
**The three faces
of love**

**Understanding
how nature works**

**The Adventist
message and the
challenge of evolution**

**The synagogue
and the church**

VOLUME 8: NO. 2



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Away from home, estranged from love and distanced from hope, they were captives camped by the rivers of Babylon. To their masters, the waters of Euphrates symbolized the timeless rhythm of life—ever flowing, never ending, feeding the city, protecting an empire. But to the captives, those very waters meant loss of freedom, identity, and dignity. In that tension of Babylon, the masters demanded the captives, “Sing us one of the songs of Zion.”

Was the demand one of jest born out of religious bigotry? Or was it a result of genuine curiosity that so often and so surprisingly leaps out of that latent image of God buried somewhere in the lowest depths of the human soul?

Never mind the psychological analysis of the question. Sufficient was the opportunity to shout, to praise, to sing, and to say, “Our God reigns in Zion.” But the children of Israel missed out on the opportunity and chose to take pride in their exclusiveness. Captivity or freedom, Babylon or Jerusalem, they were the exclusive ones, the chosen ones, and their song is their song. “How shall we sing the Lord’s song in a strange land?” they said and retreated into themselves (Psalm 137:1-4).

Fortunately, not all of Israel were of that mindset. We know of at least four who sang the songs of Zion, prayed the prayers of Israel, proclaimed that their God is able, and turned the tides of history. Daniel and his three friends became symbols of hope. They turned the university of Babylon and the palace of the emperor into centers of witness and dispensers of hope, so that emperors of two dynasties could send out edicts acknowledging the sovereignty and supremacy of God (Daniel 2:28, 29; 6:25-27).

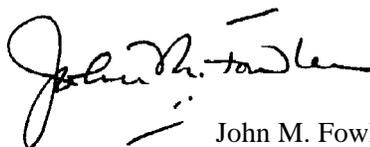
That kind of opportunity to sing the songs of Zion in a strange land is available to Seventh-day Adventists even today. We may not be captives, but we are in a strange land, sometimes as pilgrims, sometimes as professionals, sometimes as leaders in an alien culture. Consider, for example, Adventist students in non-Adventist campuses around the world—150,000 of them. For every student in an Adventist college, there are three in a non-Adventist college. What an opportunity to sing the Lord’s song!

But the question always creeps up: How shall we sing? I suggest three simple steps:

1. Know the song. The Lord’s song is about Him. He is my Creator, my Redeemer, my Friend, my Counselor, my Guide, my returning Lord. I have tasted Him. He is good.

2. Know the rivers of Babylon. They can be treacherous. They can be polluting. But the dynamic of faith can keep us in Babylon but not of Babylon. We can dare to be a Daniel, a Nehemiah, an Ezra, or an Esther. We need not be a Sanballat or a Tobiah.

3. Know your task, both immediate and distant. We need to handle both without sacrificing one or compromising the other. We have an immediate task—to study, to research, to teach, to govern. We also have a distant vision—to extend the kingdom of God, to sing the song that never fades.



John M. Fowler, *Editor*

Likes the illustrations

I was very much impressed by the content of *Dialogue* 6:2 and especially by the outstanding illustrations that accompanied the interview with Nathan Greene. Is there a way in which I can obtain larger copies of “The Carpenter,” “The Family of God,” and “Chief of the Medical Staff”? We would like to frame and display them in our offices for the enjoyment of everyone who visits us.

ELIZABETH ARTEAGA H.
Universidad Peruana Unión
Ñaña, PERU

The editors respond:

Many of our readers also enjoyed the portfolio of paintings of this great Adventist artist, Elizabeth. You can obtain information on ways of acquiring copies of his work for framing by contacting *The Hart Institute*: 2223 East Alvarado; Fallbrook, CA 92028; U.S.A. Telephone: (619) 723-8082.

Concerned about humor

Having just received my first two copies of *Dialogue* (6:3, 7:1), I want to congratulate all those involved in the preparation of this journal. I thoroughly enjoyed the articles and would like to continue receiving future issues to strengthen my pastoral ministry. However, I am concerned about the humor depicted in the cartoons. The one that appears on page 21 (6:3) reveals bad taste in alluding to courtship, and the one on page 14 (7:1) takes in jest the words of Jesus. The apostle Paul admonishes us to avoid “foolish talk or coarse joking” (Ephesians 5:4), and Ellen G. White counsels that “amusement is not to be interwoven with instruction in the Scriptures” (*Evangelism*, p. 211). I pray for your ministry and wish to meet you all some day soon in the New Earth.

DANIEL BARANOW
Jujuy, ARGENTINA

The editors respond:

We carefully select the few cartoons that appear in our journal. They are used mainly to make our readers think and to bring balance to our more serious articles. The Bible, as you know, contains good doses of humor. As an example, remember the sarcastic remarks of prophet Elijah in taunting the priests of Baal at Mount Carmel (1 Kings 18:26-29). Jesus used humor both to teach spiritual truths and to challenge His critics. Recall, for example, His observation that those who ignored His teachings were as foolish as those building a house on the sand (Matthew 7:24-27), or His ironic statement that “it is easier for a camel to go through the eye of a needle than for a rich man to enter the kingdom of God” (19:24). He sarcastically called the hypocritical Pharisees “whitewashed tombs” (23:27). Ellen G. White had a healthy sense of humor, which she used in her writings and speeches—even in her sermons! (See Laughter and Tears of our Pioneers, by Paul Gordon and James R. Nix [North American Division Office of Education, 1989]).

Although we may not agree on the proper use of humor, Daniel, we are pleased that you enjoy the articles that appear in Dialogue. Perhaps you should keep on reading them and just skip the cartoons!

A modern story of steadfast faith

I enjoy reading *Dialogue* and especially appreciated the profile of Dr. Pike-Yee Kan (7:3). As a Seventh-day Adventist pre-medical student on a secular campus, I face similar conflicts. Although I have so far been spared consequences as challenging as hers, my experience agrees completely—we can only stand firm on the big tests by standing firm on the little ones. “He that is faithful in that which is least is faithful also in much” (Luke 16:10).

I almost held my breath as I read the interview question, “Did you sit for the examination [on the Sabbath]?” And how I thrilled to read her answer, “No, I

didn’t.” It is my conviction that we deny God the privilege of using us to exalt His name and character whenever we compromise principle. Thank you for this modern story of steadfast faith among God’s people. And surely God will continue to bless and use Dr. Kan as His witness.

JOHN H. KELLY, JR.
Shepherd College
Hedgesville, West Virginia,
U.S.A.

Surviving in a secular world

As a 19-year-old Adventist student pursuing a degree in agricultural economics, I find the contents of *Dialogue* both fascinating and fresh. How I wish I could receive each new issue regularly! The sad fact is that I have seen only three copies. We are only four Seventh-day Adventists in a public college with more than 800 students. We face religious opposition, which makes our faith grow stronger. In fact, thanks to God’s help, we are surviving in a very secular world.

In *Dialogue* 6:2 (1994), I really appreciated David Wong’s “Editorial” and “The Survival Kit.” Both were enlightening and challenging. Don’t you worry: By God’s grace we will hold on to our faith and continue to stand tall. Thanks for the encouragement your journal provides. We’ll keep on reading it, even if we get them occasionally and late!

NIMROD S. MANGILOG
ASCA, Banga, Aklan
PHILIPPINES

The editors respond:

We were thrilled by the content of your letter, Nimrod. We are so glad to know that you and your Adventist fellow-students enjoy Dialogue, although copies reach you only occasionally. We are mailing you a copy of a recent issue, to bring you up-to-date. In order to receive future issues regularly, contact the education or the youth director of your union. They are responsible for the distribution of Dialogue in your area. We pray that God will continue to strengthen your faith and help you succeed in your studies!

Wants to stay in touch

I am a 25-year-old Adventist from Zimbabwe who is studying medicine at Charles University in Prague. Some time ago I obtained a copy of a back issue of *Dialogue* and read its content with interest. I want to stay in touch with the journal and with Adventist university students in other parts of the world. They can write to me at the address listed below. Thank you!

FORTUNATE MCHECHESI
Svehlova Kolej
Slavíkova 22; Prague 3
CZECH REPUBLIC

An honor to be a subscriber

I consider it an honor to be a subscriber to *Dialogue*. The process of secularization that has been affecting, first, our world and, secondly, the Seventh-day Adventist Church, convinces me that the mission your journal has undertaken is extremely important. Your wise selection of topics and authors, your biblical approach to the issues, your clear and positive style—all make *Dialogue* an ideal vehicle to convey truth in public college and university circles, where confusion increasingly reigns as we near the end of this century. May the Holy Spirit continue to inspire and guide you, making your journal a vehicle of truth and, eventually, an instrument of salvation for many.

KATHLEEN GENOVER
NELSON, PH.D.
North Ft. Myers, Florida, U.S.A.

Continued on page 14

Write to us!

We welcome your letters, with reactions and questions, but limit your comments to 200 words. Address them to *Dialogue Letters*: 12501 Old Columbia Pike, Silver Spring, MD 20904, U.S.A. You can also send them via fax: (301) 622-9627, or E-mail (via CompuServe): 74617,1231. If selected for this section, your letter may be edited for clarity or space.

Perhaps the longest and simplest love letter ever written was composed in 1875 by Marcel de Leclure, a French painter. His work of love contained one phrase: *I love you!* 1,875,000 times. But this figure represents only a small portion of the actual times *I love you!* was spoken or written during the production of this unusual letter. Marcel did not actually write this letter himself, but hired a scribe to do it for him. According to scribal tradition, Marcel dictated the letter—word for word. The scribe then repeated each phrase back to him as he wrote it down on paper. The phrase *I love you!* was actually spoken or written 5,625,000 times during the composition of this lengthy love letter. Marcel was in love and wanted his sweetheart to know it!

All of us want to be loved. Our need for love is so great we are often frustrated and insecure when our love needs are not met. But what is love? I suggest there are at least three faces of love, as it matures in life: the “if” face, the “because” face, the “in spite of” face. These faces show up, depending on our needs, wants, desires, and motivation.

The “if” face

The “if” face is the easiest one to spot. Most of us have seen this face of love many times in our lives. It is a manipulative one at best and a destructive one at worst.

Wendy was 18.* She sat across the table from me with her two-year-old daughter on her lap. She told me her sad story of “if” love. Her boyfriend had manipulated her into having sex. He kept pleading, “If you really love me, it is all right.” She eventually gave in. Wendy became pregnant, and the boy’s parents forced him to marry her. Now he was running around with other women. She had become nothing more than his housekeeper and babysitter. “I’ve missed out on all my teen years!” she sobbed, burying her face in her hands.

Wendy deeply resents her husband for what he had done to her. She feels cheated and cheap. She feels she was forced into becoming a parent. Her self-esteem is low; her life is miserable. She recognized too late the deceptive “if” face of love.

Many marriages are founded on this kind of love. The “if” love can exert such an overwhelming power and urge that

some fail to recognize its deception. The primary target of this love is not the other person, but self. “If” love is interested only in satisfying one’s own needs and desires. Many young people get caught up in this selfish drive toward fulfillment and realize too late that they have been deceived.

Tragically, far too many parents offer only the “if” face of love to their children. Harry committed suicide

The three faces of love

True love is unconditional and loves the unlovable.

because he failed his medical entrance exam. His father’s “if” love fuelled his depression. Harry knew how much his father wanted him to be a doctor. He was convinced that if he did not succeed in doing so, his father would reject him. Rather than witness the withdrawal of his father’s love, the young man took his own life.

by
Len
McMillan

The “because” face

The “because” face of love operates on a more pleasant level than “if” love. This face places value on and is considerate of the other person. It says, “I love you because you are sexy; because you are a ‘hunk’; because you write romantic poetry; because you bring strength and security into my life; because you are a great conversationalist; because you drive a classy automobile; and so on.” Whatever reason “because” love chooses to take a second look, it places value on the recipient of its glances. It offers positive strokes to the one being loved.

However, the “because” face tends to foster competition and insecurity. Those who receive “because” love feel

they must continually prove that they are lovable. They are afraid of losing the quality that makes them loved. A young woman is loved because she is beautiful. A young man is loved because he is athletic and good looking. In some cases, the fear of future rejection can even prevent them from enjoying the “because” face of love in the present. Scripture reminds us, “There is no fear in love, but perfect love casts out fear. For fear has to do with punishment, and he who fears is not perfected in love” (1 John 4:18).** Fear and love cannot exist in the same relationship. A love that creates fear of failure is not true love.

Judy was young and beautiful. She had won many beauty contests in high school and was one of the most popular girls on the college campus. She was engaged to a handsome young man. But one day tragedy struck. As she was working in her father’s dry-cleaning facility, the flammable dry-cleaning fluid exploded and burned her face, chest, and arms. She was so disfigured that she would not allow the bandages to be removed except in the presence of her doctor. She was horribly disfigured.

Soon after the accident, her fiance broke off the engagement. Her parents could not face their disfigured “beauty queen” and rarely visited her in the hospital. Even though they spoke to her over the telephone, it was not the same. In a few months Judy died, never having left her hospital room. Not from complications. She simply gave up her will to live, because the reason she was loved had been taken away from her. Her beauty was gone.

The “in spite of” face

This kind of love simply loves. Unlike the “if” face, it is not based upon selfish motivation. It expects nothing in return. Unlike the “because” face, it does not depend upon the attractiveness of the other person. It looks past both the good and bad qualities and gazes into the soul. It is able to love even when rejected. It finds beauty in the ugly. It finds infinite value in a finite being. It looks lovingly on all who fall within its gaze.

Where do we find such a lovely face? The ultimate expression of that love is Jesus. He came to love humanity “in spite of” them. He came to introduce

a face of love that had been missing since the Garden of Eden. He brought to this earth a love without conditions, fears, or selfish motivation.

Jesus did not bring a face of love that demands, “I will love you if you are a good moral person. I will love you if you worship me. I will love you if you pay a faithful tithe.” Nor did He bring a face of love that reasons, “I love you because you pray each day. I love you because you attend church each week.” These are all measures of *our* love for God, but they do not measure God’s love for us.

God did not place conditions upon His love. In fact, “God shows His love for us in that while we were yet sinners Christ died for us” (Romans 5:8). God doesn’t wait until we deserve to be loved. There are no “ifs” or “because” in God’s love. He simply loves! He is love! And that love continues in spite of whether or not we deserve it.

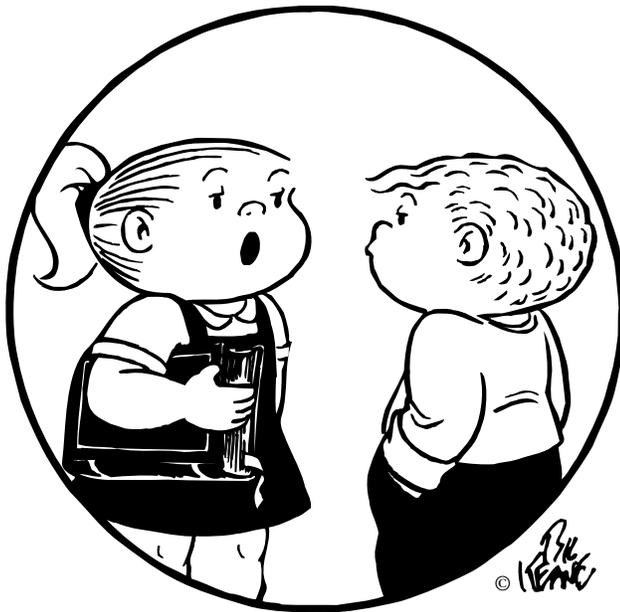
Jesus demonstrated the power of “in spite of” love when He wept over the death of Lazarus. Those who saw Him weeping said, “‘See how he loved him!’” (John 11:36). That was love in spite of who Lazarus was. Lazarus did not merit the resurrection, but Jesus loved him enough to call him from the grave.

Which face is your face?

Which face of love do you prefer? The “if” face with its manipulative nature? The “because” face that must be earned anew every day? Or the “in spite of” face that continues to love you even when you appear unlovable?

It would be hard to imagine a young man proposing to his girlfriend in this manner, “Honey, I want you to know that I love you in spite of your many faults. I love you in spite of your crooked teeth. I love you in spite of your angry disposition. I love you in spite of....” It wouldn’t take very many “in spite of” statements before that relationship would reach a traumatic ending. Few indeed really want to be loved “in spite of.” We would much rather be loved “because of.”

However, hidden behind the face of “because” love is the root of all religious legalism. Many want God to love them “because” rather than “in spite of.” Surely our good works must count for something! Surely these works will at least get us an apartment with a view on



“Epistles are the Apostles’ wives.”

Reprinted by permission from *Count Your Blessings*
(Focus on the Family Publishing).

the main thoroughfare in heaven. It is difficult for us to admit that we bring nothing to the relationship except our need. It is difficult for us to understand that God has no reason to love us, but He does! It is difficult for us to comprehend that any changes this new relationship brings into our lives is a direct result of His “in spite of” love and not the *cause* of His love. It means recognizing that nothing we can do will make God love us any more than He already does. God is love!

Jesus pleads with us, “Love one another; even as I have loved you” (John 13:34). This is actually a command empowered by “in spite of” love. Only that enabling could make such a bold request and expect obedience. Learning to relax in God’s love does not mean to be lax in upholding His standards. Rather, it means having confidence that “neither death, nor life, nor angels, nor principalities, nor things present, nor things to come, nor powers, nor height, nor depth, nor anything else in all creation, will be able to separate us from the love of God in Christ Jesus our Lord” (Romans 8:38, 39).

The meaning of love

What does having and giving “in spite of” love mean? It means you can let Christ remodel your life without the worry and insecurity that someday Christ will abandon His remodeling project! It removes insecurity and fear of failure. It takes away the anxiety of rejection. It means we no longer have to compete fiercely in order to feel loved. It does not discredit another in order to add credibility to one’s own account. It does not play games with God in an attempt to gain His love. It recognizes that God has already seen us at our worst—and still loves us. It means not being under constant tension or demanding our rights from others because of our insecurity. It means we can begin to share “in spite of” love with our family, friends, neighbors, colleagues, fellow church members—and even with that special someone in our lives.

Tammy was a beautiful young wife. She always had a cheerful smile. Now, she lay on her hospital bed, after a surgery for a cancerous tumor on her cheek. The surgery had turned her face into a grotesque form, with her cheerful smile forever gone. The surgeon had

Guidelines for Contributors

College and University Dialogue, published three times a year in four language editions, is addressed to Seventh-day Adventists involved in postsecondary education either as students or teachers, and also to Adventist professionals and campus chaplains around the world.

The editors are interested in well-written articles, interviews, and reports consistent with *Dialogue*’s objectives: (1) To nurture an intelligent, living faith; (2) to deepen commitment to Christ, the Bible, and Adventist global mission; (3) to articulate a biblical approach to contemporary issues; and (4) to offer ideas and models of Christian service and outreach.

Dialogue usually assigns articles, interviews, and reports for publication. Prospective authors are urged (a) to examine previous issues of our journal, (b) to carefully consider these guidelines, and (c) to submit an abstract and personal background before developing a proposed article.

- **Essays:** Well-researched and stimulating feature articles that focus, from a biblical perspective, on a contemporary topic in the arts, the humanities, religion, or the sciences.
- **Profiles:** Biographical sketches of Adventist men and women who are outstanding in their careers or professions, and who are also active Christians. Recommendations are welcome.
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- **Campus Life:** Practical ideas for the college or university student, chaplain or teacher who seeks to integrate faith, education, social life, and outreach in an academic setting.
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done his best, carefully following the curve of her jawbone to hide the scar, but the tumor had been too large and the incision too deep. His scalpel had severed the nerves on the right side of her face. The operation had left the right side of her mouth pulled up into a half-open smile that never moved.

The young woman and her husband looked deep into each other’s eyes as they discussed the future. When the surgeon came in, Tammy asked, “Will my mouth be always like this?”

“Yes,” replied the doctor, “I am afraid it will. In order to remove the tumor I had to cut the nerves. They may never grow back. I’m sorry.”

Nodding, Tammy looked toward the ceiling. A tear welled up in her eye and

dropped silently on her pillow. Her husband reached out and grasped her hand in his. Their eyes met, searching and questioning. Smiling broadly, he lovingly assured her, “Honey, I actually like your new smile. It’s kind of cute.”

Isn’t it great to know God still loves us in spite of our crooked smile? 🙏

Len McMillan (Ph. D., Ephraim Moore University) is family life director at the Pacific Health Education Center; 5300 California Avenue, Suite 200; Bakersfield, California 93309; U.S.A.

*Names in this article are fictitious to protect the privacy of the persons concerned.

**All Scripture passages in this article are from the Revised Standard Version.

While we keep fitting pieces into the puzzle of nature, we should be aware that we are only working on a small corner and that the hope of dropping in the last piece is beyond our grasp.

Scientists attempt to find patterns in the things human beings see and experience. The most desirable and useful patterns are those that can summarize many observations into a

Understanding how nature works: Last piece of the puzzle?

by
J. Mailen
Kootsey

compact principle. For example, Newton's laws of motion, compact enough to be written on a postcard, provide a simple and elegant picture of planetary orbits around the sun and at the same time describe the motion of a baseball in flight, or a car on a highway, as well as all other kinds of motion we see every day.

The striking successes of Newton's laws of motion have led scientists to hope for other powerful laws to explain and simplify other kinds of phenomena. Each time someone discovers one of these organizing principles, the experience brings elation to scientists—something like the satisfaction in matching up pieces of a jigsaw puzzle. As each new law is discovered, the universe seems a little more understandable. Each new success also invites speculation about the overall size of the

puzzle. Are we about to close the borders and complete the pattern? Are we close to finding the last set of laws needed to describe the universe, giving us unlimited understanding and capability for prediction?

In recent decades, we have discovered some patterns that don't seem to help complete the puzzle, but rather appear to extend it. These difficult ideas are now accepted as accurate descriptions of natural phenomena. The following is a brief introduction and illustration of three of these concepts: dynamic systems, complexity, and chaos.

Dynamic systems

Early researchers in almost every field of science have regarded natural things as static and unchanging. The stars, for example, were seen as steady points of light fixed on a rotating, hemispherical "ceiling." Now we understand them to be large, complex, and dynamic bodies, moving at blinding speeds in different directions, heating up or cooling down, exploding or contracting, colliding or flying apart. Stars only appear static because their changes are slow when compared to the time scale of human experience.

Bone is another example where a static appearance is deceiving. Bones are sometimes compared with the steel girders buried inside the walls of a building. Their function is to provide the rigidity necessary to keep the body upright, but otherwise they are supposed to keep out of sight and not break. This they usually do, but the similarity to steel girders ends there.

Bone is a composite material, the inspiration for numerous high-technology manmade materials. Strong crystals of a calcium salt are embedded in a matrix of elastic collagen to make up a material that is both light and strong. Fiberglass—combining the strength of glass fibers with the flexibility of plastic—is a well known manmade composite. Others continue to appear, such as the graphite composites used in making tennis racquets.

Even more important than its structural form, bone is a living structure made up of a community of cells interspersed with small blood vessels. One type of bone cell secretes the elastic collagen and helps form the crystals from calcium and phosphate in the surrounding

solution. Another type of bone cell breaks down the collagen and dissolves the crystals back into solution. These two types of cells work in different regions in a manner something like urban renewal. Older parts of bone are dismantled in some areas while construction of new bone proceeds in other areas. The two processes are carefully balanced so we always have the right amount of bone necessary for support. Hormones from other parts of the body help with the regulation of this dynamic process, and even external forces on the bone influence the breakdown and renewal processes.

Steel beams are static and are thus unable to adapt to different needs or to repair themselves when damaged. Bone characteristics, on the other hand, can be changed by subtle alterations of the growth or destruction processes. The growth rate is normally in exact balance with the rate of destruction, but if the growth rate is increased slightly, the balance will tip in favor of growth, and the size of the bone will increase. The balance could, of course, tip just as easily in the direction of destruction, as has been observed in extended space flights. Because bone construction is guided by cell internal instructions, bones can repair and restore themselves by shifting the balance toward growth in selected areas. New bone is deposited to repair breaks, crooked bones can gradually become more straight, and bones with more stress can grow stronger to handle the load. As dynamic systems, bones are thus much more versatile and adaptable than static girders.

The methods used to study dynamic systems are also quite different from those used to study static objects. For the latter, the main tasks are naming, classification, and measurements of physical characteristics such as size, shape, color, etc. Dynamic systems require many more measurements and observations. It is necessary to know how such systems behave under different conditions and in response to different stimuli. Furthermore, it is difficult (if not impossible) to summarize all the behavior variations of a dynamic system in a few words or mathematical equations. The usual approach is to write equations describing the way each component of the system relates to the others, but it may be very difficult to

solve the equations to predict how the system will behave as a whole.

Dynamic systems are thus combinations of interacting components, and their interesting characteristics come from the changing relationships between components. One force is balanced against others, and the changing balance means changing behavior. Once we recognize the nature of the dynamic systems, it becomes apparent that we are surrounded by such systems. From microscopic cells to the global environment, we see complex forces and processes grouped together and interacting with one another. Instead of a fixed universe, we see one characterized by interaction, change, variation, and response.

Complexity

Someone has said that the “hard” or mathematical sciences have succeeded because they looked for and found simple things to study—sufficiently simple to be described by the mathematical tools available, such as Newton’s laws of motion. Physics textbooks, for example, have been filled with exercises assuming “frictionless” motion. Textbook writers know that we have to live with friction in real life, but the mathematical tools to make predictions are limited. Hence, the actual situations have not been given extensive treatment. In recent decades, computer technology has greatly expanded available mathematical tools, permitting scientists to work on and think about systems of much greater complexity. Scientists in all fields are now including more realism in their studies, instead of being limited to idealizations known to be greatly oversimplified. In fact, a new branch of science now focuses on complexity itself.¹

Consider, for example, the muscle cells that form the heart and that cause the heart to pump blood. Functionally, these cells are small “motors” that use energy derived from food to make the heart contract and pump the blood through arteries, capillaries, and veins. The technology of mechanical motors is well developed, but it is of little help in understanding heart cells because the principles on which they work are quite different.

In the heart cell, the contractile force is generated by large molecules with electrical attractions. How these molecules generate force and motion is interesting and complex enough, but that only begins to describe how the muscle works. The contractile molecules are held in place by an elastic matrix and by the thin membrane walls of the cells. The membrane wall separates the fluid inside the cell from the outside fluid and serves several functions, including regulating the fluid environment around the contractile molecules and coordinating the contraction of the large number of cells making up the heart. The number of molecules of all kinds inside the cell has to be kept constant so that the forces of osmosis do not shrink the cell or cause it to swell and tear apart. The energy necessary to power the contraction has to be obtained from glucose circulating in the outside fluid and converted into a form usable by the contractile molecules. Oxygen necessary to release the energy has to be taken in, and carbon dioxide and other waste products removed from the cell. The calcium ions that initiate the contraction have to be moved around inside the cell and their amount closely regulated. Finally, each cell has to communicate with its neighbors to know when to contract, so that the entire heart muscle works together as an efficient pump.

Large molecules span the cell membrane wall of the muscle cell to move molecules in and out, making all these processes work. At least a dozen types of such transport molecules are known to exist in heart cell membranes, and more may yet be discovered. Each is like a miniature factory with numerous steps in the process that moves molecules in and out. The transport molecules do not work independently, but are affected by the results of all the other transport molecules and by other factors in their environment. As a result, they are effectively linked together into one large, complex system.

Thus the microscopic heart cell—too small to be seen by the unaided eye—is a system of incredible complexity with numerous interacting parts, each highly complex in itself. We cannot predict the

behavior of the heart cell by simply adding together what we know about its individual components (complex molecules). It is necessary to know both the behavior of its components *and* how they interact with each other as a “community.” Only with powerful computers has it been possible to even begin to understand how such a system functions,² and the most powerful computers available today fall far short of the capacity necessary to process all that we know about heart cells.

The heart is, of course, only part of the circulatory system, the circulatory system is only one of the organ systems in the body, and one person is only a small part of a society. The task of understanding a single complex system is difficult enough, but nature seems to be made up of an endless hierarchy of linked and interacting systems. Our mathematical tools (including computers) struggle to cope with one or two levels of this hierarchy at a time, but for the whole they are completely inadequate.

Chaos

Scientists have made a living studying regular behavior. It isn't that everything we see is regular and repeatable. There just didn't seem to be any point in studying irregular behavior, since the whole point of science is to find regularities. This approach made it impossible to discover “chaos” as a principle in science until about 25 years ago when Robert May started thinking about systems that produce unpredictable results.

May was studying the laws of populations and how their sizes change from one generation to another. If each individual in one generation produces two offspring in the next (a relationship represented by a very simple mathematical equation), the result is an explosion of growth, given the name Malthusian from the person who first studied the mathematics of such growth. A slight modification of the basic growth equation gives the Logistic equation,

with limited growth. May programmed the Logistic equation into his computer and studied how it behaved as he changed the growth ratio (average number of children per parent). For some smaller values of the ratio, the equation predicted a population of steady size. A little larger value of the ratio, and the population oscillated back and forth—regularly—between high and low values. A little larger ratio and the oscillation suddenly went twice as fast. Still a little larger value of the ratio and... *chaos*: the population changed values irregularly with no visible pattern.

Mathematicians had seen chaotic behavior in mathematical equations before the 1970s, but May was the first to connect mathematical chaos with the real world. The result was startling because it weakened one of the fundamental dogmas of science: mathematical equations were considered to be the highest form for expressing principles of nature, and the solutions to mathematical equations describing natural systems were believed to be repeatable—no matter who did the calculation or how often it was repeated. That, after all, is the basic use of mathematics in science—to make predictions precise and repeatable. May showed that equations written to describe natural processes may under some circumstances give unpredictable results. Since May's discovery, chaotic behavior has been found in numerous areas such as epidemics, heartbeat patterns, business cycles, and fluid flow.³

May's discovery had two important results. First, scientists saw that they could no longer ignore phenomena that show irregular and non-repeating patterns. Second, there was a realization that even when correct mathematical equations are written to describe a natural system, and there is a way to solve the equations, we may not be able to use those solutions for the practical purpose of prediction because the outcome may be chaotic or random behavior. An example is the frustrating problem of trying to make long-term weather predictions.

Conclusion

The understanding of the three concepts described above—the ubiquity of dynamic and complex systems and

chaos—has helped mathematicians recognize the limitations of the scientific process and the wider scope of mathematics. No longer do scientists anticipate being able to describe all phenomena by applying a few laws expressed in mathematical form. Even if a unified formulation of natural forces and substance could be achieved, practical considerations such as limited mathematical tools and computer power and the possibility of chaos limit the predictions that could be made. While we do keep fitting pieces into the puzzle of nature, we recognize that we are only working on a small corner and that the hope of dropping in the last piece is beyond our grasp.

The three concepts described above also offer some new opportunities for the believer in a Creator God to enlarge his or her understanding. If the principles do apply to nature, then they are—in some sense—characteristics of God Himself that we might expect to find in His relationship with human beings. Learning from experience with dynamic systems, for example, we might expect to find a God who can adapt and adjust His responses to interact with human beings in a wide variety of conditions. He could well be described as unchanging in principle of relationships, yet adaptable to changing times as human needs change. 🌱

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Notes and references

1. W. Mitchell Waldrop, *Complexity: The Emerging Science at the Edge of Order and Chaos* (New York: Touchstone, 1992).
2. H. R. Pagels, *Dreams of Reason: The Computer and the Rise of the Sciences of Complexity* (New York: Simon and Schuster, 1988).
3. J. Gleick, *Chaos: Making a New Science* (New York: Penguin Books, 1987). For earlier discussions of chaos theory in this journal, see Kevin C. de Berg, “A Random Universe? Order and Chance in Nature and Scripture,” *Dialogue* 2:3 (1990), pp. 10-12; and David A. Thomas with Paul F. Barcenas, “Chaos: Crucible of Creation,” *Dialogue* 4:3 (1992), pp. 12-15.

Can Adventists believe in theistic evolution and yet proclaim the message of Revelation 14:6-12?

“In the beginning God created the heavens and the earth” (Genesis 1:1)*

The doctrine of Creation occupies an important place in Seventh-day Adventist message and mission. The reason for this is twofold: First, Adventists believe in a fiat Creation; and second, they are committed to the proclamation of the three angels’ message of Revelation 14.

The Adventist philosophy of origins affirms that God in seven days created the world. Adventists have no room for evolution, naturalistic or theistic, in their belief system. They not only accept that God is the Creator, but also believe that He took human flesh to become our Redeemer, as pointed out in John: “In the beginning was the Word, and the Word was with God, and the Word was God. He was with God in the beginning. Through him all things were made; without him nothing was made that has been made.... The Word became flesh and made his dwelling among us” (John 1:1-3, 14).

Thus in their proclamation of the gospel, Adventists emphasize both Creation and redemption. This emphasis is predominant in their allegiance to the everlasting gospel of Revelation 14. There we have the description: “Then I saw another angel flying in midair, and he had the eternal gospel to proclaim to those who live on the earth.... He said in a loud voice.... *Worship him who made the heavens, the earth, the sea and the springs of water*” (Revelation 14:6, 7, italics supplied).

In this message for the last days, the everlasting gospel calls for the worship of the Creator. Given that context, it is understandable why Adventists cannot subscribe to any kind of evolutionary explanation for origins.

How evolution views origins

Evolution accounts for the beginning of life in one way; Genesis in another way. Evolution teaches that life originated and developed by itself over extremely long periods of time. Genesis teaches a six-day creation.¹ Either random life origin or random life development, or both, or anything in between is in opposition to the three angels’ message.

Consider how the three branches of evolution explain life origin.

First, naturalistic (or atheistic) evolution needs only a combination of atoms, motion, time, and chance in order to bring reality into existence, from the most simple to the most complex forms of life, from the most elemental living particle to human life.

The Adventist message and the challenge of evolution

Second, deistic evolution perceives God as getting the process started by producing the first living matter. He programmed the evolutionary process by fecundating matter with the laws that its subsequent development has followed. Then, God withdrew from active involvement, becoming, so to speak, “Creator emeritus.”²

Third, theistic evolution goes beyond the deistic version by allowing for God’s continual intervention. This and its claim to harmonize the biblical account of Creation with scientific claims have made theistic evolution the reigning paradigm among contemporary evangelical scholarship. Therefore, it deserves a longer consideration.

Theistic evolution

Theistic evolution presupposes that “all material processes are divinely governed and directed; [and] evolutionary processes are no exception.”³ Thus, evolution is not an end in itself; it is just the means through which God brings everything in the universe into existence. It is God’s “modus operandi.”⁴ It is the “ongoing expression of God’s strategy,” for the development of His creation.⁵ It is God’s method of acting in the world⁶ through a *continual* creation.

by
Marco T.
Terreros

In an effort to harmonize biblical and evolutionary positions on origins, particularly with the long periods of time that all branches of evolution require, several Creation theories have been proposed. These include, the Reconstitution or Gap theory,⁷ the Day-Age or Geological Ages theory,⁸ the Artistic or Literary theory,⁹ and the Abridged Genealogies theory.¹⁰

Evolution, in any of these forms, runs counter to the heart of the three angels' message: the good news of the gospel. The news is good only because those to whom it is sent are in a desperate situation. To sinners it offers forgiveness; to those in condemnation because of humanity's fall into sin, it provides salvation. But in the evolutionary process there is no Fall; there is no sin; only continuous progress. Any animal traits present in human beings can be overcome through education and culturization. Hence, there is no need for a Savior.

Even the uniqueness of Jesus can be explained away in an evolutionary perspective. Notre Dame University professor Ernan McMullin writes: "When Christ took on human form, the DNA that made him son of Mary may have linked him to a more ancient heritage stretching far beyond Adam to the shallows of unimaginably ancient seas."¹¹ If this is the accounting for Jesus' first coming, the Second Coming can no longer be a realistic hope.

Yet the Second Coming with its judgment is the focus of Revelation 14, which adds a new dimension to the Old Testament exaltation of God as Creator. Thus Creation and judgment constitute the eschatological motif of the three angels' message. If the world does not glorify God because of the first, it must fear Him for the second. This pattern can be perceived through the three proclamations. The first angel exalts the Creator; the second calls attention to a false system that denies God; the third speaks of the judgment to come. The redeemed adore God for His love in creating. The reprobate tremble before Him because of His righteous judgments.

Creation and judgment

Judgment is not taught just in Revelation, but it, along with the Creation concept, permeates the Bible. The defilement of original creation brought about God's first universal judgment, the Flood. In the last days, God's eschatological judgments are sent "for destroying those who destroy the earth" (Revelation 11:18), with the ultimate purpose of reversing what happened after the Fall and creating a new heaven and a new earth.

Peter speaks of this Creation-judgment motif in strong words. Those who scoff about God's activity in human history "deliberately forget that long ago by God's word the heavens existed and the earth was formed out of water and with water. By water also the world of that time was deluged and destroyed. By the same word the present heavens and earth are reserved for fire, being kept for the day of judgment and destruction of ungodly men" (2 Peter 3:5-7).

Peter's point is simple. History has always had its skeptics. In the early days, there were those who "deliberately" forgot that God created the world and that He executed His judgment on wickedness through a universal flood. Similarly, toward the close of history, skepticism regarding God as Creator and judge will be prevalent.

One major source of such skepticism in today's world is the theory of evolution. Indeed it is part of the "maddening wine" (Revelation 14:8) of Babylon with which the world is drunk.

Creation and evolution: current debate

Currently, the Creation-evolution debate is carried on as part of the renewed interest in the relationship of science and Christian faith. This is evident in the creation of new organizations, such as the John Templeton Foundation, with its Humility Theology Information Center (Ipswich, Massachusetts), launched in 1993. This center, whose charter membership includes the world's top authorities in science and religion, holds that theology is incapable of reaching a clear understanding of the mysteries of the universe (hence the label "humility theology"). Therefore the need to turn to science as the source for answers.

Another much older organization is the Chicago Center for Religion and Science, where scientists and theologians alike are committed to evolution without renouncing their faith in God. Based at the Lutheran School of Theology, the center publishes *Zygon*, a leading journal on theistic evolution.

Another periodical devoted almost exclusively to promoting theistic evolution is the *Journal of the American Scientific Affiliation*. The Affiliation, based in Ipswich, Massachusetts, counts over 1,000 holders of doctoral degrees among its members. Originally organized to promote creationism, the affiliation has experienced an "evolution" of its own to become an advocate for theistic evolution.

At an individual level, we can detect a significant shift in the evolution-Creation debate: from a complete denial to a public admission of respect for special creation as a viable alternative to explaining the origin of the universe. This is not to say that the discussion is closed; certainly it is not. Those dominating the debate include Howard Van Till (Calvin College), Ernan MacMullin and Alvin Plantinga (both of Notre Dame University), Philip Johnson (University of California), and William Hasker (Huntington College). Van Till, MacMullin, and Hasker are on one corner of the ring, while Plantinga and Johnson stand on the other.

The first group argues for macro-evolution; the second for the inefficiency of natural selection and the viability of special divine intervention for explaining the complexities of life on the planet. The second group is not advocating an *ex-nihilo* creation with a short chronology. This option has, long ago, been rejected, and those who defend it labeled as fundamentalists and extremists. Plantinga and Johnson argue that God should be seen as interacting with the world.

Thus the trend is twofold: first, to favor progressive creation where divine intervention is required, not only to account for the original life forms, but also to introduce the first individuals of the major life groups in a constantly developing creation; second, to move toward a form of deistic evolution, preserving what Van Till calls "the integrity of nature." This means that God created a universe in which His ends for all creatures, except humans, would be

achieved, exclusively, in a natural way.¹²

The seriousness of the contest between the two groups is seen in the work of MacMullin and Plantinga, who both teach at the same university. They are on the opposite sides of the debate, writing and responding to each other. While Plantinga argues for special creation,¹³ McMullin is convinced that all probabilities point away from this possibility.

The most outspoken voices for a recent, *ex-nihilo* creation are the publications and media productions of the Institute for Creation Research (ICR), based in San Diego, California. Their position, called “scientific creationism,” is under constant attack by their opponents.

The Seventh-day Adventist Geoscience Research Institute (GRI) has a similar commitment to Creation, although it differs in some of their positions from ICR. The GRI publishes its research and findings in its respected journal, *Origins*.¹⁴

But these organizations, for the most part, are isolated voices crying in the desert, to which the leading brains and the scholarly community, which favors evolution, are not paying much attention.

Recent publications from Europe indicate that the Roman Catholic Church, which officially endorses theistic evolution, is playing an important role in the current worldwide debate. The church seems to recognize in natural and biological sciences new manifestations of nature’s unity, and is urging its members, as well as calling other churches, to correspond with these tendencies. It is on the basis of these new trends, rather than theology, that Pope John Paul II has made the appeal: “As never before in her history, the Church has entered into the movement for the union of all Christians, fostering common study, prayer, and discussions that ‘all may be one’ [John 17:20 is quoted].”¹⁵ Even evangelical scholars have supported the papal pronouncements.

Important implications

What are the implications of this trend toward a theistic evolution for Seventh-day Adventists? First, by denying a six-day Creation, evolution removes the basis for Sabbath worship, thus preparing the stage for the world

recognition of Sunday sacredness—part of Adventist teaching of last-day events.

Second, if the Bible’s authority on origins can be set aside so easily, why not the authority of its moral law and its demands on human life and lifestyle? In a future void of biblical authority, notions of human will, good, and purpose, supported by science and humanism, are likely to dominate much of life, including worship. As Langdon Gilkey has observed: “The most important change in the understanding of religious truth in the last centuries—a change that still dominates our thought today—has been caused more by the work of science than by any other factor, religious or cultural.”¹⁶

Third, in view of the subtle onslaught by evolution on the central thrust of the everlasting gospel, the challenge for Adventists is obvious: a renewed, power-filled commitment to worship and proclamation of “him who made the heavens, the earth, the sea and the springs of water” (Revelation 14:7).

Fourth, theology can no longer flourish in isolation. Theology’s interaction with the sciences cannot be avoided. In the context of the church’s global mission, we need to look at fresh approaches to people conditioned by scientific method and evolutionary dogma. The Adventist community, including academics, professionals, and administrators, cannot afford to ignore the problems related to theology and science. They need to foster greater openness toward inter-disciplinary interchanges, courses, and research projects in this area.

Finally, the challenge from evolution—natural, theistic, or deistic—is really a challenge to one’s faith. Creation is not optional for Adventists; it is a test of faith. Yes, we cannot fully understand all that is involved in Creation, just as we cannot understand everything about redemption. Understanding of both is possible only through faith. Faith in God. Faith in what God has said in the Bible. As Ellen White wrote long ago: “I have been shown that without Bible history, geology can prove nothing. Relics found in the earth give evidence of a state of things differing in many respects from the present. But the time of their existence, and how long a period these things

have been in the earth, are only to be understood by Bible history. It may be innocent to conjecture beyond Bible history, if our suppositions do not contradict the facts found in the sacred Scriptures. But when men leave the word of God in regard to the history of creation, and seek to account for God’s creative works upon natural principles, they are upon a boundless ocean of uncertainty. Just how God accomplished the works of creation in six literal days he has never revealed to mortals. His creative works are just as incomprehensible as his existence.”¹⁷ 📖

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*All Scripture passages in this essay are from the New International Version.

Notes and references

1. For an earlier discussion of the topic in this journal, see Clyde L. Webster, Jr., “Genesis and Time: What Radiometric Dating Tells Us” (*Dialogue* 5:1 [1993], pp. 5-8) and Richard M. Davidson, “In the Beginning: How to Interpret Genesis 1” (*Dialogue* 6:3 [1994], pp. 9-12).
2. See Millard J. Erickson, *Christian Theology* (Grand Rapids, Mich.: Baker Book House, 1985), pp. 480, 481.
3. Howard J. Van Till, *The Fourth Day: What the Bible and the Heavens Are Telling Us About the Creation* (Grand Rapids, Mich.: Eerdmans, 1986), p. 247.
4. In theistic evolution, sometimes called “biblical evolutionism,” the evolutionary process is perceived as the manifestation of the work of God in nature. In this context, God’s creative work is considered to have two aspects: (1) The “foundational aspect,” in which the finite existence of the natural world is dependent in a moment-by-moment basis on God’s activity; and (2) the “progressive aspect,” in which new creatures and new characteristics emerge creatively in the process of evolution. See Richard Bube, “Biblical Evolutionism,” *Journal of the American Scientific Affiliation* 23:4 (December 1971), p. 141.

5. Van Till, p. 265; see also pp. 249-275 for Van Till's fuller exposition of what he calls the "Creationomic Perspective." Van Till prefers this designation to the term "theistic evolution."
6. See Brent Phillip Waters, "Christianity and Evolution," in David B. Wilson and Warren D. Dolphin, eds., *Did the Devil Make Darwin Do It? Modern Perspectives on the Creation-Evolution Controversy* (Ames, Iowa: The Iowa University Press, 1983), p. 155.
7. The Gap Theory suggests that millions of years elapsed between Genesis 1:1 and 1:2, and that Creation occurred in three stages: a pre-adamic period when the earth was beautiful; an intermediate period in which it became empty and formless; and the "reconstitution" period described in Genesis 1:3 ff.
8. Geological Ages Theory postulates that the Creation days were not literal days but very long periods of time.
9. The Artistic Theory views the Genesis record as a literary and artistic account intended to convey religious truth but not scientific reality.
10. The Abridged Genealogies Theory claims that if genealogies omit generations—as some certainly do—such omissions could account for all the time necessary for evolution to occur.
11. Ernan McMullin, "Evolution and Special Creation," *Zygon* 28 (September 1993), p. 328.
12. See McMullin, p. 325. See also McMullin's article, "Plantinga's Defense of Special Creation," *Christian Scholar's Review* 21 (Special 1991 issue), pp. 55-79.
13. Alvin Plantinga, "When Faith and Reason Clash: Evolution and the Bible," *Christian Scholar's Review* 21:1 (September 1991), pp. 8-33.
14. Readers interested in obtaining a sample copy and subscription information may write to Editor, *Origins: Geoscience Research Institute*; Loma Linda University; Loma Linda, CA 92350; U. S. A.
15. See Robert John Russell *et al.*, eds., *John Paul II on Science and Religion: Reflections on the New View from Rome* (Rome: Vatican Observatory Publications, 1990), p. M3.
16. Langdon Gilkey, *Religion and the Scientific Future* (New York: Harper & Row, 1970), p. 4.
17. Ellen G. White, *Spiritual Gifts* (Washington, D.C.: Review and Herald Pub. Assn., 1945), vol. 3, p. 93.

Letters...

Continued from page 4

Why only three issues per year?

I am a 24-year-old accounting student and a great admirer of *Dialogue*. This journal has broadened my view of the Seventh-day Adventist Church—its spread, its challenges, and its people. My regret is that you publish it only three times a year. Have you considered increasing the number of issues per year? We'll love it.

HILDA PAISCECO
Hortolandia, Sao Paulo
BRAZIL

The editors respond:
Thank you, Hilda, for your positive evaluation of our journal. Several of our readers would like to see Dialogue published more frequently. The fact is that, in order to control the cost of producing the journal, most of the members of our Editorial Board donate their services. This, together with a subsidy provided by the Adventist Church, allows Dialogue to be given free to thousands of Adventist students attending public colleges and universities. Perhaps some day a generous benefactor will provide the funds necessary to add a fourth issue per year. We'll also love it.

A powerful force for young adults

Within a few weeks I will obtain my M.Div. degree from the Seventh-day Adventist Theological Seminary and will go back to the Southern California Conference, which sponsored my studies, to continue my work as a minister for the Lord and His church. I know of several young adults like myself who feel that *Dialogue* keeps them spiritually nurtured and in touch with the world of ideas. The articles are current, relevant, and really interesting. I noticed that even non-Adventist young adults, whether Christian or non-Christian with whom I have shared the journal, find it appealing. In fact, I plan to share

Dialogue with more young adults with whom I will come in contact and minister to in my new area of service. Thank you for making this tremendous resource available. I pray that this great journal will continue to be a powerful force for educated young adults in our church all around the world.

JEFF ROSENTHAL
Andrews University
Berrien Springs, Michigan,
U.S.A.

Help for campus ministry

I'm an Adventist pastor with a large number of high school and university students in my congregation, who attend non-Adventist educational institutions. I feel a pastoral burden for these students in secular intellectual arenas. My concern is to find ways of keeping them in touch with Adventist faith, organization, culture, and mission. Can you help?

ISAAC SARVO
Ash-Town, Kumasi, GHANA

The editors respond:
AMiCUS was established precisely to provide support, through the world Divisions, for pastors and church leaders like you. We have four suggestions: (1) Contact our regional representative, listed on page 2, and request a copy of the Sourcebook on Adventist Ministry on the Public University Campus. (2) Send him a list of the Adventist university students in your congregation and ask him to include you in the distribution network of Dialogue so that they may begin receiving this journal regularly. (3) Consider the possibility of organizing a local Adventist student fellowship for nurture and outreach. (4) Write to leaders of Adventist student associations in other parts of the world, asking them for ideas that work in their context. You will find their names and addresses in the "Action Report" and "Letters" section of our journal. By separate mail you will receive 30 copies of back issues of Dialogue to help you launch your ministry. Best wishes!

As his custom was, he went into the synagogue on the Sabbath day” (Luke 4:16, KJV).

“Upon this rock I will build my church” (Matthew 16:18, KJV).

The first passage describes a custom in the life of Jesus, something He did every Sabbath. He worshiped in the Jewish synagogue or the temple. This was a custom the disciples followed later as they went from town to town on their missionary journeys as recorded in the book of Acts.

The second passage contains a promise: that Jesus Himself will build the church where He will be worshiped as the Lord and Saviour of the world. The apostles, even as they worshiped in the synagogues, spoke much about the church as the body of Christ and as the community of the believers in Christ as one sent by God.

That was the apostolic age. But since then, history has recorded nothing but strife and conflict between the synagogue and the church, between Jews and Christians.

Is that strife necessary? Should hatred mark the relationship between these two communities? Can we try to understand and learn from each other? The answer should be “yes” for three reasons: both communities have so much in common; Christianity can learn much from Judaism; and Judaism can learn much from Christianity.

The common ground

Christianity and Judaism share common roots. First, there is the Scripture. Jesus and the disciples had only one Bible: the Old Testament. Indeed, the New Testament builds on the Old and amplifies it.

Second, there is theology. Both Judaism and Christianity share a common concept of a personal God who created our world. The story of the Fall, the call of Abraham, the ethos of the covenant, the giving of the Ten Commandments, and the ethical emphasis of the prophets are all part of the common heritage of the two religious groups.

Third, there is history. The philosophy of history that God is in control and that history is moving toward its climax on a linear basis is common to both Christianity and Judaism. The Church traces its history to the church in the wilderness, and draws its support and

inspiration from the promises that were made to the children of Israel. Moreover, the Church grew in the soil of Israel. The first Christians were all Jews who behaved as faithful Jews. Jesus was a Jew. The Old Testament, as well as the *midrashim*, the Jewish parables, were a

The synagogue and the church

What can Christians and Jews learn from each other?

part of His teachings. All His disciples were Jews. Most—if not all— of the New Testament was written by Jews, who constantly referred to the Jewish Scriptures and traditions.

With so much in common, why should there be strife between the two religions? On the contrary, should they not be learning from each other?

What Christianity can learn from Judaism

The Church can connect to Israel and learn from them their love for the Scripture. The Hebrew Scriptures have been preserved by the tenacious work of the Jewish scribes, who carefully copied the ancient manuscripts, and also by the faithful Jews, who read them throughout generations at the synagogue. Moses, Isaiah, the Psalms, and the Song of Songs are still chanted today in the original language. Thanks to the Jews, Christians can have access to the Hebrew text of the Old Testament, to the Hebrew thinking of the writers of the New Testament, and even to the Hebrew prayers, through which Jesus Himself worshiped. The role of the Scripture in Jewish life and worship is something Christians can cherish.

by
Jacques B.
Doukhan

The Church can also learn from Judaism the deeper meaning of the Law, the Ten Commandments, the dietary laws, the Sabbath, and the whole ethical code. These have not only been preserved in writing by the Jews, but they are also being witnessed to by the people who observe them in their lives. The Church needs the Jews to rethink the theology of the law. Christians tend to stress grace so much that they have often ignored the value of justice and obedience. Emotions and feeling and the subjective experience have been overemphasized at the expense of faithfulness, will, and the objective duty of obedience.

Along the same line, the Church needs the Jews in order to rediscover the intrinsic value and beauty of studying the Word of God, as the Word from above that has its own truth to be discovered. Too often, the Bible is used to prove one's point in a theological dispute or as a shallow sentimental inspiration for religious devotion. True, the Christian can expect the guidance and illumination of the Holy Spirit to understand the Scriptures, but it is naive to substitute the Spirit to personal searching of the Scriptures.

Christians can also learn from the way Jews worship: their reverence of the sovereign God, their respect for the Scripture, their corporate singing that involves effort by the mind, aesthetic sensitivity, and deep emotions, as well as the motions of the body. An attention to

these might inspire Christians to make their worship services more creative and fulfilling.

Another religious value Christians can learn from the Jews is the joy of life, the sense of the feast, and the ability to receive the gift of God in Creation. From earlier stages, the influence of Gnosticism, especially of Marcion, Christianity has opposed faith in the God of Creation, the beauty and senses. An attempt has been made to distinguish between the God of the Old Testament as God of creation and the God of the New Testament as God of salvation. This distinction is sometimes reflected in the Christian theology of Sunday interpreted as the sign of salvation versus the Sabbath, a sign of Creation. This dualism has influenced generations of Christians and produced a religion of sadness that suspects laughter and enjoyment. Christians may learn from the Jews to pay attention to their physical as well as their spiritual life. They can learn from them a holistic view of life. What they eat, what they drink, whatever they do affects their total being. Christians, like Jews, can affirm that religion is a way of life and not just a turn of the soul.

What Jews Can Learn from Christianity

History has shown that Israel needs the Church. Christians have made the God of Israel known throughout the

earth. Christians have translated the Hebrew Bible and taken its message to all the world. From Amazon to Africa, from Alaska to Australia, the story of Joseph and the psalms of David have been heard by the simple and the sophisticated people alike. Jewish theology of particularism has been complemented by Christian universalism, the latter being responsible for taking the biblical truth to the ends of the earth. A by-product of this Christian mission is the knowledge of the people of the Old Testament and the existence of Israel. This is one of the most ironical and interesting paradoxes of history. Without the Church, Judaism might have remained a small, insignificant, and obscure religion that might well have disappeared.

The Jews have deliberately ignored the New Testament, although it was written by Jews even before the time of the composition of the Talmud. Jews would benefit from the reading of these texts, for they not only witness to the life and belief of the first Century Jews, but they also contain valuable truths that may strengthen and enrich their Jewish roots.

As a matter of fact, Jews well versed in their own Scriptures and tradition may understand the New Testament even better than the Christians themselves, who often project their own worldview into them. The Jews will discover that the New Testament is not as foreign as they think. After all, it was written in the context of a worldview shaped by the Old Testament. Approached this way, the Jews may even get a better grasp of their own heritage. Often the meaning and the beauty of the Hebrew Scriptures are enhanced by the explanations of the New Testament. The stories of the Rabbi of Nazareth, His parables and His teachings, will surprise them by their Jewish flavor and the high Jewish ideals they convey.

Grace (*hesed*) is not unique to the Christian message. Judaism also cherishes grace. However, Jews can learn from Christians that salvation is not achieved through *mitzwoth* (law), but through the God who comes down in history and acts on behalf of His people. Jews need to learn more about the proximity of God, the God who goes so far as to enter the complex process of incarnation in order to speak with

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humans, be with them, and save them. Certainly Abraham Heschel thought of this reality when he observed that “the Bible is not man’s theology but God’s anthropology.”*

Learning about God’s incarnation, the Jews will understand better the God of Abraham, Isaac, and Jacob—the God who spoke face to face with Moses, the God who fought for Israel at Jericho, and the God who spoke through the prophets. And this perspective will even bring new life into their *mitzwoth*. The law will not just be performed as a required chore, but it will blossom from the heart as a fruit emerging from their personal relationship with God.

The Seventh-day Adventist mission

The mission of the eschatological remnant to witness to the world would hardly fulfill itself without reference to its roots. The flower cannot blossom if the tree is not rooted: the future cannot be produced without this memory. This requirement contains a whole philosophy of witnessing. The responsibility to bring the message to the Jews and to other Christians implies the duty to respect them. It is not possible to preach to the Jews while being anti-Semitic; likewise, it is not possible to preach to Catholics while being anti-Catholic. The Adventist adventure pertains to Jews, to Christians, and to everyone in the world.

We as Seventh-day Adventists are heir to both Jewish and Christian history. We also have the mandate of the everlasting gospel of Revelation 14. Our message is unique not only because we proclaim fully Jesus and the law, grace, and obedience, but also because we speak of a definite future to come. Our mission is not just of a historical nature, to proclaim a past event; it is also of an eschatological nature, to declare a coming event.

Our mission should, therefore, be carried out with humility, openness, and sensitivity, with the consciousness that there is always something to learn and receive from others in order to reach out to men and women everywhere, Gentile or Jew. 🕊

Born in Algeria of Jewish ancestry, Jacques Doukhan (Ph.D., University of Strasbourg; Th.D., Andrews University) teaches Hebrew and Old Testament exegesis at Andrews University. He is

The Ten Points of Seelisberg

Immediately after the Second World War, Protestant and Catholic churchmen concerned with the terrible force of anti-Semitism, which reached its climax with the Third Reich, met with their Jewish colleagues to focus on 10 issues in order to avoid “false, inadequate, or mistaken presentations or conceptions... of the Christian doctrine.”

1. Remember that one God speaks to us all through the Old and the New Testaments.
2. Remember that Jesus was born of a Jewish mother of the seed of David and the people of Israel, and that His everlasting love and forgiveness embraces His own people and the whole world.
3. Remember that the first disciples, the apostles, and the first martyrs were Jews.
4. Remember that the fundamental commandment of Christianity, to love God and one’s neighbor, proclaimed already in the Old Testament and confirmed by Jesus, is binding upon both Christians and Jews in all human relationships, without any exception.
5. Avoid distorting or misrepresenting biblical or postbiblical Judaism with the object of extolling Christianity.
6. Avoid using the word “Jews” in the exclusive sense of the enemies of Jesus, and the words “the enemies of Jesus” to designate the whole Jewish people.
7. Avoid presenting the Passion in such a way as to bring the odium of the killing of Jesus upon all Jews or upon Jews alone. It was only a section of the Jews in Jerusalem who demanded the death of Jesus, and the Christian message has always been that it was the sins of mankind which were exemplified by those Jews and the sins in which all men share that brought Christ to the Cross.
8. Avoid referring to the scriptural curses, or the cry of a raging mob, “His blood be upon us and our children,” without remembering that this cry should not count against the infinitely more weighty words of our Lord, “Father, forgive them, for they know not what they do.”
9. Avoid promoting the superstitious notion that the Jewish people are reprobate, accursed, reserved for a destiny of suffering.
10. Avoid speaking of the Jews as if the first members of the Church had not been Jews.

Published by the International Council of Christians and Jews in 1947.

also the editor of Shabbat Shalom and L’Olivier, a Jewish-Christian journal published in English and in French. Among his books are Drinking at the Sources, Daniel, and Hebrew for Theologians.

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Reference

*Abraham Heschel, *Man Is Not Alone: A Philosophy of Religion* (New York: Octagon Books, 1972), p. 129.

If you wish to receive a free sample copy of *Shabbat Shalom* (English) or *L’Olivier* (French), send your request to Dr. Jacques Doukhan, at the address provided.

Bertha Saveniers

Dialogue with an Adventist sculptor in Belgium



Take a block of marble, a hammer, and a chisel, and place them in the strong hands of Bertha Saveniers, 60. Let her imagination and devotion go to work and, behold, we see in action the most creative woman sculptor in the Adventist world.

Honored in Belgium, known in other European countries, Bertha Saveniers has the rare gift of turning inert materials into radiant symbols of life, faith, love, and hope. To reflect her Creator by a brilliant combination of mind and matter, to leap from a dominant faith to a spell-binding shape, and to challenge her students to view sculpture as an avenue to construct meaning to life is the work Bertha has chosen for herself. Her objectives are reflected in the name of her workshop: Bezaleel, after the leader charged with the magnificent work of building, furnishing, and decorating the tabernacle.

Bertha was born in Borgenhout, near the city of Antwerp, Belgium. She was nine when World War II ended, and, as a child, she experienced the striking difference between war and peace, oppression and freedom, chaos and order. Nurtured in a Catholic home, her life revolved around religion and art. Even as an elementary student, she showed interest in the creative arts. After completing secondary school, she enrolled in the Art Academy of Antwerp to study drawing and sculpture, and then moved on to the Graduate School of Fine Arts. After 10 years of study, she taught ceramics in Antwerp, and in 1966 began her career as a sculptor and teacher in Mol.

Since then, Mol has been her home, workshop, dream hub, and training center. Her atelier is filled with projects and completed works in paper, linen, wood, and marble. Her students come from all over the world. In 1991 she published *Maranatha*, a pictorial profile of her commitment to art and sculpture as they reflect her inner faith.

As an artist, Bertha shows a sublime sensitivity. A smoothness, a gracefulness, and a striving for unity mark her sculptures. Is her style symbolic, representative, realistic, or modern? Hard to categorize, but one thing is certain: She is inspiring, in both her life and work.

■ *How did you land in the world of arts and sculpture?*

My father died when I was three, and I was brought up by my mother. She was a very sensitive and affectionate person. She loved nature and beauty, and she wanted her children to develop that

sense of love for nature. Each Sunday she would take us for walks along the Escaut River, which runs through Antwerp. She made us familiar with all forms of culture, taking us to historical museums, libraries, concert halls, and theaters. Early in childhood I developed a taste for the graphic arts. I loved to draw, particularly models of dresses. But I chose sculpture because I love shapes and forms.

■ *Your style is unique. Tell us how you developed it.*

I suppose uniqueness is what makes an artist. That is not to say that I am not indebted to other influences. My personal tastes and my teachers gave me a good start. Trips to Italy and Czechoslovakia, and studies on Middle Eastern and African art have forged a cultural blend that has influenced my work. My search for God and my commitment to the biblical message help me to see love, beauty, and unity—factors that have shaped my uniqueness. I stay away from art without content and from imitating the work of others.

■ *You are perhaps one of the finest Adventist woman sculptors in the world. How did Adventism become part of your life and profession?*

My mother was a devout Catholic, and she taught all her children to believe in and lean on God, whatever the situation. During the war years, her faith in God came through to us children in many ways. She showed her religion through her love of people and her service to the needy. I discovered God through her. Later, as a student, I worked for a Jewish family to pay for my fees. There I saw the difference between their Sabbath observance and our Sunday worship. I wished even then that I could experience that joy of Sabbathkeeping.

I became an Adventist after attending public lectures conducted in our town. The Adventist evangelist focused on Bible and archaeology. My artistic instincts bonded with archaeology, and I started attending the meetings. My eyes were opened to the Bible as never before. I was full of questions and found answers there. Soon I became a Seventh-day Adventist.

■ *One of your sculptures depicts the second coming of Christ. Is this part of your Adventist experience?*

The life of Jesus always fascinated me. When I was still a Catholic I did a sculpture of the child Jesus with His Mother. Then I depicted His death in a "Pieta." I did these as expressions of what Jesus meant to me as my Saviour. After I became an Adventist, the passage of Acts 1:1-11, which links the resurrected and the returning Jesus, attracted my interest. I reflected over this theme and studied it for seven years. As a result, I sculpted "Maranatha," taking seven months to complete it.

■ *What is so special about "Maranatha"?*

I wanted to emphasize the person of Jesus and at the same time depict His glory and transcendence. The result is a sculpture of Jesus with His face completely concealed in cloud. I chose white marble to reflect His purity and beauty. On His robes I engraved in Hebrew the title "King of kings and Lord of lords." I used the plates of plexiglass to symbolize the distance Paul is speaking of in 1 Thessalonians 4, where Jesus is shown as

returning with clouds but not touching the earth. But I also wished to point out that Jesus is coming to welcome the saved home (Matthew 11:28-30). I suggest this by having one hand pointed toward the earth and the other open in welcome. Finally, I wanted ever to be reminded of the price Jesus paid for it all, and so placed the marks of crucifixion on His feet. It's a complicated sculpture, but a wondrous one. Of course, it cannot capture all the mysteries and wonders involved in the person and mission of Jesus.

■ *How do you choose your topic?*

I never know what will be my next topic. I work on many projects simultaneously. That way I need not get bored with one subject. Inspiration for my spiritual works comes from the Bible. They are more difficult to conceive, because they demand a long study of the Bible, much prayer, and an intense relationship with the Lord.

As the year 2000 draws near, I intend to work on themes related to women, such as fertility and love, and try to express the life God makes to shine in the life of a woman.

■ *Are you able to relate your work and Christian witnessing?*

I think so. I want my sculptures to convey a definite message, sometimes more than one. For instance "Lazarus" teaches both the reality of resurrection and the deliverance from sin. My works are spiritual witnesses. Each year, thousands of people see "Maranatha," "Resurrection," and "Repentance." Many people find in these sculptures a wonderful message of God and His love. Once a priest told me: "Madam, if we were no more able to preach God's Word, your stones wouldn't cease speaking for Him!"

■ *As an art teacher, how do you relate to students?*

A teacher of fine art can only accompany his or her students. My students often say that I have taught

them stone, sculpture, and shape. That's one viewpoint. But for myself, I am more interested in teaching them three significant principles: Be yourself; seek to help people understand what you are trying to convey; and be an example.

■ *If you had only one sculpture to make, what would it be?*

Hard question! Every time I undertake a major work, I think that it may be my last one. However, I have just bought four tons of marble... I am convinced that it is God who has given me the talent for sculpture. My hope is that with Him my creative work will never stop.

■ *As a person, what worries you the most? What brings you the most happiness?*

What troubles me the most is the chaos we see in society, in families, and even in the church; the eagerness to seek pleasure, money, and power at any cost. But I find hope for the future. And that hope rests on the promises of God. I look forward to the plentiful outpouring of the Holy Spirit. When our lives are committed to God, we cannot fail. He gives me courage to walk every day and be a living witness of the great deliverance that only comes from Him. 🙏

Interviewed by **Bernard Sauvagnat**

Bernard Sauvagnat works in the Communication Department of the Franco-Belgian Union Conference of Seventh-day Adventists, Paris.

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Jon Johanson

Dialogue with an Adventist record-breaking aviator from Australia



July 26, 1995. Oshkosh, Wisconsin, U.S.A. Jon Johanson taxied his self-built RV-4, parked it under the wing of a giant Quantas 747, and stepped off to a hero's welcome. He had just flown solo from Adelaide, Australia, the farthest anyone had ever come in such a plane to the world's premier light-plane air show. Jon's lifetime dream had now propelled him into the record books of aviation history.

But getting there wasn't easy. His early school days had been tough. He grew up with low self-esteem and self-doubt. "You'll never do any good," his teacher once admonished him. Jon admits that he found studies difficult, but his heart was set on flying.

Jon grew up in Horsham, a rural town in eastern Victoria, Australia. After completing high school, he finished a carpentry apprenticeship. About the same time, he spent every dollar he could spare on the most consuming passion of his life: learning to fly. But he also wanted a profession and chose nursing. On the day he left home to Sydney to begin nursing training, he received his unrestricted private pilot's license.

After graduating as a nurse, Jon worked as a volunteer in Southeast Asia, then returned to Australia to obtain his midwifery certificate. He also improved his flying qualifications. A short time later, he went to Darwin, in Australia's far north, to work as a pilot and nurse. It was during this time that his dream to fly to Oshkosh in his own self-built plane began to materialize. He devoted every possible resource for two-and-a-half years to the fulfillment of that dream.

When he landed at Oshkosh to a tumultuous reception from 200,000 people, his journey had taken more than three weeks. He returned home via Europe, the Middle East, and Southeast Asia, setting a record for circumnavigation of the globe for his class of plane.

■ *Nursing and flying. Do they go together?*

I love them both. Nursing has provided me with a steady income that helped me with my flying interests. It gives me an opportunity to be close to people in suffering. For instance, while doing some maintenance on my plane at Oshkosh, I saw a man collapse nearby with an apparent heart attack. My nursing training allowed me to come to his rescue. I applied CPR until paramedics could arrive. As for flying, I always

loved it, although I never thought I'd be able to do it. I didn't think I was smart enough or good enough. From my early days, I had this problem of low self-image.

■ *How come?*

Schooling didn't help much. I had this strange feeling that I was a failure. English was a special problem. I couldn't spell and didn't think it was important. As long as one could read, why bother about spelling? And then there were teachers constantly telling me that I was a problem. Maybe I was, but their telling me reinforced that image. When I left high school, I came out believing that I wouldn't amount to anything. As

far as flying, I never thought I'd even get a license. And to have thought of it as a career, no way.

■ *But things have changed, have they not?*

My flying lessons helped. You can't fly without that confidence that you can go up in the air and come down safely. You take control of a machine. If you can do that, you can take control of your life. And what's more, you are not alone in making out in life. As a Christian, I believe God has made it possible for us to achieve. So I have learned to live with what people say and go beyond it. Whenever I visit schools I tell the children, "When people put you down, don't get discouraged. Try to analyze what they say, pick what is worthwhile, discard the rest, and keep plodding. Never quit."

True independence

by
Charles
Taylor

Independence! How sweet the sound! Each one of the 236 countries listed by the United Nations cherishes the concept of national independence, even when local autonomy is the only practical goal in some of the smaller nations. Through the centuries, millions have given their lives to secure self-government for their homelands. Almost every city of any size in Latin America has a street named *Independencia* or bears the name of the date when the country gained its independence. Practically every country has a city or a state named after its hero of independence.

Freedom is one of the five basic psychological needs of human beings, along with love and three kinds of approval from others. Especially in the years of adolescence it is important to develop a separate identity. Even churches seek to establish their identities by achieving independence from a larger religious body. I have sat in committees where local Seventh-day Adventist congregations, conferences, and even unions have debated the need for

independence, at least in certain matters, from the world church headquarters and its policies.

The academic world values independence when it gives examinations based on the honor system, with the teacher absent from the room. It stresses intellectual independence when theses and dissertations are checked for possible plagiarism, conscious or unconscious. However, it values dependence when researchers are encouraged to provide footnotes and bibliographies acknowledging other sources of information, going back to generations past.

For the Christian, that dependence reaches beyond history. “We can trace the line of the world’s teachers as far back as human records extends; but the Light was before them. As the moon and the stars of our solar system shine by the reflected light of the sun, so, as far as their teaching is true, do the world’s great thinkers reflect the rays of the Sun of Righteousness. Every gleam of thought, every flash of the intellect, is from the Light of the world.”¹

Our only secret of survival in a hostile world lies in exercising our freedom to choose the source of genuine power. Christian life is a constant dependence on a power outside our own. Paradoxically, that is the secret of independence, of being free from the control of the world around us. Paul speaks of it in terms of renewal: “Don’t let the world around you squeeze you into its own mold, but let God remold your minds from within, so that you may prove in practice that the plan of God for

you is good” (Romans 12:2, Phillipps).

Jesus illustrated the independence-dependence motif in the parable of the vine. “I am the true vine,” He says. Instead of choosing the graceful palm, the lofty cedar, or the strong oak, Jesus takes the vine with its clinging tendrils to represent Himself. The palm tree, the cedar, and the oak stand alone. They require no support. But the vine entwines about the trellis, and thus climbs heavenward. So Christ in His humanity was dependent upon divine power.”²

Here is the most important relationship of dependency: “There is no limit to the usefulness of one who, by putting self aside, makes room for the working of the Holy Spirit upon his heart, and lives a life wholly consecrated to God.”³ “If all were willing, all would be filled with the Spirit. Wherever the need of the Holy Spirit is a matter little thought of, there is seen spiritual drought, spiritual darkness, spiritual declension and death. Whenever minor matters occupy the attention, the divine power which is necessary for the growth and prosperity of the church, and which would bring all other blessings in its train, is lacking, though offered in infinite plenitude.”⁴

Of John the Baptist we are told, “He could stand erect and fearless in the presence of earthly monarchs, because he had bowed low before the King of kings.”⁵ His bold independence was derived from his dependence on God’s grace and power. True freedom bows itself in submission to the One who is the Author of life and authentic freedom. 🌍

Charles Taylor (Ph.D., University of Maryland), a former director of the General Conference Education Department, serves as a statistician for Adventist Global Mission. His address: 12501 Old Columbia Pike; Silver Spring, MD 20904; U.S.A.

Notes and references

1. Ellen G. White, *Education* (Mountain View, Calif.: Pacific Press Publ. Assn., 1952), pp. 13, 14.
2. White, *The Desire of Ages* (Mountain View, Calif.: Pacific Press Publ. Assn., 1940), pp. 674, 675.
3. *Ibid.*, pp. 250, 251.
4. White, *The Acts of the Apostles* (Mountain View, Calif.: Pacific Press Publ. Assn., 1911), p. 50.
5. *The Desire of Ages*, p. 103.

Dialogue answers your questions

The age of fossils

Frequently press reports describe the finding of bones and fossils of animals that existed millions of years ago. As a Bible-believing Christian and a creationist, my impression is that they can't be that old. But I'm not sure. How can scientists determine the age of those specimens? How reliable are their dates?

It is true that newspapers, science journals, and textbooks, as well as most natural history museums, suggest that life evolved on earth over many millions of years. This is in sharp contrast to the biblical account of a recent creation by God in six days. Many wonder which is true.

Scientists determine the age of the fossils in a variety of ways, most commonly by their position in the rock layers and their relation to other fossils. The rocks themselves are dated, using a variety of complex methods, the most important being the radiometric dating methods such as uranium-lead or potassium-argon. Sometimes these methods give the dates expected by the scientists, and sometimes they don't. The problem is that a variety of factors can change the concentration of the elements used in determining the dates. For instance, a recent lava flow in Hawaii that was dated historically at only 1801 A.D. gave a potassium-argon date of 1.1 million years because excess argon was trapped in the lava. Those who believe in a recent creation by God as described in the Bible usually explain the old radiometric dates obtained on the basis of changes expected during the upheaval of the flood described in Genesis.

Other scientists who believe in a recent Creation point out that very old rock material might have been here on an empty earth long before the creation of life during the Creation week, which took place a few thousand years ago. Some of those old rocks would have been incorporated into the fossil-bearing layers during the Genesis flood. Dating the fossils by these old rocks would give the false impression of an old age for young fossils.

There is some scientific data that suggests that the long geological ages of billions of years are erroneous. For instance, the present rate of erosion of our continents is very rapid—so rapid that our present continents would have been eroded down to sea level several hundred times over their assumed geological ages. Since they are still here, it does not appear that they have existed for the long time suggested by standard geological interpretations. Other evidence of rapid action can be seen in the lack of evidence for long time periods needed for erosion, soil formation, and growth of plants at the many localities in the geologic layers where parts are missing. At these localities the underlying layers should show the evidence of the long time implied by the missing layers. The lack of such evidence suggests that the long geological periods never occurred.

It is sometimes difficult to scientifically test evidences of the past because the conditions then could have been very different from present ones. The worldwide flood described in Genesis would alter many interpretations. One's

worldview can easily affect the interpretation of data. Furthermore, scientific theories often change, and what is considered dogma today, may be heresy tomorrow. Science used to teach that mountains were formed by the contraction of the earth as it cooled. Now the prevailing opinion is that they were formed by the movement of large plates over the surface of the planet.

Caution is warranted in interpreting scientific data. The scientific model of an evolutionary origin of life is in serious scientific trouble. There are many reasons to believe in the truthfulness of the Bible. 📖

Ariel Roth, Ph.D., Geoscience Research Institute, Loma Linda, California, U.S.A.

Open Forum

Is there a question you'd like to have answered by an Adventist specialist? Phrase it clearly in less than 75 words. Include your name and postal address, indicating your hobbies or interests. Mail your question to *Dialogue - Open Forum*; 12501 Old Columbia Pike; Silver Spring, MD 20904; U.S.A. If your question is selected for publication, along with an answer, you will receive a complimentary book with our thanks.

Venezuela: students with vision and a mission

by
Orlando
Ramírez



A vocal group sings during a recent meeting of Adventist university students in Venezuela.

The Venezuela Adventist Students Society (VASS) was officially organized in 1990 as a ministry of the Youth Department. However, it had its beginning seven years earlier. In Caracas, the nation's capital, a small group of Adventist youth organized themselves to provide encouragement and support for Adventist students in public universities.

Next in Cumaná, a young Adventist studying mathematics at the Universidad de Oriente was facing problems in Sabbathkeeping and practicing his Adventist faith and lifestyle. Each day he prayed, asking God to send to the university other Adventist students from whom he could draw support. The following year, several Adventist students enrolled at the university, and an Adventist Students Society was organized.

Faith and lifestyle

Soon the Adventist students' faith and lifestyle earned them the respect of the university community. Their quiet sharing of faith has resulted in the baptism of 20 fellow students and three

professors in the past 12 years. Isabel López, now a successful professional, remembers those years: "It wasn't easy. The difficulties we faced required a great deal of prayer and even tears. Some of us could not complete our studies for up to three years because we would not take exams on the Sabbath; but, praise God, we succeeded! Thanks to the perseverance of earlier students, now Sabbath is no longer a problem there."

During the first years, the Student Society in Cumaná involved only seven Adventist students, but they stood firm in their Christian convictions. The first president of the society, said Kasdanouche, not only graduated *summa cum laude*, but was immediately invited by the university to become a member of the faculty.

Growing strong

At present, the Adventist Student Society has 22 chapters in Venezuela and the Dutch Antilles, with approximately 1,000 members. They have their own constitution and regularly elect officers. Once a week, the chapter members meet on their respective university campuses to have a short devotional, listen to concerns they may

have in their studies, pray for one another, and plan future activities. Projects include distribution of missionary publications among students and teachers, public lectures, health fairs, and programs of Christian music on campus. The approach that brings the best results is simply inviting their friends to the chapter's weekly meetings. There they find a group of fellow students ready to provide genuine love, understanding, support, and encouragement to face the difficulties of university life.

While the situation has improved for our students, there are still challenges: political ideologies, promiscuity, derision from other students, public ridicule from some teachers, and classes and tests on Sabbath. In addition, they are not allowed to use the auditorium to hold religious meetings. Unfortunately, some of our youth are overwhelmed by the political and social pressures and leave the church while in school.

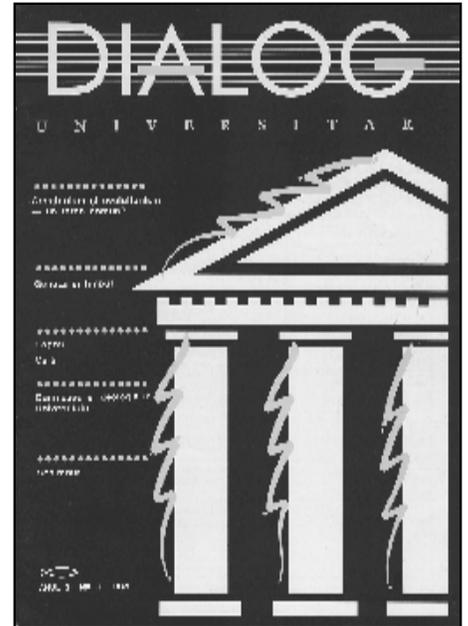
A significant role

The Seventh-day Adventist Church in the Venezuela-Antilles Union is young, with 75 percent of its members less than 35 years old. Thus the university students' role is significant, both in their involvement with the local churches and in their outreach on campus. During the past five years, these activities have resulted in the baptism of 100 fellow students and several teachers.

We thank God for the commitment of these young adults, who have a clear vision of their mission. In the near future we hope to obtain the resources necessary to provide better support for this growing sector of our membership, including a university chaplain and sufficient missionary publications.

The members of the Venezuela Adventist Students Society welcome exchanges with other Adventist student associations. They can be reached through the education and youth departments of the Venezuela-Antillian Union: Apartado Postal 78298; Caracas; Venezuela. Fax: (2) 242-2241. 📠

Orlando Ramírez is education and youth director for the Venezuela-Antilles Union in Caracas. He also serves as sponsor for the Venezuela Adventist Students Society and Dialogue representative in the region.



Advance in Portugal

In April 1995, a group of Adventist university students and professionals met in Monte Real, Portugal, to take part in a spiritual retreat and to approve the statutes of the Adventist University Students' Association. Dulce Neto, a journalist, led in the deliberations. Leaders of the Portuguese Union of Seventh-day Adventists later endorsed the document, and now the association is seeking government recognition. There are approximately 150 Adventist university students and the same number of Adventist professionals in Portugal. This year, a representative group will meet again to develop a plan for future activities. Leaders of other Adventist student fellowships interested in exchanging information may contact the association through Rogerio Nobrega, counselor: Portuguese Union of Churches, Rua Joaquim Bonifacio 17, 1199 Lisboa Codex, Portugal. 📠

Dialogue in Romanian

The Romanian Association of Adventist University Students (AMiCUS) and the Romanian Union recently published a second issue of *Dialog Universitar*. It contains several articles on creation and a full-color art supplement that originally appeared in English *Dialogue*. The journal is distributed among members of the association and also used for outreach among university students and professors. They welcome contacts with other Adventist student associations through Benjamin N. Rosca, counselor: Strada Plantelor 12, 70308 Bucharest 2, Romania. 📠

The commitment of one contributes to the education of another—in more ways than one.

In the fall of 1946, I was 18 and ready for college. My father's income was modest, and I looked for a place where the tuition would be low and the education would be good. My search ended when I enrolled in Arkansas State Teachers College (ASTC). The college

The 1940s were part of the so called "golden era" of Hollywood. Movies had language and scenes acceptable to family values. At ASTC, they provided an alternative to uninhibited parties and dances and often were really educational. So I was surprised when Mary Lou declined my request. She said she did not go to movies as a matter of moral principles. Her reply was gentle, kind—and stunning! Here I stood in the middle of a post-war social revolution, facing a young lady who refused to be a part of the usual campus social scene and stood alone. Her words seemed strange, but strong.

So, we did the only other thing going in town that week. We went to the mid-week prayer meeting at the First Baptist Church!

My education begins

During that summer, I thought a lot about Mary Lou. One day I received a letter from her explaining more about herself. She said she was a "Seventh-day Adventist." A "Seventh-day Adventist"? What in the world was that? I had a faint memory of my grandmother telling of a "Seventh-day Adventist" farmer down the road who always showed respect for a funeral procession by stopping his plow and mules in the cotton field, removing his hat, and bowing his head until the procession had passed. Well, that's pretty nice.

Then I went to the encyclopedia and read about a people predicting the return of Jesus Christ, leaving farms, waiting in white robes. Not too good.

I asked the pastor of our interdenominational church what he knew about "Seventh-day Adventists." He said the only thing he knew was that they were very active in the mission fields. Not too bad.

When the 1948 fall session opened at ASTC, Mary Lou and I renewed our friendship. My education continued in pre-med—and Seventh-day Adventists. Not attending movies was a blessing to my strained budget. Our dates consisted mostly of riding the city bus on the loop around town and back to the campus. Cost? Ten cents each. We were among the bus company's "frequent travelers" that year.

by J. D.
Mashburn,
M.D.

The education of a pathologist

was established primarily to train teachers, but it offered general courses in business, pre-law, and pre-medicine. I chose pre-med.

The crucial year

My freshman year was routine. Then came 1947, a year that would change my life forever. That fall, a young high school graduate from the oil fields of South Arkansas turned up at ASTC. Early in the school year, Mary Lou Johnson impressed me as pretty, quiet, dignified, and warm. But I did not have the courage to ask for a date until the following spring, just before the summer break. I asked her to go to a movie with me.

Taking the Bible seriously

My next lesson came when I asked Mary Lou out on a Friday evening. I knew she went to church on Saturday for some misguided reason, so Friday should be okay, shouldn't it? Well, Mary Lou gave me a study as to how God kept time—from sunset to sunset. You see, my problem was that I was a typical Christian who believed the Bible in general. I just didn't know what it said!

And then there was the matter of *eating*, of all things! Once we attended a local church function for college students at which the main bill of fare was delicious ham sandwiches. Mary Lou chose salad. She said she did not eat pork or other unclean meat. Had she never awakened in the morning to the aroma of coffee percolating in the pot and bacon frying in the pan? Well, it was back to the Bible again!

During the 1948-1949 school year, our friendship grew closer, and my education continued. Although I did not apply any of her "peculiar" principles to my own life, I began to understand the reasons for her actions, and my appreciation of her character and qualities took deep roots in my own psyche.

In 1949 our ways parted. In the fall, I entered the University of Arkansas School of Medicine at Little Rock, 30 miles away from ASTC, where Mary Lou remained. The next two years were difficult ones, and a real test of our relationship. In spite of the distance and the study load, I hitchhiked to ASTC during weekends.

By then my personal finances had reached a crisis. I was able to enter the first year of medical school because my aunt loaned me \$480, her life savings. But now it was fall 1950, and my mother had only one sister to come to my aid! Help came from another source, however. I was offered a position as student assistant in the anatomy laboratory. But the work load slowed down my class load, and I had to take an extra year to complete my medical studies.

A risk and a partnership

In the spring of 1951, Mary Lou graduated with a B.A. degree in home economics. Then she did the only thing I have ever seen her do contrary to her

Seventh-day Adventist standards. She married me—a non-Adventist. This was risky, and I wouldn't recommend it to any young Seventh-day Adventist today.

I continued my second year as a student assistant in the anatomy laboratory. Mary Lou obtained a job as a first-grade teacher in the county school system. My lab job ended in the spring of 1952, and I entered my junior year as a full-time student. Mary Lou's income put me through the rest of medical school.

I received my M.D. degree in June, 1954, and three months later our first child (a son) was born. Mary Lou stopped working and stayed home to care for the baby. We figured we could survive with my intern's income of \$150 per month. In addition, Mary Lou's father loaned us \$1,000, a large sum in those days, to help us through the year.

Although I possessed an M.D. degree, I still had many years of training and experience ahead before I could begin practice as a pathologist. These were not easy years for Mary Lou. Our family increased to three sons and a daughter. I was amazed with Mary Lou's faithfulness in observing the Sabbath from even to even; taking the children all spit and polished on time to Sabbath School *every* week; regularly paying her little tithe; keeping the house clean and neat, with drawers full of clean, orderly clothes, and our table laid out with hot, wholesome, and delicious meals.

A vegetarian by evidence

Oh, yes, the meals. In the early years of medical school, I learned in my biochemistry and nutrition classes what medical science considered to be the best foods to promote good health. What I learned was identical to the concepts advocated by the Seventh-day Adventist Church under the guidance of a woman with a third-grade formal education.

As my training in pathology entered the 1960s, great advances were made in preventive medicine. The relationship of animal fat to hardening of the arteries was finally established. The U.S. Government took the official position that the use of tobacco was injurious to

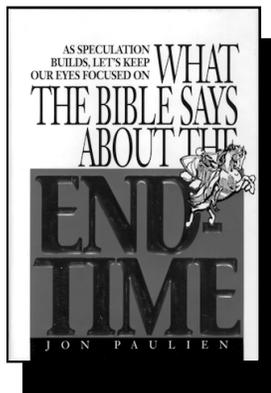
health. Overwhelming statistics were published, indicting alcohol as the greatest drug problem in our society. I was performing autopsies and seeing for myself the truths of these great health principles of medical science—and the Seventh-day Adventist Church. Eventually my experiences in the autopsy room led me to become a vegetarian.

The final step

But the greatest influence on my life has always been Mary Lou. In good times, bad times, difficult times, she has stood by me—a loyal and faithful wife, a loving mother to my children, and my best friend. All along she was patient, kind, loving—a true representative of Christ in the home. This is what *really* led me to the Seventh-day Adventist Church.

So in 1962 I decided it was time to close the circle of faith in our home. The spring of that year, I followed Jesus into the baptismal waters and joined the fellowship of His commandment-keeping people. God has continued to bless our home and my professional life. For almost 30 years I have had the opportunity to serve Him at a Seventh-day Adventist medical center in the field of my specialty. God is faithful. 🙏

J. D. Mashburn (M.D., University of Arkansas) is chairman of the Department of Pathology at Washington Adventist Hospital and an elder at the Spencerville Seventh-day Adventist Church. His address: 7600 Carroll Avenue; Takoma Park, MD 20912; U.S.A.



What the Bible Says About the End-time, by Jon Paulien (Hagerstown, Maryland: Review and Herald Publ. Assn., 1994; 159 pp.; hardbound).

REVIEWED BY GOSNELL L. O. R. YORKE.

On the threshold of the third millennium, all eyes seem to be focused on the future and the end-time, with the seemingly irresistible

urge to engage in sensational date-setting. Paulien's book is an attempt to provide a calm, reasoned, and biblically sound response to this fascination with the future—a fascination that has also gripped quite a few members of the Seventh-day Adventist Church.

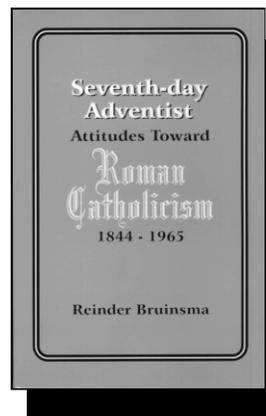
The author walks us through the Bible, from Genesis to Revelation. What emerges is a fascinating insight: The biblical view of the end-time is not the same throughout the Scriptures. Rather, what we find is a progressive view: At the time of the Flood, it was a return to the “good old days” of Creation; during the prophetic period, it was the transformation of human society, human nature, and the natural world within the context of the current world order; in the Gospels and Paul, it was anchored in Jesus; and in the Book of Revelation, influenced as it was by the inter-testamental apocalyptic vision, the end-time points to a radically new heaven and new earth.

The author is not afraid to refer to inter-testamental literature like I Enoch and the Sibylline Oracles. Neither is he afraid to be creative, as when he deals with some interpretational issues within the Book of Revelation. However, two relatively minor details left me feeling less than fully satisfied with this well-written, semi-popular work. First, the title seems to promise an exhaustive treatment of the subject when, in fact, the book does not and admits this (p. 95). Second, Paulien's tendency to generalize about Seventh-day Adventists when he clearly refers to middle-to-upper-class *American* Adventists in most cases (p. 91).

Overall, I recommend this book as a useful tool to those interested in the basic issues of end-time events—and that's just about every *Dialogue* reader.

Born in the Caribbean, Gosnell L. O. R. Yorke (Ph. D., McGill University) teaches theology at the University of Eastern Africa, Baraton, and edits the Journal of Adventist Thought in Africa. His address: P.O. Box 2500; Eldoret; Kenya.

Book publisher's address: Review and Herald Publishing Association; 55 W. Oak Ridge Drive; Hagerstown, Maryland 21740; U.S.A.



Seventh-day Adventist Attitudes Toward Roman Catholicism, 1844-1965, by Reinder Bruinsma (Berrien Springs, Michigan: Andrews University Press, 1994; 374 pp.; paperback).

REVIEWED BY ENRIQUE BECERRA.

This book is a slightly revised version of the author's 1993 Ph.D. dissertation submitted to the University of London. Bruinsma clearly

states the focus of his study: “Why has Adventism been able to shift its position with regard to other Protestant churches, but has (at least officially) not been willing to revise its estimate of the Roman Catholic Church?” (p. xi).

The first two chapters give the necessary background for the study. First, the author deals with the anti-Roman sentiments of Protestants in Puritan England and in colonial and early republican America because of a long tradition of anti-Catholic interpretation of apocalyptic Bible prophecy. Second, he deals with the Millerite movement and William Miller's system of hermeneutics and his interpretation of Daniel and Revelation, especially where these were applied to Roman Catholicism.

The three main chapters of the book cover 1844-1863, the period of Sabbatarian Adventism; 1863-1915, the formative period of Adventism; and 1915-1965, Adventism in its mature stage, until Vaticanum II.

Bruinsma finds that, from 1844 until 1915, Seventh-day Adventists were not more vehemently anti-Catholic than many other Protestant denominations. However, from 1915 on, most Protestant denominations gradually became less judgmental and more open to the Catholic Church. But Adventists, while being more careful in their public pronouncements, have remained unchanged in their convictions regarding Catholicism as an ecclesiastical organization. One important contributory factor to this position, according to the author, is the influence of Ellen G. White: Once she “had codified these views, it became virtually impossible to re-evaluate them critically, without questioning her prophetic authority” (p. 297).

Bruinsma ends by pointing out two groups in the Adventist Church today: one seeking to make Adventism relevant to this generation; the other, more conservative, subscribing to traditional interpretation of prophecy. The author concludes, “It seems to me that Adventists must enter into some sort of dialogue with Roman Catholics.... Many are unable, or unwilling, to see the many different faces of Catholicism in different parts of the world, or to recognize the tremendous changes and developments that have taken place within Catholicism.... [There is a] need for a fresh approach that will re-evaluate the traditional Adventist views in the context of our time” (pp. 301, 302).

The question is, how do we do this and yet retain our

Adventist college/university students and professionals interested in exchanging correspondence with colleagues in other parts of the world:

Francisca Akwaboah: 24; female; single; studying toward a degree in business administration with a minor in computer science; interests: reading, singing, sports, denominational history, and knitting; correspondence in English. Address: Griggs University Extension Campus; P.O. Box 9358, Airport; Accra; GHANA.

Teresinha Anella: 46; female; divorced; a Social Security inspector; interests: travel, reading, music, computers, working for Jesus, and making new friends; correspondence in Portuguese, English, or Spanish. Address: Av. Castro Alves, 35 - Santa Cruz; Iapira, SP; 13970-000 BRAZIL.

Helen P. Araujo: 22; female; single; teaching at an Adventist school; interests: reading, religious music, and volleyball; correspondence in Portuguese or Spanish. Address: Rod. Dom Gabriel P. B. Couto, Km. 65 (Dea); Caixa Postal 26; Jundiá, SP; 13212-240 BRAZIL.

Yesenia Aravena: 20; female; single; studying toward a degree in English at Universidad de La Serena; interests: meeting new people, travel, sports, cooking, music, nature, and animals; correspondence in English or Spanish. Address: Alonso de Ercilla 688, Parte Alta; Coquimbo; CHILE.

Joseph Arloo: 34; male; a teacher; hobbies: gardening and sports; correspondence in English. Address: S.D.A. Junior Secondary School; P.O. Box 28; Bawjiase, C/R; GHANA.

Kossi Awoute: 34; male; married; father of two young sons; working at the headquarters of the Sahel Adventist Union; interests: Christian music, religious films, reading about the rest of the world, and travel; correspondence in French or English. Address: Union des Eglises Adventistes du Sahel; B. P. 2157; Lomé; TOGO.

Sandra Bagah: 27; female; single; studying toward a degree in nursing; hobbies: music, singing, flowers, and outdoor activities; correspondence in English or Malay. Address: #IP Adventist Court, No. 1 Midlands Drive; 10250 Penang; WEST MALAYSIA.

Lolívie M. Baricuatro: 22; female; studying toward a degree in English; interests: music, sports, reading, collecting stamps and postcards, camping, and cooking; correspondence in English or Filipino. Address: MSU - Buug College; 7009 Buug, Zamboanga del Sur; PHILIPPINES.

Beverly Sison Baruis: 20; female; single; studying toward a degree in accountancy; interests: camping, travel, spelunking, mountain climbing, music, computers, and meeting new friends; correspondence in English. Address: Mountain View College; 8700 Malaybalay, Bukidnon; PHILIPPINES.

Abraham Binzuwa: 26; male; a minister; hobbies: reading religious materials, listening to gospel music, and preaching the

Adventist message; interested in receiving used Christian books to study; correspondence in English. Address: Seventh-day Adventist Church; P.O. Box 073; Takoradi; GHANA.

Amy Burrill: 24; female; single; studying speech-language pathology; interests: learning about various cultures, languages and dialects, hiking, baseball, and travel; correspondence in English. Address: 8890 Lawrence Dr., Apt. 303; Kent, OH 44240; U.S.A.

Ernesto Callo: 35; male; single; a technician in engineering equipment; interests: marathons, scuba diving, and photography; correspondence in Spanish or English. Address: Correo Central de Miraflores; Lima 18; PERU.

Ana Cruz Ucharico: 25; female; single; teaching language and literature at an Adventist school while studying journalism; interests: music and singing, collecting postcards and stamps, poetry, and travel; correspondence in English, Portuguese, or Spanish. Address: Casilla 7; Puerto Maldonado; PERU.

Dina Esteves: 43; female; married; working as a secretary at a law firm; interests: music, poetry, and learning about other cultures; correspondence in English, French, or Portuguese. Address: Ed. "Altis", 3o. "Q"; Cerro Alagoa, Lt. 10/11; 8200 Albufeira; PORTUGAL.

Liris Cristiane Calzado Ferreira: 22; female; single; teaching pre-school at an Adventist school, planning to continue studies in education; interests: reading, Christian music, crafts, camping, travel, and collecting postcards and stamps; correspondence in Portuguese. Address: Rua 4A, No. 359 - Vila Alema; Rio Claro, SP; 13506-661 BRAZIL.

Giselle F. de Oliveira: 21; female; single; studying medical science; interests: reading, singing, snow skiing, practicing martial arts, swimming, travel, and making friends all over the world; correspondence in Portuguese, English, or Spanish. Address: 11 Birch Street; Danbury, CT 06810; U.S.A.

Geraldo Gabriel: 32; male; completed a degree in theology and plans to pursue advanced studies; interests: swimming, cycling, collecting postcards and stamps, classical and gospel music, and making new friends; correspondence in Portuguese or English. Address: R. Apolinario Cortes, 38; Caixa Postal 35; Ouro Preto, RO; 78950-000 BRAZIL.

Ruth M. Gomes: 20; female; single; studying toward a degree in language and literature; interests: reading, swimming, good films, and music; correspondence in Portuguese, English, or Spanish. Address: Av. Amazonas 265, Apto. 21; Cohab. Carapicuíba; Sao Paulo, SP; 06327-270 BRAZIL.

Osei M. Joshua: 38; male; a teacher by profession; hobbies: teaching, reading, and expanding my field of knowledge; correspondence in English. Address: S.D.A. Church; P.O. Box 22; Kintampo, B/A; GHANA.

Mela Robyn Julin: 21; female; single; completing a diploma in nursing; interests: music, animals, collecting stamps, travel, videos, and gardening; correspondence in English or Malay. Address: 1G, Adventist

Court; No. 1 Midlands Drive; 10250 Penang; MALAYSIA.

Rosemary Yaneth Lezcano: 28; female; single; a teacher of secretarial sciences at Panama Adventist Academy; interests: singing, volleyball, cycling, travel, and working with young people; correspondence in Spanish or English. Address: Apdo. 365; David, Chiriquí; PANAMA.

Gilmer Liévano: 23; male; single; studying toward a teaching degree in physical education; interests: travel, good films, mascots and pets, and making new friends; correspondence in Spanish. Address: A A 1428; Ibagué, Tolima; COLOMBIA.

Eva Limbagan: 22; female; single; studying toward a degree in nursing; hobbies: journalism, poetry, playing the guitar, sports, and drawing; correspondence in English. Address: Philippine Union College; P.O. Box 1834; Manila; PHILIPPINES.

Christopher J. Makwero: 21; male; single; studying toward a degree in accounting; interests: reading, listening to music, jogging, collecting stamps, and travel; correspondence in English. Address: Solusi University; Private Bag T-5399; Bulawayo; ZIMBABWE.

Gladys K. Mariita: 22; female; recently married; pursuing a degree in education (mathematics and geography) at Nairobi University; hobbies: singing, sharing faith, playing the guitar, and reading the Bible; correspondence in English. Address: University of Nairobi - Kikuyu Campus; P.O. Box 30197; Nairobi; KENYA.

Chamululu Mubanga: 35; male; single; studying toward a diploma in administrative management; interests: swimming, Christian music, playing the organ and the guitar, singing, group Bible discussions, and travel; correspondence in English. Address: P.O. Box 10195; Chingola; ZAMBIA.

Kim Mung: 18; studying at Myanmar Union Adventist Seminary; hobbies: cycling, table tennis, soccer, and reading; correspondence in English or Myanmar. Address: Myanmar Union Adventist Seminary; Mosokwind Road; Myaung Mya Myo; MYANMAR.

Shadrach Myanney: 34; male; an office secretary; hobbies: writing and preaching; correspondence in English; Address: South Ghana Conference; Box 803; Accra; GHANA.

Beatrice Rolline Ogembo: female; single; studying toward a degree in home economics at Moi University; hobbies: reading, composing, singing and eventually recording gospel songs with her group "The Lighthouse Adventist Family Choir;" correspondence in English. Address: c/o Mrs. Janett Ogembo; P.O. Box 146; Migori; KENYA.

Nelson A. T. Okenye: 29; male; single; a postgraduate student in commerce at Indore University; interests: music, sports, presenting sermons, nature, camping, and traveling; correspondence in English or Kiswahili. Address: P.O. Box 74; Etago - Kisii; KENYA.

Myrna C. Oligario: 34; female; single; holds a degree in agriculture; hobbies:

swimming, reading, and singing religious songs; correspondence in English. Address: Dapdap, Dolores; Eastern Samar; 6817; PHILIPPINES.

Jennifer M. A. Otory: 38; female; single; holds a degree in economics and works as an employment officer in the civil service; interests: herbal remedies, cosmetology, acting, dressmaking, cooking; correspondence in English. Address: P.O. Box 31282; Nairobi; KENYA.

Adriana Pacheco: 19; female; single; studying special education; interests: crafts, poetry, swimming, and exchanging photos; correspondence in Spanish. Address: 4300 - 123; Palmares - Alajuela; COSTA RICA.

Estefenson Eduardo Prado: 21; male; single; studying toward a degree in business administration; interests: playing the piano, travel, coin collecting, and learning other languages; correspondence in English, Spanish, or Portuguese. Address: Rua Pereira da Silva, 330 - Ap. 403; Laranjeiras, Rio de Janeiro, RJ; 22221-140 BRAZIL.

Nyaniso Qwasha: 19; male; single; studying toward an accounting degree; interests: soccer, reading, and watching TV; correspondence in English. Address: P. Gorvalla Lodge; 3 Brand Street; Bellville; 7530 SOUTH AFRICA.

Wenny S. Rosa: 22; female; single; studying toward a degree in secondary education with a major in general science; active in the Movement of Adventist Students (MAS); hobbies: collecting stamps, singing, cooking, reading, and excursions. Address: 009 Comique Compound; Sabado Street; Pagadian City; 7016 PHILIPPINES.

Claudia Sansón: 21; female; single; studying toward a degree in educational psychology; interests: reading, walking, Bible study, sharing my faith, outdoor activities, and psychology; correspondence in English, Portuguese, or Spanish. Address: Chile 243; 3360 Oberá; Misiones; ARGENTINA.

Doris Joy Santosidad: 22; female; single; studying toward a degree in nursing; interests: exchanging stamps, drawing, singing, piano playing, and making new friends; correspondence in English. Address: Mountain View College; 8700 Malaybalay, Bukidnon; PHILIPPINES.

Noami Barnabas Sato: 22; female; single; completing a diploma in nursing; hobbies: cycling, jogging, listening to music, travel, and photography; correspondence in English. Address: 1G Student Nurses Dormitory - Adventist Court; No. 1 Persiaran Midland; 10250 Penang; MALAYSIA.

Sarah N. Simiyu: 21; female; single; studying at Egerton University toward a degree in education and agriculture; hobbies: sports, Bible reading, travel, and making friends; interested in achieving higher goals and in corresponding with development-conscious readers; correspondence in English or Kiswahili. Address: P.O. Box 43812; Nairobi; KENYA.

Cynthia Anne Simon: 18; female; single; studying toward a diploma in nursing at

Penang Adventist Hospital; hobbies: music and sports; correspondence in English or Bahasa Melayu. Address: 1M Adventist Court, Midlands Drive; 10250 Pulau Tikus; Penang; WEST MALAYSIA.

Emma Trujillo: 18; female; single; just completed an associate degree in business; hobbies: camping, music, travel, and making new friends; correspondence in English or Spanish. Address: # 33 Paraiso Village; Corozal District; BELIZE.

Nana Tuffour: 23; male; single; pursuing a degree in theology with an English minor; interests: exchanging photos and making new friends; correspondence in English. Address: Valley View College; Box 9358, Airport; Accra; GHANA.

Marcela Alejandra Valdiviezo: 25; female; single; a physiotherapist working at a private clinic; interests: helping people, personal development, and expanding the influence of the gospel; correspondence in Spanish. Address: Jacinto Ríos 278, Barrio Gral. Paz; 5000 Córdoba; ARGENTINA.

Ismael Valenzuela: 37; male; never married; a health administrator, holding a master's degree in health services administration and a law degree; interests: church activities, reading, water sports, music, travel, and outdoor activities; correspondence in English or Spanish. Address: 99 Main St., # 157; Stoneham, MA 02180; U.S.A.

María Magdalena Vásquez: 38; female; single; a public accountant involved in business; interests: reading, music, and travel; correspondence in English or Spanish. Address: Apartado Postal # 215; San Pedro Sula; HONDURAS.

If you are an Adventist college/university student or professional and wish to be listed here, send us your name and postal address, indicating your age, sex, marital status, current field of studies or degree obtained, college/university you are attending or from which you graduated, hobbies or interests, and language(s) in which you would like to correspond.

Address your letter to **Dialogue Interchange:** 12501 Old Columbia Pike; Silver Spring, MD 20904-6600-U.S.A. Please type or print clearly. We will list only those who provide all the information requested above. The journal cannot assume responsibility for the accuracy of the information submitted or for the content of the correspondence that may ensue.

Correspondents in China?

F. John Adams, a Seventh-day Adventist who taught English in China, has sent us additional names of several of his former students who desire to establish correspondence in English with *Dialogue* readers. They are planning to graduate in 1996 and become English teachers. Most of them have been given Bibles, but have only a general acquaintance with Christianity. The mailing address for all of them is the same: [Name of the student] Class 9252; Foreign Language Department; Xaingtang Teachers College; Xaingtang, Hunan; 411100 CHINA.

Deba: 22; female; single; interests: reading, fishing, sewing, gardening, cooking, and making new friends.

Helen: 19; female; single; interests: classical and popular music, reading, stamp collecting, sports, and skating.

Hidy: 21; female; single; interests: swimming, travel, watching TV, reading, and making new friends.

Holly: 20; female; single; interests: reading, singing, knitting, cooking, and making new friends.

Kathy: 19; female; single; interests: classical and popular music, playing the guitar, painting, poetry, badminton, and travel.

Lucy: 21; female; single; interests: singing, reading, watching sports and TV, travel, and making new friends.

Margaret: 20; female; single; interests: sports, reading, music, knitting, calligraphy,

and travel.

Vicky: 21; female; single; interests: swimming, singing, reading, volleyball, and table tennis.

Johnson Cao: 21; male; single; interests: sports, reading, swimming, learning languages, travel, and making new friends.

Shirley Chen: 19; female; single; interests: reading, music, travel, stamp collecting, flowers, cycling, badminton, and gardening.

Brenda Dai: 19; female; single; interests: reading, cycling, cooking, singing, swimming, stamp collecting, and watching TV.

Daisy Hong: 21; female; single; interests: badminton, volleyball, basketball, table tennis, reading, fishing, and travel.

Nancy Liu: 22; female; single; interests: music and singing, reading, knitting, ice-skating, poetry, and travel.



Recent developments in science and technology have opened new possibilities in genetic engineering. These, in turn, have created ethical dilemmas for Christian believers. After careful study of the issues involved, leaders of the Seventh-day Adventist Church have approved the document “Christian Principles of Genetic Interventions,” prepared by the Christian View of Life Committee of the

Genetic engineering: An Adventist response

General Conference. The statement is presented here for the information and reflection of our readers.

Introduction

Most of the new developments in genetics are the result of increased knowledge concerning the fundamental structure of genes, not only in humans but throughout all the realms of life on earth. Among these developments are genetic mapping, new means for genetic testing, new possibilities for genetic engineering, and a variety of eugenic strategies that would have been unimaginable only a few years ago. In short, new genetic knowledge has produced unprecedented power. With that power has come the potential for immense good or harm. And with such great power also comes great responsibility. From the standpoint of the Christian faith, we are

accountable for the use of this power not only to global humanity, but also to every realm of created life that God has entrusted to our stewardship. Ultimately we are accountable to the Maker of the universe who holds us responsible for the care of each other and of the earth.

When creation came forth from the Creator’s hand, it was “very good” (Genesis 1:31). The genetic endowment which Adam and Eve received from their creator was without defects. The genetic diseases from which humans now suffer are not the result of normal variation. They have developed through harmful mutation. In restoring the human genome to a healthier condition, modern sciences may attempt to recover more of creation’s original condition. To the extent that helpful genetic interventions can be conducted in harmony with Christian principles, they are to be welcomed as cooperation with the divine intention of alleviating the painful results of sin.

Any attempt to state comprehensive principles of ethics for genetic interventions must confront the complexities of a rapidly changing field of science. Since the discovery of the molecular structure of DNA (deoxyribonucleic acid), knowledge of genetics across an ever wider range of life forms has burgeoned.

Many of the increases in information and technological ability have been accompanied by significant ethical concerns. We can only begin to imagine future questions that will arise as genetic science progresses. The complexity of the issues and the pace of change make it likely that statements of relevant Christian principles will require expansion and modification as time passes.

One example of an area of rapid change is genetic mapping. An international, scientific effort known as the Human Genome Project is attempting to construct a detailed genetic chart, or “map,” of all the human chromosomes. The goal is to provide a comprehensive description of the sequence of the millions of DNA base pairs which human chromosomes contain. Researchers plan to use this information to facilitate the identification and isolation of human genes, thereby providing a helpful aid in understanding human development and in treating human diseases. New details about the identity, role, and function of human genes are continually emerging.

Increased knowledge about the

identity of human genes has given rise to a variety of new possibilities for genetic testing. In the past, genetic information about an individual was largely inferred from the person's family history or clinical observations of the person's phenotype, or physical expressions of a person's genes. Today, a growing number of sophisticated genetic analyses make it possible to identify defective genes that cause genetic diseases such as cystic fibrosis, Huntington's Chorea, and some types of cancer. Many of these tests can now be performed prenatally. The potential exists for identifying hundreds of genetic characteristics, including a wide range of genetic disorders.

A further result of basic genetic knowledge is the capacity to alter genes intentionally, or genetic engineering. Through the use of enzymes which are able to excise specific segments of genes, it is possible to change the genetic makeup of cells by deliberately inserting, removing, or changing specific genes. Genetic engineering presents astonishing new possibilities, including the transfer of genes across biological boundaries, such as from animals to plants. The potential for improving life forms seems endless. Genetically engineered plants, for example, can be made more productive, more resistant to diseases, or less susceptible to internal processes of decay.

Genetic engineering has directly benefited human medicine. It has made possible, for example, the production of human insulin and human growth factor, neither of which was previously obtainable in sufficient quantities. Genetic engineering also makes it possible to treat diseases through genetic alteration. With this type of treatment, a patient whose cells have missing or defective genes receives needed genetic material. No one knows how many genetic diseases may eventually be treated in this way, but initial successes with diseases such as cystic fibrosis give hope that other genetic disorders may be treatable.

Increased genetic knowledge also produces new possibilities for eugenics, or endeavors to improve the gene pool of various species, including human beings. In broad terms, such attempts fall into two categories. Negative eugenics uses strategies whose goal is to prevent harmful genes from being inherited.

Positive eugenics uses strategies whose goal is to promote the transmission of desirable genes. An example of negative eugenics, common in the past, is the sterilization of individuals considered to have defective genes capable of being inherited. An example of positive eugenics is artificial insemination by donors who have been selected for traits, such as high intelligence, that are deemed desirable.

Ethical Concerns

In order to provide focus, it is helpful to consider a sampling of current ethical concerns for which we seek to state Christian principles. These concerns can be placed in four basic categories: the sanctity of human life, the protection of human dignity, the acceptance of social responsibilities, and the safekeeping of God's creation.

Sanctity of human life. If genetic determinism reduces the meaning of humanhood to the mechanistic workings of molecular biology, there is serious potential for devaluing human life. For example, new capacities for prenatal genetic testing, including the examination of human pre-embryos prior to implantation, generate questions about the value of human life when it is genetically defective. How serious must a genetic defect, prenatally diagnosed, be before it is an ethically legitimate reason for discarding a pre-embryo or for inducing an abortion? Some conditions, such as trisomy 18, are generally deemed incompatible with life. But the relative seriousness of most genetic defects is a matter of judgment.

Protection of human dignity. The protection of personal privacy and confidentiality is one of the major concerns associated with the new possibilities for genetic testing. Knowledge about a person's genetic profile could be of significant value to potential employers, insurance companies, and to those related to the person. Whether genetic testing should be voluntary or mandatory, when and by whom the testing should be done, how much and with whom the resulting information should be shared are matters of significant ethical concern. Difficult decisions must be made about whether there are exceptions to the usual expectation of confidentiality and privacy when persons may suffer considerable harm because of

a lack of information. At stake is the protection of persons from stigma and unfair discrimination on the basis of their genetic makeup.

Another cluster of concerns related to human dignity stems from the possibility of intentionally altering the human gene pool. Medical interventions for genetic diseases may be aimed either at the treatment of bodily cells that are genetically defective or at the alteration of reproductive cells. Changes in human reproductive cells could become a permanent part of the human gene pool. Interventions may also extend beyond the treatment of disease and include attempts to enhance what have formerly been considered normal human characteristics. What are the implications for the meaning of being human, for example, if interventions aimed at enhancing human intelligence or physique become available?

Acceptance of social responsibilities. The power that results from new genetic knowledge also raises concerns about the ethics of social policies and the boundaries between individual liberties and social responsibilities. For example, should society develop policies designed to encourage either positive or negative eugenics? Should individuals with serious genetic disorders be given full procreative liberty? Another area of social concern has to do with the use of society's resources. Questions can be raised about the amount of social resources that should be spent for interventions in human genetics when more basic health care is not fully available. Other questions arise concerning the distribution of the benefits and burdens of genetic interventions and how they will be shared by rich and poor within society.

Stewardship of God's creation. As the powers of genetic engineering are further developed, many changes could be made in various species that inhabit the earth. These changes have the potential for being both permanent and, to some degree, unpredictable. What limits to genetic change, if any, should be accepted? Are there boundaries that should not be crossed in transferring

genes from one life form to another? We may hope that genetic changes are intended to enhance life on our planet.

But there are reasons for concern. For example, consideration has already been given to genetic alterations for the purpose of developing new biological weapons. The exploitation of other life forms for purposes of military security or economic gain should call forth careful, moral scrutiny.

It is with ethical concerns like these in mind that we state the following Christian principles for genetic interventions.

Principles

1. Confidentiality. Christian love requires that trust be maintained in human relationships. The protection of confidentiality is essential to such trusts. In order to safeguard personal privacy and protect against unfair discrimination, information about a person's genetic constitution should be kept confidential unless the person elects to share the knowledge with others. In cases where others may suffer serious and avoidable harm without genetic information about another person, there is a moral obligation to share the needed information (Matthew 7:12, Philippians 2:4).

2. Truthfulness. The Christian obligation to be truthful requires that the results of genetic testing be honestly reported to the person tested or to responsible family members if the person is incapable of understanding the information (Ephesians 4:25).

3. Honoring God's image. In all of God's creation, only human beings were created in the image of God (Genesis 1:26, 27). The Christian acknowledgment of God's wisdom and power in creation should lead to caution in attempts to alter permanently the human gene pool (Genesis 1:31). Given current knowledge, genetic interventions in humans should be limited to treatment of individuals with genetic disorders (somatic cell therapies) and should not include attempts to change human reproductive cells (germ cell alterations) that could affect the image of God in future generations. All interventions in human beings for genetic reasons should be taken with great moral caution and with appropriate protection of human life at all stages of its development.

4. Prevention of suffering. It is a Christian responsibility to prevent or relieve suffering whenever possible (Acts 10:38, Luke 9:2). For this reason the primary purpose of human genetic intervention should be the treatment or prevention of disease and the alleviation of pain and suffering. Because of the tendencies of sinful human nature, the possibility of abuse, and unknown biological risks, attempts to modify physical or mental characteristics with genetic interventions for healthy persons who are free of genetic disorders should be approached with great caution.

5. Freedom of choice. God values human freedom and rejects the way of coercion. People who are capable of making their own decisions should be free to decide whether or not to be tested genetically. They should also be free to decide how to act on information that results from testing, except when others may suffer serious and avoidable harm. It may be the morally responsible choice

to avoid known risks of serious congenital defects by forgoing procreation. While such decisions about procreation and genetic testing are deeply personal, they should be made by the individual with due consideration for the common good.

6. Stewardship of creation. Safeguarding God's creation includes esteem for the diversity and ecological balance of the natural world with its countless species of living creatures (Genesis 1). Genetic interventions with plants and animals should show respect for the rich variety of life forms. Exploitations and manipulations that would destroy natural balance or degrade God's created world should be prohibited.

7. Nonviolence. Using genetic manipulation to develop means of warfare is a direct affront to Christian values of peace and life. It is morally unacceptable to abuse God's creation by changing life forms into weapons of destruction (Revelation 11:18).

8. Fairness. God loves all human beings, regardless of their perceived social status (Acts 10:34). The benefits of genetic research should be accessible to people in need without unfair discrimination.

9. Human dignity. Created in God's image, human beings are more than the sum of their genes (Genesis 1:27, Acts 17:28). Human dignity should not be reduced to genetic mechanisms. People should be treated with dignity and respect for their individual qualities, and not be stereotyped on the basis of their genetic heritage.

10. Healthfulness. Christians have a responsibility to maintain the health of their bodies, including their genetic health (1 Corinthians 10:31). This means that Christians should avoid that which is likely to be genetically destructive to themselves or to their children, such as drug abuse and excessive radiation. 🏠

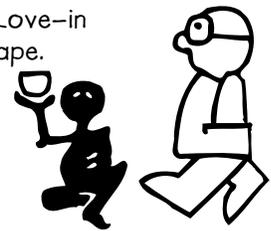


Parable

© by Guido Delameillieure
Collonges-sous-Saleve, France



Exegesis: Love—in Greek, Agape.

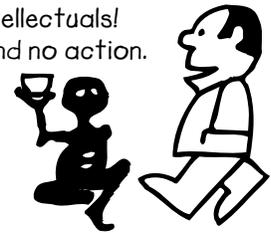


This is a key word in theological discourse.

It clearly differs from filial love and eros love...



These intellectuals! All talk and no action.



Their "Love" is a joke.



They have no idea of what it is!



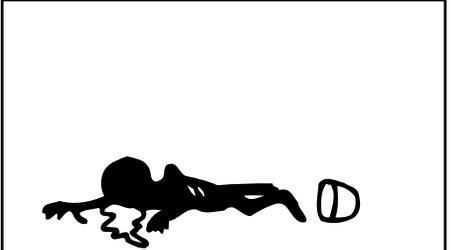
In this world none of us can escape suffering...



But we must have faith in God.



Because God is Love.
1 John 4:16



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