

THE BIBLICAL EDUCATOR

"To know wisdom and instruction; to perceive the words of understanding" Proverbs 1:2

* Institute for Christian Economics, 1980
Editorial Office: 1007 E. North Street, Anaheim, CA 92805
Subscription Office: P.O. Box 25, Sterling, VA 22170

MATHEMATICS: IS GOD SILENT?

Part I

by Larry L. Zimmerman

A few Septembers ago the Westmont College faculty defeated a proposal which encouraged the Interterm planners to stimulate a return to an "inter-disciplinary, integrative (i. e. faith/practice)" program. According to the *Westmont Horizon*, (October 1, 1976) "some faculty members felt they were being pressured into doing something that was not possible in their particular field." "Integration is not possible in mathematics," said Dr. David Neu, Associate Professor of Mathematics. "In mathematics God's revelation is silent. There is nothing to integrate . . . the mathematician is not seeking for truth . . . as far as mathematics goes there ain't nuthin' there."

It is not surprising that Dr. Neu might be led to assume that nothing is there in mathematics. Since about 1850 this has been the majority position of the top professionals in his field, who turn some strange sounding phrases in describing their discipline. For example, Bertrand Russell referred to mathematics as "the subject in which we never know what we are talking about, nor whether what we are saying is true." ("A Recent Work on the Principles of Mathematics" in *International Monthly*, 1901, Vol. 4, p. 84) Morris Kline called it "a body of knowledge" containing "no truths" (*Mathematics in Western Culture*, N.Y., Oxford University, p. 9), and to David Hilbert it was a meaningless, formal game.

It is a mistake, however, to allow the power of these men's names in mathematics to give authority and force to their conclusions in philosophy, and the foregoing statements are philosophical. It is easy for a Christian to forget that when an unbelieving scientist philosophizes, he is generally wrong. These of all people are suspect in philosophy because, dealing so intimately with the creation, they fall into the Romans 1 category of those who knew God (from His revelation in creation) but did not honor Him as God and thus became futile in their speculations and were given over to outlaw minds. The philosophical base proposed by Bertrand Russell was a "firm foundation of unyielding despair." (*Why I am Not a Christian*, Simon & Schuster, 1966, p. 107).

Their assumption is that nothing is there in mathematics and if this nothing is somehow something, it is still of human invention; the mathematician is like an artist, "freely creating those worlds he pleases." There were, however, two questions historically that mathematicians found difficult to answer from the perspective of mathematics-as-art, and with which their contemporary colleagues are still struggling.

First, why are there so many unifying elements such as sets, functions, and vectors, interlacing what initially appeared to be completely diverse ideas invented independently by different people at different times in different parts of the world? Even more difficult to explain on this basis are the numerous simultaneously produced identical "inventions," for example, calculus by Leibnitz and Newton, hyperbolic geometry by Lobachevsky and Bolyai, and vector analysis by Hamilton and Grassman. It's as if a group of artists, supposing they were independent and free, slowly realized they were all painting sections of the same gigantic, unified entity, some of them even painting the same parts at the same time!

Noted physical chemist Gilbert N. Lewis said in "Geometries,"

"We cannot avoid the thought that having embarked upon a certain line of mathematical inquiry, while we appear to have preserved the utmost of personal freedom, we seem bound to follow certain paths and make and remake certain discoveries." Einstein agrees, stating there is invariably one theoretical construction "that proves to be unquestionably superior to all others . . . the theoretical system (is determined) in a virtually unambiguous manner." (Quoted in "Scientific Theories" by H. R. Post in *The Listener*, Feb. 10, 1966).

The second and toughest of the two questions is posed by Morris Kline: ". . . the study of mathematics and its contributions to the sciences exposes a deep question: Mathematics is man-made. Yet with this product of his fallible mind man has surveyed spaces too vast for his imagination to encompass, he has predicted and shown how to control radio waves which none of our senses can perceive, and he has discovered particles too small to be seen with the most powerful microscope. Cold symbols and formulas completely at the disposition of man have enabled him to secure a portentous grip on the universe. Some explication of this marvelous power is called for." (*Mathematics and the Physical World*, London, George Allen and Unwin, 1954, p. ix).

Kline is echoing a plea which historically has surfaced continually and is still waiting to be answered by those who believe that mathematics is strictly a human endeavor. When one reads articles like Nobel Prize winner Eugene Wigner's "The Unreasonable Effectiveness of Mathematics in the Natural Sciences," one senses Wigner's bewilderment over the fact that purely cerebral "inventions," the "free creations of the human mind," have such powerful applications to the physical world. Wigner expresses his opinion that "the enormous usefulness of mathematics in the natural sciences is something bordering on the mysterious" and "there is no rational explanation for it." (*Symmetries & Reflection, Scientific Essays*, E. P. Wigner, p. 223). He also cites examples such as the use of complex numbers in the laws of quantum mechanics and concludes: "it is difficult to avoid the impression that a miracle confronts us here." (op. cit. p. 229)

Other prominent mathematicians agree. Nicholas Bourbaki (which is the pseudonym under which a rather amorphous consortium of French mathematicians publish a distillation of ideas from their group) stated, "mathematics appears thus as a storehouse of abstract forms . . . and it so happens—without our knowing why—that certain aspects of empirical reality fit themselves into these forms, as if through a kind of pre-adaptation." ("The Architecture of Mathematics," *American Mathematics Monthly*, Vol. 57, 1950, p. 231).

Even the work of G. H. Hardy, a militant "pure" mathematician who boasted that he had never done anything useful and who regarded God as his personal enemy, was shown after his death to have important applications in genetics and pyrometry.

After claiming that "the mathematician is entirely free to construct what worlds he pleases; he is not discovering the fundamental principles of the universe nor becoming acquainted with the ideas of God." John W. N. Sullivan also begs this deep question by admitting, "Why the external should obey the laws of logic, why, in fact, science should be possible, is not at all an easy question to answer." (*The World of Mathematics*, edited by J. R. Newman, Simon & Schuster, N. Y., 1956, p. 2020).

If these two questions cannot be answered rationally from the perspective of mathematics-as-art or human invention, those of this persuasion should ask themselves if their position is realistic.

DEBATE AND THE SKILLS OF ECONOMIC AND POLITICAL ANALYSIS—Part II

Part of the Christian world-and-life view is a unique political and economic perspective. In sharp contrast to humanistic political systems, the role of God is reserved solely for God, not for the State (as in socialism, totalitarianism, and 20th century America) and not for individual man (as in anarchy). Man is called not to depend upon the government for his security, but to forsake his revolt against maturity and exercise responsible dominion under God. Central to the perspective of those who founded this nation was a Biblical emphasis in law, politics and economics. The present social chaos and cultural decline is due to an abandonment of God's Law for the nations. Central to the Christian School program, therefore, must be a thorough indoctrination of the Biblical doctrines of law, politics and economics. Only the Christian Schools can raise up the necessary leaders and prophets to stay the judgment of God.

Two of the many advantages a student would gain in a program of academic debate in the Christian School would be a broad-based understanding of the Biblical doctrines of economics and politics, and at the same time a Scriptural understanding of humanistic opposition to God's law. Such a program would thoroughly prepare the students to face the collapse of a humanistic economic system, or hopefully to be used of God to bring forth repentance and avoid judgment.

As an illustration of how a program of academic debate would function, let us consider the following resolution: "Resolved: That the Federal Government Should Enact a Comprehensive Program of Medical Care for Each Family Unit."

The first step the student must make is to gain an understanding of the necessary Dialectical and Rhetorical skills to be used in debating any policy proposition: Logical thinking, reasoning, and analysis; composition skills, organization of thought; and the skills of persuasive public address. These skills were covered in the first part of this series.

The second step is to gain an intimate acquaintance with the library, preferably a large university library, but at the very least a library that contains not only Biblical publications, but also those of the humanists. A larger library, such as that of the university, provides access to legal periodicals, government documents, and to a large selection of books and journals. A student should know how to find a given Senate hearing (in the case of our example, Sen. Kennedy's hearings of health care); they should be able to compile the current consensus of legal opinion in leading law journals and Supreme Court

opinions; they must update their evidence with recent action in Congress (Congressional Record) and current events (major newspapers, such as the New York Times, the Christian Science Monitor, and the Wall Street Journal are all indexed and on microfilm in many libraries.) Research skills are of inestimable importance in college and will be important tools of dominion. In competitive debate students must document their defense of the resolution with qualified authorities and are thereby forced to develop research skills. In so doing they also gain a working knowledge of humanist sources and thinking.

But the real understanding of humanist ideas and policies comes by defending a policy as outrageous as our example (one which incidentally has already been used on both the college and public high-school debate circuits). At first glance, one might react, "How can *anyone* defend a policy like that?" But in the world of debate, somebody has to. Worse still, the team that is forced to defend such socialist policy knows all too well that its opposition (in a Christian school, anyway) is armed with R. J. Rushdoony, Gary North, Von Mises, and a host of others (cf. II Kings 6:16). Knowing this, defenders of such a policy will be forced to think beyond North and Von Mises, and attempt to construct a case for Medical Care that will dispose of their arguments for the free market. This is not an impossible task. Two hundred years from now, Christians will be looking back at Rushdoony and North and saying, "Christian Reconstruction was in its infancy then. Praise God we now know more than they." By being put into the position of "devil's advocate" (what interesting terminology) the sharper young students will see the flaws in the analysis of our current thinkers, and plug up these holes before the humanists exploit them.

Meanwhile, those who are given the task of opposing the resolution should be busying themselves with continued diligent study of the Scriptures, and formulation of Christian public policy. When their opponent exposes a weakness in their thinking, they must return to God's Word to find where they went amiss. All of this intensive education and analysis of politics and economics is enhanced when students are given the opportunity to defend both sides of the topic.

Each topic also gives great insight into particular areas of society. Our example forces students to debate the merits and demerits of different medical programs: preventive vs. symptomatic; the value of natural foods and a Biblical diet vs. the synthetic methods of modern medical science, etc.

This kind of intensive analysis of economic and political policy will raise up a whole new breed of Christian soldiers.

SINGING—Part II

James B. Jordan

Singing is one of the most important things the Christian School teaches. Singing is an emotional enhancement of speech, and it was given to humanity by God to enable us to praise Him. The humanistic schools have replaced music and singing, which are God-centered, with competitive sports, which are man-centered: the goal being to glorify the individual or to glorify the school.

Virtually anyone can be taught to sing. The number of people who cannot be taught to match pitches (*sing on key*) is infinitesimal. The vast majority of people who think they cannot sing, in fact have simply never been taught to sing. Of course, singing on key comes easier to some than others. Childhood is the best time to overcome reticence about singing, and schools should put forth intense efforts to teach all children to sing in key.

Of course, all children should be taught to read musical notation. The simplest way is to sing by numbers, assigning the numbers one through seven to the pitches of the major scale. Children should be taught to sing by sight, reading by the numbers. (Your music teacher will understand what I mean by this, if it is unclear to you.)

The result of a self-conscious music programme will be churches filled with people who have been trained to glorify God with their voices. The prospect is exciting. Also, years of singing good hymns and psalms will do much to instill a sense of good taste, and prevent the children from being caught up in whatever the current humanistic musical fad is. The reason Christian kids so often go for "rock" music is that their musical taste is completely unformed. The violence in today's music is but the reverse side of the sentimental, goopy, syrupy, popular music of a previous generation. "Champagne music" leads to "marijuana music." Too many gospel songs are nothing but sentimental goop, and children brought up on these are starved for music with some real meat in it. They find such "strong" music in "rock." It would be better if they had been brought up on strong Christian music, such as the psalms.

Singing and musical training should not stop anywhere in the curriculum. The child must reacquire confidence in his voice when it changes, at the onset of adolescence. Moreover, a high school choral

programme, with only the best Christian music (i.e., classical or art music), remains the best way to shape taste and prevent the teenager from being drawn into the musical arms of KISS (Knights in Satan's Service), and such like "rock" groups. If you have a large high school (maybe someday . . .) you can set aside the best singers and take them on tour.

In the first essay on singing we discussed psalms. What about hymns? The children are learning hymns at church, of course, but the chances are good that the hymns they learn are sentimental, contentless, gospel refrain hymns. In school you want to teach hymns that are mentally and musically superior, both to help set the child's musical taste, and to teach him sound, firm doctrine and experience. I strongly recommend the *Lutheran Hymnal* of the Missouri Synod Lutheran Church (pub. Concordia), and secondly the *Hymnal* of the Protestant Episcopal Church (Church Hymnal Corporation, 800 Second Ave., NY, NY 10017). No hymn book is perfect, but there is a wealth of beautiful hymns in these books, and thus they are excellent for any singing programme. The *Lutheran Hymnal* gives the chorales in their original rhythmic form, and the Episcopal *Hymnal* includes, in addition to many fine hymns, some good Gregorian Chant and Anglican Chant. Expose the children to all of these.

For Christmas be sure to make use of the *Oxford Book of Carols* (Oxford University Press). Also, don't neglect the American heritage. Decent collections of Black Spirituals are available from several publishers, though the best arrangements are those put out by the Tuskegee Institute. The best collection of White Spirituals is *The Good Old Songs* (Cayce Pub. Co., Thornton, Arkansas). For help and good ideas, get Alice Parker, *Hymn-Singing* (Hinshaw Music, Box 470, Chapel Hill, NC 27514).

The simplest and most appropriate way to teach singing is as part of your daily chapel exercises. As you train them in worship, train them in music, which is one of the primary means of worship.

For sight singing at the high school level, and for general singing as well, get hold of the collection of *101 Bach Chorales*, in English, published by Schmitt, Hall & McCrory, Minneapolis. Bach is best, and kids who love Bach, while they may flirt with "rock", will not be sucked into the whole "rock" scene.

BOOK REVIEW

by David H. Chilton

The Future of the Bible, by Jakob van Bruggen. Nashville: Thomas Nelson, Inc., 1978.

The multitude of Bible translations and paraphrases in our day has caused much confusion among Christians. Should we discard our King James Bibles for a newer, more modern rendering? If so, to which version shall we turn? Should there be special translations to meet the needs of children and the unevangelized? These and other questions are being asked, and they are ably dealt with in this excellent book. Van Bruggen, a professor of New Testament Exegesis, is an accomplished scholar and writer who presents his case with clarity and force.

Van Bruggen's work is based firmly on his view that the Majority Text (the reading of the majority of manuscripts) is the only valid and reliable foundation for a translation. For the most part, the text of the King James Version followed the Majority Text closely, but since 1881 most versions have been guided by the tenets of B. F. Westcott and F. J. Hort. (The destructive subjectivism of their critical theories has been laid bare recently in another Nelson publication, *The Identity of the New Testament Text*, by Wilbur Pickering.) Ninety percent of all manuscript evidence is ignored by these new "Bibles" in favor of a few corrupted texts. A fundamental principle of modern textual criticism is that the original text was subject to error and inconsistency. If, for instance, a reading is consistent, it is rejected: a later scribe must have "harmonized" it. The accusations brought against the Majority Text are most revealing: it is characterized by "lucidity and completeness"; both in matter and diction it is "conspicuously a full text. . . . Entirely blameless on either literary or religious grounds. . . ." (Westcott and Hort, *The New Testament in the Original Greek*, p. 134 f.) Bible translators have the obligation to face squarely the ungodly presuppositions behind the Westcott-Hort methodology. "The law of the Lord is perfect," the Spirit informs us; and He surely meant it as a compliment. A trustworthy translation will begin with the fear of the Lord, and will be based on the text God has provided His people throughout the history of the Church.

The bulk of this book, however, goes beyond textual arguments and deals with popular translational theories. Even granting the purity of the text, a major problem has arisen in the method of handling the word of God itself. "The theory that most translators hold is that of dynamic equivalence. The Bible societies have accepted this theory as the most important guideline for their work" (p. 67). The emphasis here is not on translating the words given by God in Scripture, but rather on how the message is received by those reading it. Bible study must become a "communication event", and Scripture must be transformed to fit the cultural patterns of its "receptor." Thus our perspective should not be to communicate doctrines as such, but to deliver communication effectively. All language is imperfect and limited; we therefore should not canonize the words of the original language, but find a way for the purpose of the revelation to break through to our society. The result of this theory has been the establishment of a new hierarchical priesthood, in which the "translator" stands between the people and the word of God, and their access to Scripture exists only insofar as he successfully creates a "communication event." The words spoken by God are withheld from the people, and the Bible is bound in chains as strong as in the pre-Reformation era. Van Bruggen states:

It seems respectful to say that our human language is too small and too narrow for transmitting eternal, absolute, and divine truths; but in fact it is most disrespectful. It says that

when the Lord God created man in His image, He made him too limited to receive the truth. It also implies that the Creator was not capable of granting man a language ability sufficient for man to confess his Creator in words. . . . The theory of dynamic equivalence takes into account the receptors of the Word as they see themselves, but not as God views them (p. 81).

Van Bruggen documents his contentions with careful comparisons of various translations, especially popular versions such as *Today's English Version*, the *Living Bible* and the *New International Version* (which, its supporters claim, will establish a "tradition" surpassing the KJV). Then, in an extremely helpful section, the author discusses characteristics of a reliable translation: faithfulness to the form, clarity, completeness, loyalty to the text, spirituality, authoritative-ness and ecclesiastical usage. The Church of Jesus Christ has long needed this study, and its widespread distribution will help to secure for our children the accessibility of God's word.

(Note: For further study, I recommend the publications of the Trinitarian Bible Society. Their catalog may be obtained by writing to them at 217 Kingston Road, London SW19 3NN, England.)

The New King James Bible: New Testament. Nashville: Thomas Nelson Inc., 1979.

This is without a doubt the most reliable modern English translation in existence, in respect of both text and translation procedure. It is, in fact, not a new translation at all, but a faithful revision of the King James Version, replacing outdated words and expressions with their modern counterparts. Most of the original wording is unaffected, so that the style of the KJV is retained. As the translators of 1611 said, their purpose was not "to make a new translation. . . but to make a good one better." The 119 scholars who worked on the NKJB have succeeded in that task.

There are some problems. For one thing, the old version distinguished between singular (thee, thou) and plural (you, ye) forms of address, and changes between these forms can have significance (see Luke 22:31-32). This distinction is easily lost in modern translations, although there are ways of expressing it, and translators should make the attempt. On the other hand, other subtle nuances of Greek and Hebrew are camouflaged by even the best translations (such as differences in gender; e.g., Eph. 5:5), and this fact alone should not discourage us from accepting the NKJB. I have noticed, however, that the KJV rendering is preferable at some points (e.g., Matt. 24:30; cf. Marcellus Kik, *Eschatology of Victory*, p. 137). And it is certainly superior in that it italicizes words not found in the original text. To omit this procedure is unfair to the reader.

More importantly, work must still be done in providing a New Testament fully based on the Majority Text (both KJV and NKJB are mildly defective on this score). Thomas Nelson will soon publish a critical edition of the Greek New Testament Majority Text, and it is hoped that an accurate NKJB-type translation will result.

Finally, there are those who will reject any modern translation, regardless of its reliability—and for a good reason: the cultural and literary significance of the KJV. This is a point not to be slighted, for the KJV is a valuable link with our heritage. Children should be trained to read the KJV with ease, and if it is mastered, they will have few problems with Shakespeare or Milton. We need an avenue to our past, and this the 1611 version amply supplies. In no case should we simply discard it; in this respect, no modern version can ever take its place.

But if you do desire for yourself or your students a trustworthy, modern-English edition of the KJV, this is it.

The Biblical Educator is published every month by the Institute for Christian Economics, a non-profit, tax-exempt educational organization. It is mailed free of charge to those who ask to be put on the mailing list. Subscriptions: P.O. Box 25, Sterling, VA 22170. Donations are fully tax deductible; checks should be made out to Institute for Christian Economics.