as harmless holiday tales. Christians, however, highly esteem a form of worship that is free of falsehood. This is how Jesus himself felt. In prayer to his Father, he once said: "Your word is truth." (John 17: 17) He said that "true worshipers will worship the Father with spirit and truth, for, indeed, the Father is looking for suchlike ones to worship him."—John 4:23.

Delightful duet singers

BY AWAKE! CORRESPONDENT IN KENYA

THE two vocalists faced each other, ready for their performance. The lead singer bowed slightly and produced a soft, clear note that was so liquid and pure that it resonated into the morning air for a great distance. The second singer then gracefully bowed and with perfect timing produced an equally fluid note an octave higher. As the duet gained momentum and intensity, the two voices began to sound like one. I listened with breathless excitement and marveled at their well-honed skill and their voice quality.

This virtuoso performance was not played out in some packed-out symphony hall. Rather, it was performed on a tree limb near my home here in Kenya—by two birds. When their song was finished, the feathered performers stood erect, opened their wings, and flew away.

It is often said that “birds of a feather flock together.” Remarkably, though, some birds also seem to enjoy singing together—and with exquisite precision at that! So harmonious is such duet singing that without visual clues, it is often impossible for the listener to detect that two different birds are making the music! Even scientists have been fooled. Thus, only in relatively recent times has duet singing been recognized as a behavioral pattern among birds.

The Bell Bird

The tropical boubou, for example, is a particularly adept performer. Found on the African continent, it has a unique flutelike song that often resembles the trill of two pieces of metal being struck together. Thus, it is commonly called the bell bird. The boubou is handsomely tailored with glossy black crown, nape, and wings. Its snow-white breast feathers and white wing bar make for a stunning contrast. Boubous are always seen in pairs, and male and female are alike in markings and color.

Anyone walking in thick forest or bush will know of the boubous’ presence long before spotting them. The male will often utter three rapid bell-like notes. These are immediately answered by a croaking *kweee* from the female. Sometimes one bird emits a continuous sequence of notes while its partner chimes in with a single tone—a me-





lodiuous note that enters into the flow of song without any audible break.

Exactly how this coordination is achieved is not fully understood by scientists. Some think that, at least in some cases, it may simply be a matter of "practice makes perfect," as the saying goes. The male and female sing together day after day, thus achieving their high level of precision in performance.



Interestingly, boubous often seem to have an "accent" that varies according to location. This appears to result from their imitating local sounds or other birdsongs. This process is called vocal copying. As a result, the songs of boubous heard in the bushveld of South Africa can be quite different from those heard in the Great Rift Valley of East Africa.

Lifelong Partners



In the book *The Trials of Life*, David Attenborough observes: "It is rather touching to discover that duetting pairs, as a rule, remain together season after season, if not for life." What accounts for this strong bond? Attenborough goes on to say: "Having developed the technique they also practise it as a way of reinforcing the bond between them, singing their complex duets even while sitting next to one another on a branch; and sometimes, if one of the pair is absent, the lonely bird will sing the full elaborate melody filling in the missing parts itself."



The songs may also help the birds to locate each other in dense vegetation. When the male wants to know the location of his mate, he begins a series of melodic notes, and the female joins in, even though she may be some distance away. Their timing is so exact that it is as if they planned the performance beforehand.

Whistling While They Work

Do you enjoy working to music? Well, apparently, many birds do too. The book *The Private Life of Birds*, by Michael Bright, notes that birdsongs have a stimulating physical effect on listeners, saying that after exposure to birdsongs, "the heart rates of both males and females went up." Furthermore, some female birds "built their nests faster" and "also tended to lay more eggs" when they listened to male birdsongs.

Scientists will no doubt continue to discover fascinating things about duet singers, such as the tropical boubou. But whatever functional value their thrilling songs may prove to have, let us not overlook the fact that they serve yet another lofty purpose. They bring pleasure to the ears of appreciative men and women! Indeed, such breathtaking music moves us to give praise to the Creator of "the birds of heaven."—Psalm 8:8.

From a LIFE of CRIME

to a LIFE of HOPE



When I was 12



With my wife and two sons today

AS TOLD BY COSTA KOULLAPIS

I STARED AT THE DIRTY WALLS OF MY PRISON CELL AND DETERMINED THAT I NEEDED TO FIND A WAY TO GET MY HANDS ON A LARGE AMOUNT OF MONEY SO THAT I COULD BREAK OUT OF THE CYCLE OF CRIME I WAS IN AND START A NEW LIFE.

AS I sat there—miserable and dejected—I recalled that within the previous year, 11 of my friends had died. One was hanged for murder, another committed suicide while awaiting trial for murder, three overdosed on drugs, two were beaten to death in street brawls, and four died in motor accidents. Also, several other friends of mine were in various prisons serving sentences for serious crimes.

So in the gloom of my prison cell, I prayed desperately to God, whoever he might be, to show me a way out of this criminal maze. It was not until some time later that I received the answer to that prayer. In the meantime, I managed to evade the serious charge of assault with intent to cause grievous bodily harm. A plea bargain proved helpful, and I was able to get off with a lesser charge and a reduced sentence. But let me first

explain how I came to be in that predicament.

I was born in Pretoria, South Africa, in 1944 and grew up there. My early years were unhappy, and our family life was often made miserable by Father's violent fits of temper, aggravated by his frequent bouts of heavy drinking. He was also a heavy gambler, and his mood swings resulted in severe verbal and physical abuse for us all, particularly for my mother. To escape the constant fights, I took to the streets.

My Path to Crime

As a result, I became worldly-wise at a very early age. For example, when I was eight years old, I learned two lessons. The first was when I was caught with toys that I had stolen from a neighbor's home. I received a severe beating from my father. I can still hear his angry threat: "If I ever catch you with stolen stuff again, I'll break your neck!" I resolved not so much that I would never steal again but that I would never be caught again. 'Next time I'll hide it and won't be found out,' I thought to myself.

The second lesson that I learned when still quite young was unrelated. At a Scripture class at school, our teacher taught us that God has a personal name. "God's name is Jehovah," she said to our surprise, "and he will listen to any prayer you say, as long as you ask the prayer in the name of his Son, Jesus." That made quite an impression on my young mind, although it did not halt my slide toward a life of crime. I had actually become an expert at shoplifting and burglary by the time I reached high school. My friends at school were of no help, since many of them had already spent time in reform schools for various crimes.

As the years passed, I became a habitual criminal. I was involved in countless muggings, burglaries, car thefts, and violent acts of assault before I was even out of my teens.

Since I was constantly hanging around pool-rooms and bars, running errands for pimps, prostitutes, and criminals, I did not even complete my first year at technical high school.

I associated regularly with hardened criminals, who did not flinch at maiming anyone who betrayed them. I learned that it paid to keep my mouth shut and never brag about my accomplishments or flash money around. To do so would only serve to broadcast that a crime had been committed, which could lead to police attention and awkward questioning. Worse still, it might lead to unexpected visits from other criminals wanting a slice of the spoils.

Yet, even with those precautions, at times I did come under police surveillance on suspicion of being involved in illegal activities. But I took care never to have in my possession anything that might link me to a crime or that could incriminate me. Once, the police raided our home at three o'clock in the morning. They searched the whole house twice, looking for electrical goods—a local wholesaler's stock had been stolen. They found nothing. I was taken to the police station for fingerprinting but was not charged.

Into the Drug Scene

From the age of 12, I began regularly using mind-altering drugs. My health started to suffer from such abuse, and on several occasions I almost overdosed. Before long I was introduced to a doctor who had strong underworld connections. This led to my becoming a dealer in drugs, and I soon learned that supplying a few distributors posed much less of a risk for me because I could remain out of sight while others took the risks.

Sadly, some of the people I had drug dealings with overdosed and died or committed serious crimes while under the influence of drugs. One "friend" murdered a prominent medical doctor. This made news headlines

throughout the country. He then tried to incriminate me, but I had not even heard about the incident until the police arrived at my doorstep. In fact, the police would often come and question me about various crimes that had been committed.

One day, however, I did something very foolish. After a week-long drug and alcohol binge, I attacked two people in a rage after a misunderstanding and badly injured them. The following morning they identified me as their assailant, and I was arrested on the charge of assault with intent to cause grievous bodily harm. That is how I landed in prison.

Get Rich, Then Go Straight

After being released from prison, I heard of an opening for a stock controller with a pharmaceutical company. I applied and convinced the employer that I was right for the job. With a recommendation from a friend who was already in the company, I got the job. This, I thought, was the way for me to make a lot of money and go somewhere else to make a clean start. So I applied myself to learning all aspects of the business as quickly as possible and stayed up late each night studying the names of all the drugs. I felt sure that this was going to be the road to a new life.

My plan was to bide my time and earn the trust of my employers. Then, at an op-

portunity, I would break in and steal a large quantity of the particular drugs that I knew to be very valuable on the black market, sell them, and become a relatively rich man overnight. I had worked out what I believed to be a watertight alibi so as to ensure my freedom and a new life.

The time arrived for me to put the plan into action. One night, after cautiously entering the warehouse, I looked at shelves stocked with drugs worth hundreds of thousands of dollars. There I saw my chance to start a life free from crime and violence. But, for the first time ever, my conscience began to bother me. What caused this sudden twinge of conscience when I had almost forgotten that I even had a conscience? Let me tell you how this came about.

Some weeks before this, the manager and I had a discussion about the meaning of life. In response to something he said, I replied that as a last resort, one could pray. "To whom?" he asked. "To God," I replied. "But there are many gods that people pray to," he said, "so to which one would you pray?" I said: "To Almighty God." "Oh," he continued, "and what is his name?" "What do you mean?" I asked. "Well, like you and me and everyone else, Almighty God has a personal name," was his reply. That sounded logical, but I was getting annoyed. So I asked irritably: "Well, what is God's name?" "The name of Almighty God is Jehovah!" he replied.

Suddenly the years parted like a curtain, and the memory of that lesson in the classroom when I was only eight years old came flooding back. To my surprise, the impact that the discussion with the manager had on me was stunning. We sat for hours enjoying a serious conversation. The next day he brought me the book *The Truth That Leads to Eternal Life*.^{*} I read the entire book that night and was immediately convinced that I

IN OUR NEXT ISSUE

Kidnapping—Why a Global Threat

Should I Have a Credit Card?

Sustained by Hope to Endure Trials

* Published by the Watchtower Bible and Tract Society of New York, Inc.

had found the truth and the real meaning of life. For the next two weeks, we did little else but discuss the various subjects in that amazing blue book.

So, as I sat in the darkness and quiet of the warehouse, my conscience told me that my plans to steal and sell the drugs were all wrong. I quietly left and went home, determined that from then on I would steal no more.

A Complete Change

In the following days, I told my family that I had decided to start a new way of life, and I began to share with them some of the Bible truths that I had learned. My father wanted to throw me out of the house. But my brother John defended me, saying to my father: "This is the first time in his life that Costa has ever been involved in something that is not criminal, and you want to throw him out? I am going to find out more about this." To my pleasant surprise, John asked me to study the Bible with him. From then on, everyone who came to me looking for drugs received a *Truth* book instead! Soon I was conducting 11 Bible studies with the aid of that book.

Then I learned that the manager of the company was not a Witness himself. His wife had been a Witness for some 18 years, but he had "never had the time to do anything about the truth." So he arranged for an experienced Witness to conduct a regular Bible study with me. My studies soon helped me see the need to confront other issues in life, and it was not long before the truth of God's Word began to set me free from my worldly ways.—John 8:32.

However, I suddenly felt overwhelmed by the speed with which things had happened over just a few weeks' time. Major changes confronted me, and I began to realize that a great warfare between the flesh and the spirit awaited me if I continued to follow the di-

rection my Bible studies were pointing out to me. On the other hand, I realized that probable death, or at least spending much of my life in prison, lay ahead of me if I continued living the way I had until then. So after a great deal of thought and fervent prayer, I decided to follow the way of the truth. I symbolized my dedication to Jehovah God by water baptism six months later, on April 4, 1971.

Rewards for Going Straight

When I look back, I am sometimes overcome with emotion as I think of the blessings I have enjoyed since making my decision to abandon the way of crime. Of the 11 persons I started studying with during those first few tumultuous weeks, 5 are still walking in the way of the truth. My mother also accepted a Bible study and became a baptized Witness, continuing to serve God faithfully until she died in 1991. My two brothers dedicated their lives to Jehovah and now serve as elders. I was also able to help my aunt learn the truth, and she has served full-time in the ministry for the past 15 years.

The manager of the pharmaceutical company I worked for was so encouraged by the changes in my life that he began to take Bible truth more seriously. One year after I was baptized, he also symbolized his dedication to God by water baptism. Later he served as an elder for many years in one of the Pretoria congregations of Jehovah's Witnesses.

I am now married to a dedicated Christian sister. Leonie and I moved to Australia in 1978. There our two sons, Elijah and Paul, were born. My family's encouragement has been a real source of strength to me. I have the privilege of serving as an elder in Canberra, Australia's capital. Each day my gratitude goes to Jehovah, who rescued me from an empty life of crime that was leading to misery and death. More than that, he gave meaning to my life by providing a real hope for me and my loved ones.

"Please Pass the TORTILLAS"

BY AWAKE! CORRESPONDENT IN MEXICO

THINK of an invention that serves as "a wrapping, a spoon, a plate, and a food, all at the same time, and that goes well with practically any other food." Thus did nutritionist Héctor Bourges describe an invention that has been passed on from generation to generation for thousands of years. Many people still eat it every day. It is the tortilla, the flat disk of corn that is a basic element of the Mexican diet.*

Ancient writings show how important corn was to the ancient Mesoamerican people. This cereal, domesticated thousands of years ago in what is known today as Mexico, helped make possible the development of such great cultures as the Olmec, the Maya, the Teotihuacán, and the Mexica.

From Corn to Tortilla

The basic procedure for making tortillas is to mix one part mature corn kernels with two parts water in which approximately 1 percent lime is dissolved. The mixture is heated until the thin skin of the kernels can be broken loose between one's fingers. Cold water is added to stop the heating process, and the mixture is allowed to settle overnight.

* Although wheat-flour tortillas are also consumed in some areas of Mexico, their impact on the Mexican culture is limited.

The following day the soft kernels, now called nixtamal, are lifted by hand out of the receptacle and put into a new one, where the remaining liquid is drained off. The nixtamal is ground, and salt and water are added until the mixture becomes a soft dough called masa. Traditionally, the masa is divided into small balls that are shaped by hand into thin, flat disks and then placed on a hot, flat earthenware griddle. They are turned once and then a second time. A thin layer on top of the tortilla puffs up, and it is ready!

The first step of this process, in which lime is added, has proved helpful in preventing certain health problems. How is that? The lack of a vitamin called niacin causes pellagra, a disease characterized by dermatitis, diarrhea, dementia, and possibly death. This sickness is common among people who live on corn and little or no protein-rich foods.

The problem is that the niacin in corn cannot be assimilated by the body. Lime, on the other hand, makes the niacin more available to the body. The tortilla may therefore be one reason why pellagra is not a common disease in the poor zones of Mexico, except in some areas where it is the custom to rinse the

Tortillas made by hand





nixtamal to whiten the masa, which washes the niacin away.

Another important result of the addition of lime is that it increases the calcium content, a necessary nutrient for bones and nerves, among other things. By the way, because whole-grain corn is used, tortillas are also a very good source of fiber.

All things considered, wouldn't you too call tortillas a great invention? Now, as with any other invention, we have to observe how the experts use it in order to enjoy it the most.

The Custom

In the 16th century, Friar Bernardino de Sahagún related the way tortillas were served: 'The tortillas were white, hot, and folded. They were arranged in a basket and covered with a white cloth.'

After centuries, things have changed very little. Tortillas are still served hot, usually in a basket, and covered with a clean cloth. Also, as in olden times, there are many kinds of tortillas: white, yellow, blue, and reddish. They are made in different sizes as well. And, of course, most Mexicans have tortillas every day with the noon meal and very possibly for breakfast and supper also.

One basketful of tortillas is placed on the table for the entire family. Every diner is interested in keeping the tortillas hot until the end of the meal. Therefore, each person who

uncovers the tortillas takes only one and then rearranges the cloth to cover the rest of them. As the meal progresses and diners want more tortillas, no matter what the topic of conversation is, the phrase "please pass the tortillas" will be heard again and again.

At this point you may be wondering, 'Do Mexican housewives make tortillas by hand every day?' Most do not. Since 1884, machines have been invented to automate the procedure. Manual tortilla presses are still used by many housewives, especially in rural areas. But most Mexicans buy tortillas from a tortilla shop, where a machine can produce between 3,000 and 10,000 of them an hour.

It is often the children's responsibility to buy the tortillas right before a meal. So the smell, sound, and heat of the tortilla machine live in the childhood memories of most Mexicans. This is true even of poor families, since the price of the tortilla is very low. It is indeed, as Dr. Bourges, quoted earlier, says, "a real bargain, which we inherited from our ancestors."

So if you try the tortilla, you will be trying a bit of the history of a people. Remember: As many times as you wish, you may feel free to say, "Please pass the tortillas."



The Underground

World of Paris

BY AWAKE! CORRESPONDENT IN FRANCE

IDIAL the number, desperately hoping that someone will answer. "Hello! Hello!" I say. "My car keys have fallen down the drain! Please come quickly!" A special brigade of sewer workers arrives swiftly. Their job is to unblock sewers, drain flooded cellars, and save the keys, glasses, wallets, and even pets that regularly disappear down the 18,000 drains in Paris. They recover my keys, and with a sigh of relief, I thank them warmly.

The next day I decide to visit the Musée des Égouts (Museum of Sewers) on the Left Bank of the Seine River, opposite our famous river tour boats and in the shadow of the Eiffel Tower. For some 130 years, Paris has been proud to display its underground world. I find out why by imitating the over 90,000 curious people who each year visit this unique museum. Join me as I take a closer look at what the famous 19th-century French writer Victor Hugo called "Leviathan's intestines"—the sewers of Paris.

Accessible "Intestines"

Having descended 20 feet below ground, I see the first museum exhibit—a stuffed rat. Spine chilling indeed! It is said that for every

inhabitant in Paris, there are three rats, which stomach even the strongest poisons incredibly well. They certainly are well fed. Each day the rats devour 100 tons, or one third, of the sewers' waste.

Stones, nails, keys, and other heavy items get mixed in with wastewater and rain, cluttering the sewers. To the sound of dripping water, I examine the machines that purge the 1,300 miles of this huge "intestine." Each year, about a thousand sewer workers evacuate 500,000 cubic feet of waste. Murkiness, showers of filthy water, slimy walls, and abrupt rises in the water level can make a sewer worker's job quite difficult.

By the way, snaking along near the ceiling of the sewers are conduits that house a vast network of water pipes, telephone wires, and traffic-light cables.

It Began With the Romans

The Romans were the first to endow Paris with sewers. Some 60 feet of Roman sewers are still under the ruins of the Roman thermal baths in the Latin Quarter. But when the Roman Empire fell, hygiene was forgotten. Paris remained dirty and unhealthy for centuries, with only basic sewers (drains

in the middle of the street) or ditches draining away liquid waste. The ditches stank and were a breeding ground for infection. In 1131 the oldest son of King Louis VI died of an infection after falling into an open sewer.

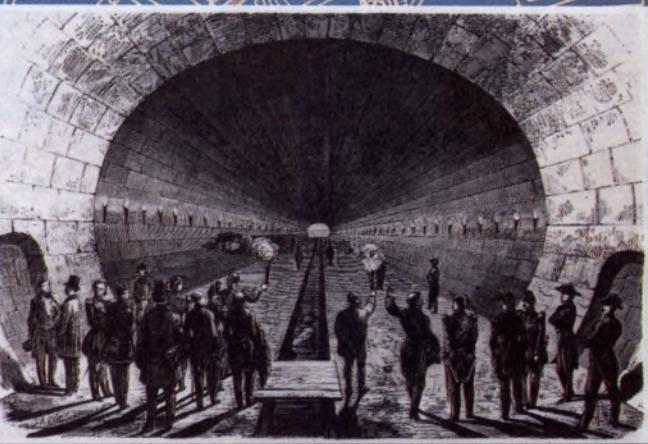
The open-air drains served as a place to dump refuse, and so did the few newly created covered drains, which were easily blocked. To make matters worse, when the water level of the Seine River rose, the sewers regurgitated foul-smelling mud and waste. Back then, the digestive system of Paris was very small. In 1636 the intestine measured just 14 miles in length and served a population of 415,000. One and a half centuries later, it was merely two miles longer. By Napoléon's time, it was suffering from acute indigestion.

In the 19th century, the existing sewers were examined and mapped out. They turned out to consist of nearly two hundred tunnels, many previously unknown. How were the tons of centuries-old mud removed? The word spread that valuables were to be found under the streets of Paris. Thus, a mass of greedy treasure hunters moved in. They waded through the mire, extracting coins, jewelry, and weapons.

Organizing the Sewerage

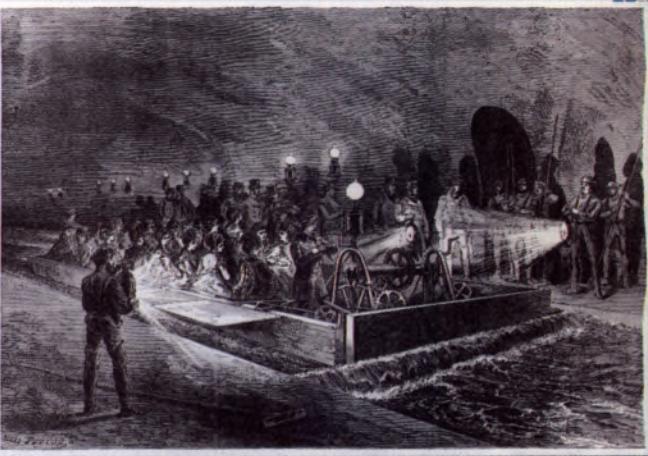
The sewers were finally organized, modernized, extended, and connected to each house. Pipes large enough to cope with unexpected flooding were used. In 1878, 400 miles of navigable channels flowed beneath large vaults. "The sewer is clean, . . . dressed up," wrote Victor Hugo.

Valentin, Musée Carnavalet, © Photothèque des Musées de la Ville de Paris/Cliché: Giet



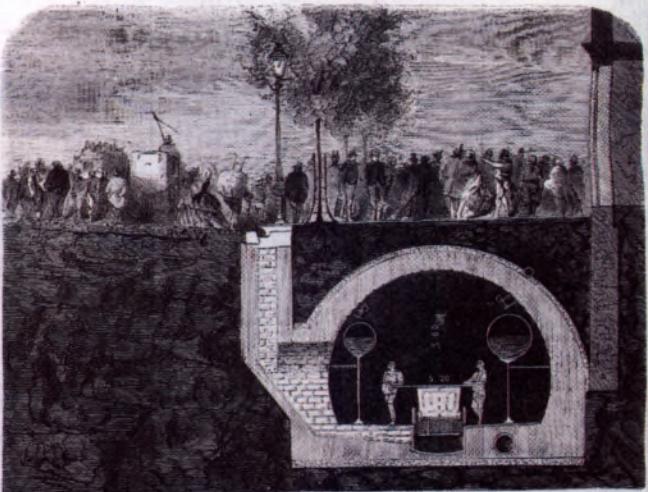
The opening of a section of the Paris sewers

J. Pelcq, The Boat, Musée Carnavalet, © Photothèque des Musées de la Ville de Paris/Cliché: Giet



Visiting the sewers

Ferrat, Musée Carnavalet, © Photothèque des Musées de la Ville de Paris/Cliché: Briant





Grimacing skulls and brittle tibiae arranged in rows and in the shape of crosses and wreaths



An inscription before the exit: "The sting of death is sin."—1 Corinthians 15:56, "King James Version"

Machines for cleaning the sewers



During the 20th century, the system doubled. And the sewers became a mirror image of the city. In what way? Each sewer bears the name of the street it follows and the number of the building above. Improvements have continued with the \$330-million renovation project started in 1991. The ten-year renovation of this vital facility, which handles 40 million cubic feet of water per day, includes the installation of automatic cleaning equipment and computerized controls.

Looking forward to a breath of regular Paris air, I come to the end of the visit. However, my tour underground is not over. "To see the innermost depths of Paris, go to the catacombs," recommends a souvenir seller. "Twenty meters [66 feet] underground are piled the bones of six million people." Where did they come from?

Churches Poison the Air

The Paris catacombs—a subterranean cemetery—received their bones only in the 18th century. Starting in the Middle Ages, people were buried in or near the churches. This brought money to the church but was most unhealthy, as the cemeteries were in the heart of town. It became a nightmare for the neighbors of the largest cemetery in Paris, the Saints-Innocents, whose 1.7 acres welcomed the dead from about 20 churches, as well as unidentified corpses and victims of plagues.

In 1418, the Black Death contributed some 50,000 corpses. In 1572, thousands of victims of the Saint Bartholomew's Day massacre

were crammed into Saints-Innocents.* Voices called for the closure of this cemetery. About two million bodies, stacked sometimes 30 feet deep, had raised the ground level by more than 6 feet. The cemetery was a breeding ground for infection, and it gave off a putrid smell, said to turn milk or wine sour. The clergy, however, opposed closing the city's cemeteries.

In 1780 a communal grave cracked open and spewed corpses into neighboring cellars. Enough was enough! The cemetery was closed; and burial in Paris, forbidden. The mass graves were emptied into the disused Tombe-Issoire quarries. Each night for 15 months, macabre convoys transferred the bones. This was extended to include another 17 cemeteries and 300 places of worship. The bones were thrown down a 57-foot shaft, where a stairway now leads down from the street into the catacombs.

Visiting the Paris Catacombs

From the Denfert-Rochereau Square, just south of Paris' Latin Quarter, I make my way down the 91 steps into the catacombs. In 1787 the ladies of the royal court were among the first to view this underground burial ground by the light of burning torches. Today, 160,000 visitors come each year.

After the staircase comes a seemingly endless series of galleries where corpses are stored. I walk gingerly, reflecting on the fact that the catacombs occupy more than 100,000 square feet. A man named Philibert Aspairt gained unsought fame when he tried to find his way through these hundreds of miles of galleries. In 1793 he got lost in this maze. His skeleton was found 11 years later, identified by his keys and clothing.

About 30 percent of the area under Par-
is has been quarried. For a long time, quar-
rying was uncontrolled. In 1774, however,

1,000 feet of rue d'Enfer (Hell Street, now Denfert-Rochereau) collapsed into an abyss 100 feet deep. Paris was in danger of caving in. The stones "we see above ground," exclaimed one writer, are "missing under our feet." To support the underground galleries, magnificent arches were built.

"It's a shame they didn't pave the ground while they were at it," I lament, observing my muddy shoes. Slipping in a puddle, I manage to catch hold of a heavy bronze door. Behind the door lies a corridor with walls built of human bones. Grimacing skulls and brittle femurs and tibiae arranged in rows and in the shape of crosses and wreaths present a morbid scene. Slabs are engraved with Bible verses and poems reflecting man's meditation on the meaning of life and death.

Upon leaving the catacombs, I clean the mud off my shoes in the gutter, making sure that my keys do not decide to revisit the Paris sewers! My tour in the fascinating underground world of Paris has been an unusual experience that I will not quickly forget. Without a doubt, there is much more to Paris than meets the eye.

CROSSWORD SOLUTIONS

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* See *Awake!* of April 22, 1997, pages 7-8.

WATCHING THE WORLD

Shortage of Skilled Parents

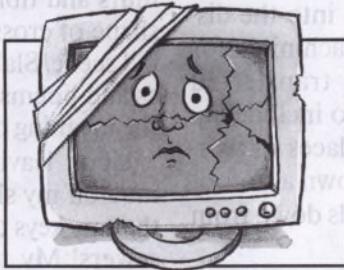
Canada's first national survey on parenting reveals that "many [parents] lack even basic knowledge of how children develop and how parents can assist in that process," says the *National Post*. Of the more than 1,600 "fathers, mothers, and single mothers with children under the age of six" surveyed, 92 percent acknowledged that being a parent is the most important thing they can do. Yet, "less than half were fully aware they can positively influence their child's level of intelligence by reading to them, playing with them, touching them, or holding them." Additionally, about 30 percent "believe every baby is born with a certain level of intelligence, which cannot be increased or decreased by how parents interact with them." Such findings are troubling, says the *Post*, since research shows that "a child's first five years are pivotal in developing their ability to learn, create, love, trust, and develop a strong sense of themselves."

Sweden to Separate Church and State

The Church of Sweden says that it will become separate from the State on January 1, 2000. This action will sever ties between it and the Swedish government that have existed since the 16th century. "Up until the first of January 1996 it has been possible for children automatically to become members of the Church of Sweden at birth, provided that one of the parents was a mem-

ber," says the church's official Web site. "Baptism was not required." The reform was ratified by the Swedish government in 1995 after four decades of debate and proposals within the church synod. About 88 percent of the Swedish population are members of the Church of Sweden.

Violence Against Computers



"What do you do when your PC [personal computer] does not do what you want it to?" asks the on-line German magazine *PC Welt*. "Do you thump it? Or do you throw it straight out the window?" Such reactions are not rare. In a worldwide survey of 150 information technology managers, 83 percent reported bursts of rage or outright violence directed against computers. Users frustrated by a never-ending download or by a mouse that quits working sometimes smash the monitor, punch the keyboard, dash the mouse against the wall, or even kick the computer. While the computer bears the brunt of the user's frustration, it is often the user that has caused the problem. For example, one worker got angry at her E-mail program because it

failed to send any mail. Later it was found that instead of keying in the E-mail address, she had typed in a street address.

Dress for Success

When you are preparing for a job interview, it's good to keep in mind that "well-dressed people leave good impressions," says the *Toronto Star* newspaper. That is because a first impression lasts a long time. Therefore, "the basic message for those in business is: If you're careless about how you look, you're careless, period," says the report. Experts say that a person who is neat and clean in appearance conveys an unspoken assurance to prospective employers or clients that they can expect quality work. Image consultants also stress that "an erect posture and energetic presence makes a strong first impression. Your tone of voice and pace of speaking make a difference."

Modern-Day Pirates

"Piracy is arguably the single greatest menace to modern shipping today," reports the *International Herald Tribune*. Pirate attacks are increasing, particularly in the Southeast Asian seas, apparently as a result of reduced naval patrols in the area. These seas, where some of the world's busiest shipping channels are located, provide lucrative bounty to pirates, who are thought to operate from the many isolated islands in the region. Well-armed

pirates use speedboats at night to plunder ships of all their valuables. Officials say that pirates, difficult to catch at sea, can only be stopped if they are tracked down on land, where they sell their stolen merchandise.

Egypt's Gold Mines

Egypt's gold mines are said to have produced over 1,500 tons of gold in ancient times. Although it has been almost 2,000 years since any sizable amount of gold was mined there, geologists estimate that much gold is still left in the ground. "We would like to bring back the glory of the Pharaohs and will reopen our mines that go back more than 6,000 years," said Sami El-Raghy, managing director of an Australian gold-mining company. The Egyptian government has given his company the rights to explore the Eastern Desert area next to the Red Sea, where 16 Pharaonic mines are known to exist. However, a 2,900-year-old map discovered in Luxor (ancient Thebes) in 1820 indicates that there are also 104 lost mines in the area, covered over by desert sands. According to *The Wall Street Journal*, it is believed that through the use of modern techniques, some may become viable gold mines again.

Six Billion and Counting

The United Nations Population Fund estimates that world population reached six billion on October 12, 1999. It took just 12 years for world population to increase from five to six billion, said Carl Haub, of the Population Reference Bu-

reau. According to a bureau report, "world population grew 4.4 billion in the 20th century," while in the 19th century, "the population grew by only about 600 million." Increases in life expectancy are the primary reason why world population surged in the 20th century. "Today, about 98 percent of world population increase takes place in less developed countries," said Haub.

Record Temperatures



"In 1998, the Earth's average temperature literally went off the top of the chart," says a Worldwatch Institute press release. Higher atmospheric temperatures result in greater evaporation and rainfall, which, in turn, creates more destructive storms. For example, "weather-related damage worldwide totaled \$92 billion in 1998, up a staggering 53 percent from the previous record of \$60 billion in 1996," says Worldwatch. In addition, record storms and floods forced an estimated 300 million people from their homes in 1998. Scientists are uncertain whether 1998 was an aberration or this destructive trend will continue. However, the report said: "Climate simulation models suggest that the events of 1998 could be a window on the future."

Speedy Reforestation

An area of the Amazon rain forest that was ruined by mining has been transformed into a luxuriant forest within two years, reports *New Scientist* magazine. Scientists at Embraña, a government agricultural research center in Brazil, developed a method of implanting nitrogen-fixing bacteria in tree seeds. Once planted, their growth speeds up greatly. The technique proved successful at Oriximiná, in the northern state of Pará, where bauxite mining had caused extensive deforestation. Researchers are using the new method on Brazil's eastern coast, where only 6 percent of the original forest remains, notes the magazine.

A Mother's Worth

If you were to add up the salaries for all the jobs that a mother performs throughout the year, how much would her services be worth? According to a report in *The Washington Post*, she would receive \$508,700 a year! This figure is based on a study of median salaries for occupations that mothers typically perform. These are some of the 17 occupations included in the report, along with their average annual salary: Child-care worker, \$13,000; bus driver, \$32,000; psychologist, \$29,000; animal caretaker, \$17,000; registered nurse, \$35,000; executive chef, \$40,000; and general office clerk, \$19,000. According to Ric Edelman, chairman of the financial services company that conducted the study, these figures do not take into account such expenses as Social Security and other retirement benefits.

FROM OUR READERS

Infidelity Thank you for the April 22, 1999, *Awake!* series, "When a Mate Is Unfaithful." I was the victim of infidelity. Although I have been divorced for three years now, the pain is still strong. The articles helped me to recognize that I need to let go, pick up the pieces, and move on with my life.

V. B., Trinidad

I have researched this subject before, but it has never been explained so well. From the moment I first heard the Bible's message, I understood that it was the truth. Now Jehovah has given me another reason to believe it.

G. B., Italy

My divorce caused me to suffer from severe depression, low self-esteem, and a never-ending list of health problems. Although the suffering continues, I am so comforted by my faith in Jehovah's promises and the love and emotional support from my congregation!

A. B., Canada

Nine months after separating from my husband, I am still coping with the pain of living alone. How do I walk down the street without someone to hold my hand? Who will sit beside me at Christian meetings? Who will accompany me to the doctor? Thank you for reminding me that Jehovah does not abandon innocent mates.

E. S., Brazil

The box "Who Is Responsible?" was of much comfort to me. I opted for a divorce after my husband's infidelity. Like Job, I sometimes wanted to die. (Job 17:11-13) But the support of family members and Christian brothers and sisters has sustained me.

M. O., Argentina

I did not read the series—I devoured it! I have been through a divorce, and these arti-

cles discussed all the questions and anxieties that it aroused. Thank you for caring for us.

E. L., France

I was seven years old when my father abandoned our family. It was a harsh blow. Some years later, Father asked us to accept him back again. My brothers and I were firmly against the idea, but Mother said yes. After reading your articles, I am beginning to understand why she made that difficult decision.

A. A., Brazil

Thank you, thank you, thank you for the series! It is comforting to know that one's feelings and emotions are similar to those of others who face this same situation. However, you said: "Possibly you have not given as much love, tender affection, commendation, and honor as your spouse needed." This statement is hurtful to those of us who have tried to make a troubled marriage work. When a person is contemplating adultery, he can become very obnoxious, and it is difficult to be affectionate with such a person.

L. W., United States

We are sorry if these comments caused pain to any of our readers. But it was not our intent to imply that an adulterer can blame his misconduct on his mate. In the box "Who Is Responsible?" we stressed that the adulterer is responsible for his wrongdoing, regardless of "an innocent mate's imperfections." The statement in question was part of a discussion of reconciliation. We were simply stressing the need for good communication, encouraging reconciling couples to identify problem areas in their marriage that might need urgent attention. There may also be hidden resentment that needs to be brought out into the open. Usually, such a discussion results in both mates' admitting to some shortcomings. After all, "we all stumble many times." (James 3:2) And while such discussions are often very painful, they are, as our article stated, "an important part of the process of restoring trust."—ED.

By Awake!
correspondent
in Britain

European Health and Safety

OVER 16,000 men and women work at the headquarters of the Watch Tower Bible and Tract Society and its 109 branch offices. Some of these volunteers care for printing, workshops, and machinery maintenance. But whatever their assignments are, they are committed to sound work practices, which safeguard life and health.

The high standard set by the Britain branch in its factory at London's Mill Hill was acknowledged publicly in 1998, following the 1997 European Week for Safety and Health. A crystal bowl inscribed with the words "European Week for Safety and Health—Award Winner 1997" was presented to the Society. What led to their receiving this prestigious award?

In 1994 the Watch Tower Society submitted to the Health and Safety Executive (HSE) a detailed analysis of how to reduce the number of back injuries at work. At the conclusion of this campaign, the Society received an HSE certificate for its support.

Awards given to Watch Tower for its high health and safety standards



In 1996 the Society was asked to compile a short report on its health and safety activities. Subsequently, a certificate was presented to the "Watchtower Bible & Tract Society in recognition of their valued contribution" to health and safety.

The following year, 1997, the HSE invited Watch Tower to share in its European health and safety campaign. In due course the Society submitted a detailed treatise, with photographs, showing that by connecting individual power tools to the main dust extraction system, it is possible to reduce dust from a wood workshop by 90 percent and reduce wood particles by 100 percent, at a cost of less than £250 (\$400).

As a result, the Society was among 30 award winners invited to meet representatives of the European Commission and the British government as well as the chairman of the Health and Safety Commission. When presenting the inscribed bowl, he commented: "Well done, Watch Tower!"

An Atheist Finds Answers

"THE articles published in your Watchtower and Awake! magazines are incredible! Your latest issues are irresistible! They answer very many questions and also give peace of mind."

So stated a reader from south India. He was born a Hindu, but his father raised him as an atheist. He says: "I found no purpose in life. Darwin's theory of evolution sounded absurd. For years questions have taunted me, such as Who is God? Why is this world corrupt? Where do we go after death? Are wicked spirits real?"

Having found the answers to his questions in *The Watchtower* and *Awake!* this reader subscribed to both magazines, sent gift subscriptions to his sister, and now passes on the magazines to people he meets. Being a photographer and an artist, he expressed appreciation for the magazines' artwork, which "speaks for itself." By reading these fine magazines, you can join the millions worldwide who have had their questions answered and have gained peace of mind.

COVER, pages 2-9 and 32: Einstein: U.S. National Archives photo; Model-T Ford: From the Collections of Henry Ford Museum & Greenfield Village; Great Depression: Dorothea Lange, FSA Collection, Library of Congress; Nicholas II and family: From the book *Liberty's Victorious Conflict*; League of Nations building: U.S. National Archives photo; Churchill: The Trustees of the Imperial War Museum (MH 26392); Battleship: U.S. Navy photo; Atomic bombs: USAF photo; Gandhi: Culver Pictures; Man on the moon: NASA photo; Pollution: Gado-Foto; Mao Tse-tung: Culver Pictures; African children: FAO photo/F. Botts; Statue of Lenin: Juraatis/Sipa Press; Space shuttle: NASA photo; Archduke Ferdinand: From the book *The War of the Nations*; Lenin: Musée d'Histoire Contemporaine-BDIC

