



christian educators journal

MARCH 1976

MORNING MEDITATIONS

It's All Greek

Perhaps is climb wall
no harder than of
wall to a words.

King Solomon wrote "...of making many books there is no end; and much study is a weariness of the flesh" (Eccles. 12:12). Some students, recognizing the truth of this statement, study as little as possible. Many, however, climb wearily over or through word after word.

Perhaps no other single factor contributes so much frustration to a child than the inability to read the required book for the course. All too often the average teacher overlooks the obvious problem, or can see no way in her system to overcome the situation. With little effort one subconsciously labels the child as "slow," "disadvantaged," or "dumb." If the busy teacher neglects to consult previous tests in the permanent file or to give the child a diagnostic reading test, the educator is operating in the darkness of ignorance.

School, with its unnatural routine of walk, sit, don't talk, listen, write, read, answer, correct mistakes, *ad repetitionem, ad nauseam, ad infinitum*, is bad enough for a child without his having to scale a barbed-wire wall of words every hour of the day to find out just what the book or the teacher wants.

Think of yourself as a Good Samaritan having come upon a child beaten and bruised by bouncing off a fearsome phonic fence. The first step is the same as the Samaritan's: "He had compassion on him" (Luke 10:33). *Sans* compassion you might as well hang it up as a teacher, particularly, of the culturally deprived. See the child as your neighbor or younger brother. Pick up the victim where you found him—at his present reading level—and apply the proper learning prescription: books or tapes written at his level that meet his learning needs. Add daily doses of praise for any measure of success or effort.

O FATHER

Open my eyes to see the struggling, bleeding students in my classes who daily wrestle with words and lose too often.

TODAY I WILL

Choose one student, check his files, test him if necessary, and find some suitable materials he can read with success.

BIBLE FRAGMENT: Luke 10:25-37.

From Good Morning, Lord: Meditations for Teachers by Don Mainprize. Copyright 1974 by Baker Book House, Grand Rapids, Michigan, and used with permission.

Healing in the Air

Scripture: I John 3:18-24; 4:7-21;
Ephesians 4:11-16

"This is my commandment to you: love one another"
(John 15:17, NEB).

I have a growing concern about Christian teaching, and I know many of you share my concern. It is simply: we preach love but we teach competition. Some of our grading systems, for example, tend to foster the spirit of "everybody for himself" rather than to create and sustain a spirit of mutual helpfulness and responsibility.

How can we teach others that we are indeed our brothers' keepers? How can we teach love and so begin to implement the most basic command of Christ and the foundation of all Christian living—"love one another"?

We have so much student information on record in the office; we elicit so little live data from our students and record it on our hearts and the hearts of fellow students. We spend hours, sometimes days, marking papers and faithfully "keeping book." I wonder what would happen if we cut that time in half and spent the other half in getting to know one another, to identify strengths, and to invent ways to help one another—to become more and more "all one body—building itself up in love."

What would happen if we'd really quit thinking as the Greeks thought and doing as the Romans did and instead took Paul's words in Ephesians 4 (and also Romans 12) as the basis for our teaching and for all of life? "And these were his gifts; some to be . . . teachers, to equip God's people for work in his service, to the building up of the body of Christ" (Eph. 4:11, 12, NEB). And then, what would happen if we built on that basis every day and looked upon every student and colleague as an indispensable working part of Christ's body—no person too small and no one independent of the other, but all working together and each one helping others to realize their God-given potential. Might we then not see a whole body grow, not just individual people? When we see this kind of growth, we will know that we are teaching what the Lord commands: "Love one another."

From Devotions for Teachers by Nelle VanderArk. Copyright 1975 by Baker Book House, Grand Rapids, Michigan, and used with permission.

ME TO THEE



RESPECTING OUR READERS

Every periodical tries to write for a readership, tries to select both its topics and its journalistic style to fit an imagined typical reader. Some unabashedly speak only to a select and specialized group of scholars. Some, knowing their readership to represent many levels of education and sophistication, write different articles with differing levels of vocabulary and concept difficulty. Others direct all articles to the lowest common denominator. *Time* and *Newsweek* would be examples of the latter; many education journals represent one of the former types. All struggle to maintain an identity in order to secure and retain a readership.

In its fifteen years of publication the *Christian Educators Journal* has always had an identity problem. With a subscription list of around 3,000 and a readership of ???? (your guess is as good as mine) CEJ seeks to speak helpfully to practicing Christian educators. However, its intended readership is the kindergarten through college teacher and administrator, with all the spread in training and interest that this diversity of readership implies.

The Board of Trustees, whose job it is to give focus to all of these concerns, has representatives from an equally wide range of types of organizations, from colleges, to service organizations (like the National Union of Christian Schools), to professional teacher organizations (see masthead on page 31 for a listing of the latter). Satisfying the legitimate needs of this multiple constituency is part of the unique challenge that your Regional Editors and Managing Editor face, in each issue

specifically and in a whole year's worth generally.

The present stance of CEJ has been to offer a wide range of topics and types of articles and features, with varying amounts of theory and practice in them. We are committed to building ever better bridges between Christian theory and practice in education, under the conviction that theory without practice is futile and practice without theory is blind. We do not claim to have found that ideal balance or emphasis; we claim only to have tried.

The time has come for CEJ to act even more responsibly and responsively toward its intended audience of Christian educators. While we occasionally receive and publish letters in our Readers Response column, we have now decided to seek more systematically a picture of ourselves as our readers see us. Therefore, in this issue of the *Journal* you will find a questionnaire designed to let you speak your mind and to participate in assessing where we are.

The questionnaire in question is located in an easily lifted-out centerfold section (page 15, 16, and 17), and provides you with an easy check list and space for comments covering many aspects of both content and format. This is one of those centerfolds whose purpose is best served not by pinning up but by mailing out.

While we would not wish to say, "Speak now or forever hold your peace," we would urge you to speak now and thus gain the peace that comes from having spoken your piece.

Do it as soon as you have perused these pages.

—D.O.

IT WORKED!

Bicentennial for Kindergartners?



by Crystal Unema*

Happy Birthday to the U.S.A.! The Bicentennial is upon us, and we have an opportunity to lead and join our students in some exploration of our nation's past, some assessment of our present, and some plotting of goals for the future. The following article by Crystal Unema, eight-year kindergarten veteran, gives a sample of some of the thoughtful and creative teaching that can grow out of this current event. It should spur all of us to think of meaningful bicentennial projects for our own grades. But whether or not we live in the United States, and whether or not there is a national birthday, material like hers emphasizes basic concepts.

I am eager to have more of your bicentennial success stories. Next fall, when we have tired of the red-white-and-blue trivia, we may be ready to read some sensible and substantive ideas for following up the summer's festivities, so do not assume your material will be too late for publication.

This column already has some responses trickling in, for which I am grateful, but I need more. I have hopes of continually expanding it.

*-Greta Rey
Column Editor*

To kindergarten pupils, two hundred years ago has about as much meaning as the concept of wedded bliss. They may know it exists, but have little or no concept of what it is. But I, as a kindergarten teacher, am very excited about the Bicentennial and have looked for ways to teach my students the important concepts and meaning of the Bicentennial year. The more I tried, the more convinced I became that such ideas as indepen-

dence, industrial revolution, and technological progress would carry very little meaning to them. What came to me finally, and what I have used so far this school year, is the concept of using our own "back yard." This the children can feel, see, and touch; they can then relate it to the basics of everyday life when the USA was founded. Our country is rich with mountains, oceans, flat lands, lakes, farms, cities, industry, and parks. I used four of these areas of study with my kindergartners.

(1) Since the people who first came to the USA had to have food, the first thing the colonists had to do was farm. Thus we studied farms first. We talked about growing food and started a little garden. Many children could identify with this because they had vegetable gardens at home. We took a field trip to a dairy farm; here the children saw the feeding and loading barns and the cows in the milking parlors. The farmer gave the children milk to drink. They realize that our country could not have existed 200 years without farmers and farms. After our field trip we made an experience chart and a thank you letter to our farmer friend.

(2) The USA has many mountains and hills. Because of the mountains the first people to live here could not travel widely. Many of my students have taken trips and experienced the height and thrill of mountains. We took a large map and found where mountains are in the USA. We found pictures of mountains and watched a movie about them. In Michigan we do not have mountains, but we do have hills, including a small one behind our school. We called that hill the school mountain and decided to climb it one day. Mountain climbers always take nourishment with them so we made a mountain climber's treat called "gorp." Gorp contains equal parts of peanuts, raisins, and M & M candy. We mixed it in class, giving everyone a plastic bag of gorp to take on the hike. The hill is not very high, but after we climbed it one kindergartener said, "My heart is pounding so hard." We all felt our hearts beating and had a lesson on what

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happens to our body with the added strain of climbing and exercise. We put an American flag at the top of the hill and claimed it for the Hudsonville Christian School Kindergarten. We made an experience chart again; the children drew moun-



tains, trees, and mountain animals on it. We also hung a bag of gorp on the chart.

(3) The third part of the USA we studied was water. Again we looked at the large map and saw the oceans, lakes, rivers, and streams in the US. We learned that oceans have salt water and that special salt water animals and fish live there. I had visited the Pacific Ocean during the summer and brought back sand dollars for each child. My husband caught salmon, which I had canned; thus the children could taste salmon from the ocean. We took a walk to a creek and watched the minnows, water bugs, and plants that live in fresh water. The children could feel and smell the water. We learned that lakes and rivers have fresh water. Again our experience chart reminded us of the things we had learned and seen.

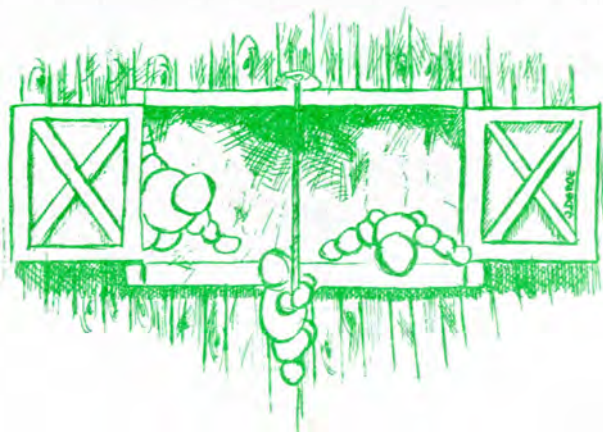
(4) The fourth week we talked about and studied work. Knowing our dads and moms work helped make work seem important for the USA. We learned that people work for enjoyment, health, and money. We discussed how people have to go to school to prepare for their life's work. Every child found out what work his parents do and drew them in their profession or occupation. We took a field trip to Creme Curls Bakery in our city and watched lines of men and women making and baking creme curls and fruit turnovers. They had never seen so many people working before and were excited. One curious boy was almost wrapped in a package of goodies, but we saved him from that plight. The kind baker, the father of a kindergartner, gave each child a creme curl, a delightful treat. The students had creme all over their faces and the bus by the time we arrived back at school. We wrote our thank you letter, everybody signed

it, and we made our experience chart. We discussed what people do with money, and the students developed a good concept of it. We also discussed how important it is to give some of our money to God.

Each week as we studied a particular subject we devoted a bulletin board to it. The children faithfully brought pictures and trip souvenirs related to the subject, demonstrating their enthusiasm. I made a cardboard birthday cake with 200 candles on it so the children could have an idea of how many 200 is. We often thanked God for helping keep the USA free for 200 years.

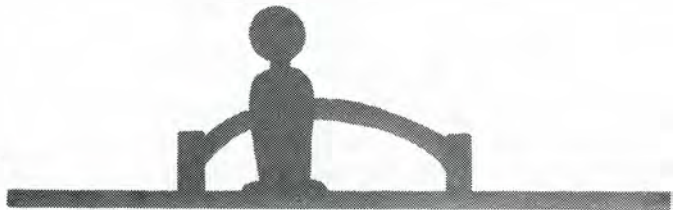
When we studied the United States map, the children talked about other kindergarten children in our country and had questions about what they do in school. We decided to write two kindergarten classes and ask them to be our Bicentennial pen pals. We wrote one class in Lynden, Washington, and another in Eastham, Massachusetts, a class on each side of the United States. We have received letters and Christmas greetings from these classes; the kindergartners were thrilled to receive mail. We also were surprised to learn that kindergartners in other parts of our country do so many of the same things we do in class. On our map we have spots marked to locate our pen pals, an aid for learning parts of our country. (Note: Teachers can ask their students if they have friends or cousins in other states and thus get a lead for a pen pal class.)

We are learning what the USA is, what it has in it, and how good God has been to it. We are thankful for our founding fathers and for the men



and women who fought to help set it free. We are learning that it is *our* country and we have to take care of it. We are learning that individuals must help make it great. From the parents' favorable comments I know the class is learning much and going home with new knowledge about the USA in its bicentennial year.

Thursday's Child



MIDDLE SCHOOL: DEVELOPMENT and DEFINITION

by Lillian V. Grissen*

Old soldiers simply fade away. Tradition does not. In both politics and education tradition and vested interests have so firmly entrenched themselves that innovation is almost a dirty word. Innovation is regarded with skepticism and fear. Nor is this always wrong; children are not guinea pigs.

Criticism of junior-high schools does not fade away, however. Educators are being forced to look at what education is doing to and for transescent. During the last two decades, Thursday's child finally has begun to receive the attention he needs.

Early Research

The junior-high school as first established was meant to be a transistional unit between elementary and high school. The research which prompted the establishment of the first junior-high schools in the 1920's was highly generalized. A kitten becomes a cat, a puppy becomes a dog, and a child becomes an adolescent. Growth, the researchers said, followed general patterns. "Average" development in height and weight, in spite of standard deviation, made growth appear gradual as well as even throughout childhood and adolescence. Early research provided an *apparently* reasonable basis for planning the curriculum of both junior-high and senior-high schools.

Ignored or overlooked was the small but incisive work of psychologist G. Stanley Hall:

[In 1904 he] studied a relatively small number of persons as they passed from childhood into adolescence. His penetrating observation indicated that this period (from 10 to 14) was one of swift accelerated growth, followed by swift deceleration of the growth rate. He gathered case data which showed that many

young people suffered considerable anxiety about their growth and about their organic functions during this period. He claimed that his subjects went through times of emotional turbulence, erratic behavior, and independent assertiveness during this transition period. (Alexander, William M. and Williams, Emmett. *The Emergent Middle School*. New York: Holt, Rinehart and Winston, Inc. 1969 p. 24.)

Students have really not changed.

Right Reasons - Wrong Premises

Junior-high pioneers ignored Hall. Result? The first junior-high schools were founded for the right reasons but on the wrong premises. And, because of the error, schools steadily departed from the idea of transition and became instead mini-high schools, with high-school philosophy, goals and methods.

It has been said that "nothing is so unequal as the equal treatment of unequals." An honest critique of most of our teaching would, I think, force us to confess that we teach groups, not individuals. Otherwise how can it be that the volatile years of transition are still so little regarded in the educational scene that many colleges still do not require specialization for those who teach 10-to-14-year-olds? Transescent are not merely Thursday's children. They are education's orphans.

At no time in the K-12 years of schooling are there greater differences in the physical, social, emotional and intellectual development of youngsters than during the 10-to-14-year-old period. But it was not until the 1940's and 1950's that more sophisticated research discredited the "gradual development" findings of the 1920's and confirmed Hall's earlier description of this age group.

Middle School: Which Grades?

Because of the wide range of maturation in 10-to-14-year-olds, discussion about which grades to include in the middle school continues. The Edsel Ford Foundation (Dearborn, Michigan) Curriculum Study indicates that:

The four-year high school (since tradition forces these four years to be considered for college entrance) ought to be under one hat or in one institution, rather than having the ninth grade in a separate institution (Groom, M. Ann, *Perspectives on the Middle School*. Columbus: Charles E. Merrill Books, Inc., 1967. p. 15).

The computation of Carnegie units begins at the ninth grade. Exclusion of the ninth grade from the middle school gives the transitional school much more latitude for a wide range of exposure and experience. The rigid requirements of accreditation and college entrance are not spelled out for the

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school in the middle—fortunately.

There is disagreement about whether the sixth or the fifth grade should be the lowest included in the middle school. The upper elementary program tends to be a patchwork of separate subjects; those are often taught in a self-contained classroom with the teacher expected to have knowledge and background in all subjects. (For teachers, a perplexing requirement.) Sixth graders too often are subjected to the same teaching methods used for first graders. Research increasingly confirms that generally sixth graders are more like seventh than they are like fifth graders.

The problem of which grades to include is not primary, however. It is minimal when juxtaposed with problems of understanding, curriculum, activities and requirements for Thursday's children.

The Preacher said long ago in Ecclesiastes that "there is nothing new under the sun," so it is no surprise that the *middle-school concept*, touted by innovators and feared by traditionalists, is actually not new, but rather an attempt to swing back the pendulum to the principles of the first junior-high schools. Today's principles differ in one extremely important aspect, however: planning, strategy, curriculum and methodology are not based on the statistical average, but recognize the peaks and valleys, the speeds and stops of the individual transescent.

The Middle School Concept

Definitions vary. There is basic agreement, however, that the *middle school concept* includes the following:

(1) a program that is relevant to each transescent's needs (physical, emotional, social and intellectual). Spiritual needs particularly require very special attention from the Christian educator.

(2) emphasis on the process involved more than on such end products as public performances and athletic victories.

(3) emphasis on the basic concepts and skills of general education closely geared to the maturation of the individual.

(4) exposure to and exploration of a very, very broad spectrum of educational experiences in the world of work, living, and leisure.

(5) individual and adequate guidance, counseling, and friendship.

A Warning

Simply changing the name "junior high" to "middle school" is meaningless . . . and this is happening. Any changes, if made, must be purposeful and must develop from conviction.

It cannot be denied that the time for introspection is here. The middle-school concept is not a panacea, but it asks consideration from Christian adults, parents, and teachers who are concerned for Thursday's child.



THE ASYLUM

"A Soft Answer"

by H. K. Zoeklicht*

John Vroom, Bible teacher at Omni Christian, worked studiously at his grooming, using both of his fat hands to tuck his shirt into his trousers, and simultaneously shining his shoes by wiping their toes back and forth along the underside of the ancient sofa in the faculty lounge. "How come I wasn't invited to the football game with the rest of you guys," he grumbled. "Us Bible scholars like a bit of recreation too now and then you know," he intoned, looking directly at Bob DenDenker.

"Well, John, you see, it's this way," said DenDenker. "Casey Voddema's plane has a load limit and, . . . say John, if you keep shining your shoes

like that your students are going to see your brilliance." He continued more seriously, "Did you read that *Newsweek* article on 'Why Johnny Can't Write?' Looks like we're going to have to get on the stick, huh?"

"I didn't read it," responded Vroom, snaring a jelly doughnut from the tray next to the coffee urn, "but I heard about it. I guess it's true that too much television and movies are changing kids' attitudes towards books and things, but I've got all I can do to teach Bible without teaching English too. Basically that's the job of the English department. Always has been. If Rip wants me to teach writing, let him say so and give me some small classes for a change." Vroom, taking half the jelly doughnut into his mouth in one bite, began to chew thought-

*Our coffeecup columnist, true to his name, here both searches for and throws light on yet another facet of Christian teaching.

fully and patiently, as though waiting for someone to respond to his wisdom. Someone did.

"You miss the whole point of the matter," said Karl DenMeester from the table across the lounge, where he had been grading a set of essays. "The point is that Lucy and I, and the other English teachers of the world, can't teach writing by ourselves. If you klutzes would stop giving true-false tests and multiple-guess tests, and if you would take the time to really correct the few essays you do assign, and if you would mark kids down for misspellings and bad paragraphs, maybe we in the English department could accomplish something."

"Ha," said Vroom, depositing the other half of the doughnut into his cavernous mouth, "what did I tell you? You want us to do your work. You get paid to teach writing. I get paid to teach Bible." His stomach rumbled gratefully.

Bob DenDenker, grinning as he drew black coffee into his styrofoam cup, said softly, "Well, I guess I get paid to teach history, but I think Karl is right. Unless we all teach writing, no one can teach it. All of us have to make it clear to our students that language, especially written language, is important, because it is usually through language that we express what we know. Look at VanderPrikkel's test here." DenDenker picked up from the mimeograph table a crinkled copy of a biology test. "There is not one place in this whole test where the student has got to do anything but make a little mark. Not once does he have to put his knowledge into a sentence, or even a phrase, to say nothing of a paragraph. All he's got to do is make little marks. We are all starting to test that way. And that tells the students something about our view of writing, doesn't it?"

"I don't know how," said Vroom defensively. "I don't know a split infinitive from a dangling particle, or whatever it is, and I'd just get the kids confused. I'm much better on the missionary journeys and the kings of Israel."

DenMeester, sensing a chance to make a point, said sarcastically, "Right, John, only English teachers know English. How did you make it through college? Somebody else write your papers?" John Vroom smiled pontifically as he looked through his dirty glasses at the exasperated English teacher. "Karl, Karl," he said condescendingly, "a soft answer turneth away wrath. Remember?"

"Right, Vroom, and a soft head turneth away writing," said DenMeester, as he put down his coffee cup, picked up his stack of unfinished themes, and walked from the room.

"Well!" said the startled Bible teacher. "Did I deserve that?" And he looked at Bob DenDenker.

"Probably not. But you are not being very fair. Do you know how long it takes DenMeester to grade one garbled paragraph? I've seen how painstakingly he does it. He does more than check it, or circle misspellings. He makes clear what's wrong and then shows the kid a way to do it better. And frankly, I'm not at all sure that we shouldn't be doing that too. In fact, if we insisted on better writing in our classes, the kids would take their English classes more seriously. But I'm like you, John, I just don't take the time. I guess I think I don't have the time either."

"Well, I really don't have the time," said Vroom. "I've got to prepare my messages for the Light-house Mission every weekend, and I like to keep up on my periodicals too. But it does bother me that those college kids have been complaining that we don't get them ready for college. Maybe we ought to hire an extra English teacher."

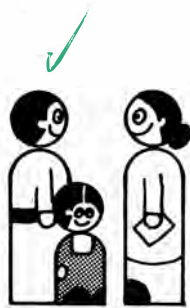
Just then the door opened and Peter Rip, the principal, stepped in and walked over to the bulletin board. "What's that about hiring an extra teacher?" he said smiling. "Staffing is my job, I always thought. Who's got the tacks?" Finding one, he then tacked an announcement on the corkboard.

ANNOUNCEMENT

THIS IS TO APPRAISE YOU OF THE FACT THAT THERE WILL BE NO, BECAUSE OF UNFORSEEN CIRCUMSTANCES BEYOND OUR CONTROL, FACULTY MEETING ON BEHAVIORAL OBJECTIVES AND THE TEACHING OF MORALITY. TRUSTING THAT THIS WILL CAUSE NO UNDO INCONVENIENCE ON ANYONES PART, THE MEETING WILL BE RESCHEDULED FOR NEXT WEEK WEDNESDAY. HOPEFULLY MRS. RIP'S PEANUT BUTTER COOKIES WILL KEEP THAT LONG.

ANOTHER REMINDER. I TAKE IT FOR GRANITE THAT YOU KNOW ABOUT THE SOPHMORE CLASS SAVING ALREADY FOR THERE SENIOR GIFT OF A CARPET FOR THE LIBRARY, BUT THEY HAVE A LONG WAY TO GO. WE FEEL THAT YOU WILL WANT TO SHOW YOUR ENTHUSIASTIC SUPPORT ALSO BY DOING SOMETHING ON THE CARPET.

PETER RIP - Prin.



CONFERENCES ARE FOR KIDS



by Laura Bartleson*

Suppose that your employer made an appointment with your spouse for the expressed purpose of discussing YOU—your efficiency on the job, your speed in learning new procedures, your ability to relate with people, your probabilities for future success. Wouldn't you want to hear every word of that conversation?

Now you can guess how children feel twice a year at Parent-Teacher Conference time. After conferences, my own children always pump and prod, trying to get out of me a verbatim account of exactly what their teachers have said. No matter how accurate I try to be, they usually ask, "Is that all?" and seem to go away unsatisfied, as though something had been hidden from them.

It was this experience with my own children that started me thinking. Do parents and teachers have secrets about kids? Are the things said at conferences things that children should not hear? Would the child's presence inhibit an honest discussion of his or her strengths and weaknesses? I did not think so. An experiment with my first graders at Oakdale Christian School has confirmed my beliefs.

I invited parents to bring their children to conferences, and the response was encouraging. Twenty-two of twenty-five invited children came. The three exceptions included one parent who didn't come, one parent who forgot to bring the child, and one parent who was vehemently opposed to the idea.

For the conferences I had ready for each a list of the reading skills mastered; a list of skills that were weak; a sampling of papers to show, for example, neatness, accuracy, and completion; and a copy of the most recent report card. (These are the same things I would have had ready to discuss if children had not been invited.) Also ready was a report card which each child had completed about me. It was in the form of questions which were read to the class to be sure the children understood. They were told to take their time, think of all they would like

to say, and be honest. The questions included:

1. Does your teacher explain things so that you understand?
2. Is your teacher fair to you and the other children?
3. Are there things you like or don't like in your classroom?
4. Is the work too hard or too easy?
5. Would you like to say something else?

Most of the answers were "Yes" and "No," but some were sentences. What they could not spell they told me in the presence of their parents at the conference.

During the conference this format was used:

1. Welcome
2. General discussion concerning the child's attitudes toward learning and school
3. Specific discussion about sample papers and specific academic weaknesses and strengths
4. Discussion of the child's social adjustment with recent report card used as a reference point
5. Discussion of the child's report card about the teacher (In many cases, children qualified or explained their answers more clearly to me at this time. With their parents right there, they seemed to feel freer and bolder to tell me exactly what they thought.)
6. Time for questions or problems that either the parents or child wished to discuss
7. Summary: a statement of what our immediate and long range goals should be

Each conference ended with three questions: (To the parents) "Has this conference been similar to your other conferences when the children were not present?" (Most answered yes.) (To the child) "Did you think that at parent-teacher conferences, teachers and Moms and Dads had secrets about kids?" (Nineteen of the twenty-two said yes.) "Did you hear any secrets today?" (All of them said no.)

As the experiment proceeded, there were some interesting revelations. In most cases, children were delighted to be included and their parents were

Laura Bartleson is a first-grade teacher at Oakdale Christian School, Grand Rapids, Michigan.

happy to include them in such a conference. Children were eager to talk about their progress and their problems and felt freer to do so with parents and teacher there together. Children often added relevant and helpful information. Parents seemed more at ease; there was more laughter, less formality. And as a teacher I came away from the conference feeling there had been a much warmer, more meaningful communication between parents and teacher.

Of course conferences at the first-grade level may be quite different from those in junior high. Including children might mean that conferences take more time. And certainly there are special cases where teachers and parents need to confer in private. However, as I look back on my own

family, I wish my children could have participated in conferences at all age levels. Parent, teacher, and child could have benefited from such an arrangement, and I do not think that we had to say anything my children should not have heard.

The parent-teacher-child experiment seemed to put the purpose of conferences into better perspective. No longer were adults evaluating a child. It was a time of *self-evaluation for all of us*. The child was a meaningful part of his own evaluation. The child and the teacher were helping the parents evaluate whether they were showing enough interest, giving enough encouragement. And the parents and child were helping this teacher to evaluate whether she was doing her job effectively.

ECOLOGY DAY:

"Everything Has Something Special About It..."

by Brenda Brink*

After many days of planning our "Ecology Day" we sophomores were ready and raring to go on Thursday morning, May 15. We all came dressed for the day in our grubbies. Mr. Hoekstra gathered the class in his room as the school day began. There he handed out 12 worksheets which we were to complete sometime throughout the day; we packed up blankets, baby food jars, fishing poles, quadrants, binoculars, and any other equipment necessary for our field trip. After Mr. Hoekstra led us in devotions we began the short walk down to DeBoer Park. The weather was perfect, and everybody was anticipating a great day.

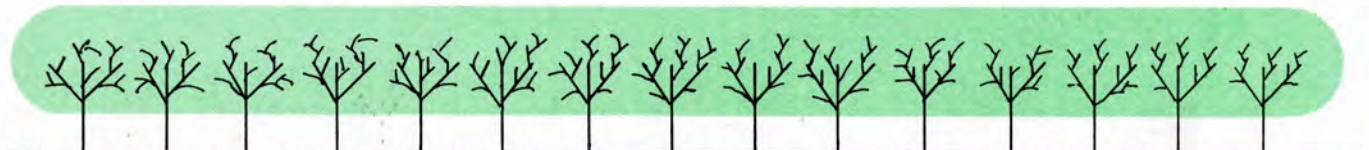
The first item on the agenda was a lesson on the geology of the park. Mr. Hoekstra explained that the river had once been rerouted; it had run where we sat. After the geology talk we were sent off in groups of two for birdwatching. I think a lot of students were surprised at how much they enjoyed

themselves. It is pleasant for a change to be quiet and take note of the world's beauty that is not always clear to our eyes and ears. For instance, when you don't think about what you're hearing, you can very easily miss the cheerful melody of a meadowlark or the beauty of a robin in flight. Ecology Day gave us an opportunity to be close to nature. A lot of students did some careful watching and came up with quite a few interesting specimens: a redwinged blackbird, a meadowlark, a flycatcher, a redheaded woodpecker, a killdeer, and a mud-hen. Some careful lookers even came up with a nest with newborn baby birds in it.

After birdwatching we had a little time to do whatever we wanted. Most students started on their worksheets. Some drew the required maps of the park. Others set to work identifying the trees in the park. Here we could apply what we learned about tree identification in the classroom.

Later that morning Mr. Huisken came down for devotions with his second period class. While he led them, Mr. Hoekstra and the fourth period class hiked up to the gravel knoll, where he directed our

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attention to plant succession. He described how each plant has its place in life. He explained how the mosses started things and then showed how each plant takes its place in sequence. When we knew much of what there was to know concerning plant succession, the fourth and second period classes switched instructors. For devotions Mr. Huisken shared a very appropriate poem with us. It was entitled "God's Grandeur." It spoke of man destroying God's creation. This was visible even where we were. I was glad to be living here instead of in a big city, but we should not take advantage of that by polluting.

The highlight of the entire day came shortly before noon, when we planted our tree. Everyone shared in the work. One student got out the spade and broke the ground. Then the digging began. Another student got down on his hands and knees and hauled out the dirt. He almost got planted head first instead of the tree when another student tried to help. Several students hauled buckets of water from the Rock River. When everything was ready, we gathered round and watched as the white ash tree assumed its final place. This was an experience we are not likely to forget. It's a good feeling to put a spindly little twig in the ground and know that someday it will be an enormous, powerful tree people can look up to.

When the planting was over, we left the tree on its own and traveled back to school for dinner; then it was back to the park for more work.

First it was quadrant studies. Each group of two was given a quadrant and instructed to research a grassy, a gravel, and a woody area.

Each pair of students was instructed to bring back a sample of plankton. A few students sat on the riverbank with plankton nets and filled baby food jars with plankton-filled river water.

Meanwhile three students, garbed in hip boots, hopped into the river and did some seining. They came up with a few different fish and minnows, some crayfish, and other river inhabitants.

Also, back at the bus, some students were sampling soil. Others were off in pairs or small groups checking out anything that interested them or following the instructions on the work sheets. A few girls followed the river down for a way and came up with some moss-covered rocks. We found a

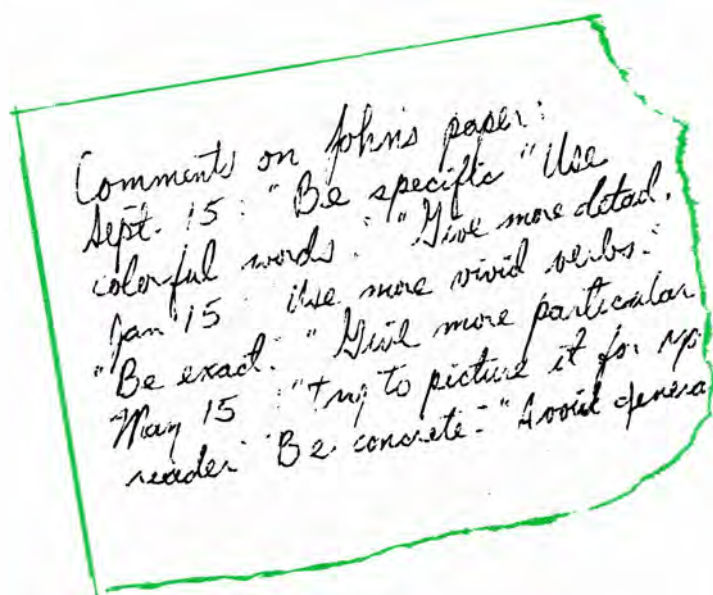
small pond off the river; here we tried our hands at capturing tadpoles. Some people were busy gathering their root systems. Every pair had to come up with a taproot, a fibrous root system, and a rhizome or stolon. This presented us with a challenge. We found out whether we had learned anything in the classroom or not. You can talk about all these things in class, but you can learn it much better when you have it right there in front of you and can see and touch it. When you're outdoors, there doesn't seem to be a time when there's nothing going on. Everything has something special about it that makes it impossible for you not to want to learn more about it. It was peaceful out there, yet everything was busy. Nature is a terrific experience, and Ecology Day helped me and a lot of other students realize that. I think a day spent close to nature like this is something every biology student, and every other person for that matter, should experience.

As the day grew to a close and Mr. Hoekstra decided we had covered about everything there was to cover, we reluctantly climbed into the bus and headed back to school. Once there, we unloaded baby food jars containing strange specimens such as crawdads, water "lice," tadpoles, and water samples, and also plastic bags of soil and other specimens.

The next three or four biology class periods were spent in the lab. We took turns examining our collections under the microscopes. Mr. Hoekstra helped us determine the habitat and niche of some of our newfound organisms. Some classes were spent organizing and classifying all the data we'd collected. A few interested students also worked on the physical and chemical characteristics of water and soil samples. This was all part of completing our worksheets.

Ecology Day was a unique experience enjoyed by the class. We enjoyed the break from a routine school day and the closeness to God's creation. We felt it was exciting to see and touch and smell and hear what we talked about in the classroom. It was wonderful to observe the little things we too often take for granted, like trees and birds and insects. I think what we experienced together that day will help us all to become better ecologists and more aware of what nature is doing around us.





Since John Can't Write

by Fred Herfst*

The following is a record of comments on John's paper at selected times during the school year:

- Sept. 15 "Be specific." "Use colorful words."
"Give more detail."
Jan. 15 "Use more vivid verbs." "Be exact."
"Give more particulars."
May 15. "Try to picture it for your reader." "Be concrete." "Avoid generalities."

In spite of the change in the wording of the comments, it is all too clear that John is still struggling at the end of the year with the same problem he had at the beginning of the year. He does not have a way of producing detailed, specific, vivid writing. He gets lost in vague, general descriptions that do not move anywhere or say anything. Obviously, too, the comments of the teacher did not produce the results he wanted. Perhaps that is because the comments indicate what to do (and that is always helpful as one step in the process of improvement), but do not indicate how to do it. Perhaps a different approach in the teaching of composition would give John the "how to" also. Francis Christensen has developed such a different approach, one that helps us see the old process of composition from a new angle with a new set of glasses. His method rests on four principles, discussed below, with the hope that his concepts may add to your stock of ideas for teach-

ing composition.

Writing: Process of Addition

The first principle states that writing is a process of addition. Traditionally, in grammar, the noun as bare subject and the verb as bare predicate are seen as the heart of the sentence, and therefore too much attention in composition is focused on these elements. The subject, or noun head, and the predicate, or verb head, should, however, be looked at as the hooks that hook the writer into the reader. The meaning or feeling that the writer wishes to convey to the reader will come from the additions made to the noun head and/or verb head. It is the addition of details that makes clear what it is about the "hooks" that the writer wishes to convey. The writer in the mental process of composing adds detail to clarify, while the reader in the mental process of imagining receives the added detail. This addition of detail comes in two categories, embedded and free modifiers. An *embedded modifier* has a close, tight grammatical relation to either the noun head or the verb head. A *free modifier* has a loose, less tight grammatical relation to either the noun head or the verb head. Another way of stating it is that free modifiers are always separated from the noun head and verb head by punctuation while embedded modifiers are not. Think here in terms of restrictive and non-restrictive clauses; the former are embedded, and the latter are free. It is primarily through the addition of free modifiers that writing can be greatly improved; they give detail and make general noun and/or verb heads

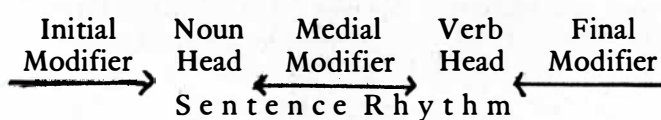
*Fred Herfst, on the staff of Fraser Valley Christian High School, Surrey, B. C., Canada, is attending Calvin College. This article arises out of work he did there for English professor Dr. Henry J. Baron.

specific. This addition is also part of the style of writing used by many well-known authors.

Writing: Rhythm or Movement

The second principle states that the rhythm or movement of the thought of the sentence is determined by the placement of modifiers. Modifiers placed before the noun head are *initial* modifiers and move thought forward by looking toward the noun head. Modifiers placed between the noun head and verb head are *medial* modifiers and pause with the thought, to look back at the noun head, or move with the thought, to look forward at the verb head. *Final* modifiers move thought back, or hold it still, by referring back to the verb head. In schematic form, we have the following:

Answers



Note here how such an insight can be used to help students with awkward sentences, and also to discuss concretely the abstract, elusive concept of style.

The third principle states that the more the number of modifiers, the thicker or denser the texture, and the fewer the number of modifiers, the thinner or leaner the texture. The nature of the texture will have a bearing, for example, on the "speed" of the thought flow, on the action, and on the distance between heads. This again places discussion of style in concrete terms, very necessary at the high school level.

Writing: Levels of Modification

The fourth principle deals with levels of modification. The noun and verb heads are considered the generalized, somewhat non-specific topic (the "hooks") that the writer is going to use to connect himself to the reader. This topic, called the base sentence (noun head, verb head, and the embedded modifiers for each), is now to be made concrete, specific, and detailed by the addition of free modifiers. The free modifiers in turn may again be modified by more free modifiers, so that all elements become very exact. We move, in other words, from the general to the specific or from the abstract to the concrete. In schematic form it might appear thus:

- Level 1 *Base sentence,*
- Level 2 *first free modifier as base sentence,*
second free modifier of base sentence

- Level 3 *free modifier of second free modifier,*
- Level 4 *first free modifier of level 3 modifier,*
second free modifier of level 3 modifier.

On each level, as many or as few modifiers as desired can be added, the number depending on the emphasis and rhythm the author wishes to achieve. Thus the teacher has a handy format for showing students how to add details to a sentence. A few concrete examples might help:

Example 1

- 1 He stood at the top of the stairs and watched me,
- 2 I waiting for him to call me up,
- 2 he hesitating to come down,
- 3 his lips nervous with the suggestion of a smile,
- 3 mine asking whether the smile meant come, or go away.

[Francis Christensen, *Notes Toward a New Rhetoric* (New York: Harper and Row, Publishers, 1967), p. 11. Six essays on the use of generative rhetoric for sentences and paragraphs. Harper and Row can also supply student workbooks, a teacher's manual, and transparencies for an overhead projector.]

Example 2

- 2 Calico-coated,
- 2 small-bodied,
- 3 with delicate legs and pink faces in which their mismatched eyes rolled wild and subdued,
- 1 they huddled,
- 2 gaudy motionless and alert,
- 2 wild as deer,
- 2 deadly as rattlesnakes,
- 2 quiet as doves.

[William Faulkner as quoted in Christensen, p.9]

Generally the free modifiers occur at the end of sentences, as in example 1, although they may occur initially and medially. To distinguish a sentence of this type from the periodic sentence and the loose sentence (Ciceronian and Senecan styles respectively), the type of sentence produced by the addition of free modifiers is called a cumulative sentence. Note how easy and natural it is to teach and use grammar at this point. Free modifiers can take the form of absolute constructions, verbal constructions, noun clauses, adjective clauses, and so on. Grammar can thus become truly integrated with the teaching of composition.

Christensen says little about embedded modifiers because the opportunity for multiple additions is limited. He also thinks that coordinate and subordinate sentence structures should be studied, but not to the extent that they have been. The real benefit of studying the coordinate and subordinate levels comes in studying paragraph structure. For further detail on how to use levels of modification in this area, consult "A Generative Rhetoric of the Paragraph" (Christensen, pp. 52-81).

Why Christensen Method

This method is helpful to the teacher in two ways: (1) the concepts can be adapted to levels ranging from very simple to very complex, and (2) the concepts can be made specific and concrete in either smaller or larger units. Thus discussions of

One way of getting the whole concept of levels of abstraction across to students is to write on the blackboard a concrete object such as tree or car, then have the class add adjectives, phrases or clauses until the tree or car is so vivid that everyone can clearly visualize it.

style need not wander off into esoteric verbiage, and grammar can be usefully integrated in the teaching of composition. The sentence is broken into semantic units rather than into word units. This helps make analysis less abstract and more meaningful since the class can be approached on the issue of how this idea or descriptive detail is related to that idea or descriptive detail. Any grammatical terminology needed is thus put in the service of the composition process. Also, the method can be demonstrated by using model sentences from good authors, who often make use of the cumulative sentence. Finally, this approach gives students a concrete method of how to go about adding detail. They learn a structure that aids them in composing and observing.

Methods and structures are not yet student observations and compositions. Specific strategies will have to be developed to teach students to observe details and motivate them to write what they observe. Strategies always depend on a theoretical framework and on the classroom situation. The main purpose of this article has been to supply the theoretical framework out of which new strategies may arise. Because the classroom teacher must pick and choose those methods best suited to his cir-

cumstances, two examples of specific strategies should suffice.

How to Make It Work

One way of getting the whole concept of levels of abstraction across to students is to write on the blackboard a concrete object such as tree or car, then have the class add adjectives, phrases, or clauses until the car or tree is so vivid that everyone can clearly visualize it. Variations of this exercise can be used: a game in which two teams find as many adjectives as possible for a stated amount of levels in a stated amount of time, or art work, in which students add more and more details to a picture. Another extremely useful strategy is to ask students to observe very closely a repeatable action, for example, someone falling off a chair at the front of the class, someone jumping, or someone stretching, and then describe, in a sentence, the action, moving from the overall, gross movement of the body to the finer movements of the hand or foot or head.

The process of addition, the rhythm of the sentence, the texture of the prose, the levels of modification--these four provide a new focus for the teaching of composition.

I offer the following as additional suggested readings for the interested teacher:

Christensen, Francis. "The Problem of Defining a Mature Style." *English Journal*, 57 (April 1968), pp. 572-579.

Elliott, Michael. "An Experiment with Christensen's 'Rhetoric of the Sentence' in a Junior High English Class." *Arizona English Bulletin*, 16 (February 1974), pp. 28-34. Arizona English Teachers Association, Pub.

An example of junior-high level work with this method.

Grady, Michael. "On Teaching Christensen Rhetoric." *English Journal*, 61 (September 1972), pp. 859-873, 877.

An article on the good points of this method.

Johnson, Sabina T. "Some Tentative Strictures on Generative Rhetoric." *College English*, 31 (November 1969), pp. 155-165.

Suggests the method is good for description, but not for other styles.

Tibbetts, A. M. "On the Practical Uses of a Grammatical System: A Note on Christensen and Johnson." *College English*, 31 (May 1970), pp. 870-878.

An article dealing with strengths and some weaknesses of the method. Note also the responses on page 878 and following.

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Don Oppewal, Managing Editor

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 ☐ too crowded
 b. print size is: ☐ adequate ☐ too small
 ☐ too small

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___adequate number

___need more

___attractive

___unappealing

___I hadn't noticed

Comment:

9. Below is a list of regular features. Please indicate how often you read each one by circling: A=nearly always, B=occasionally, C=never. Under "rating", indicate whether you think the feature is generally: 1=excellent, 2=good, 3=mediocre, 4=poor.

	rating
Morning Meditations	A B C ___
Editorial	A B C ___
The Asylum	A B C ___
It Worked!	A B C ___
Thursday's Child	A B C ___
Book Reviews	A B C ___
Cartoon	A B C ___

10. Please rate the following selected articles from the previous (Jan.) and this (Mar.) issue using this scale: 1=excellent, 2=good, 3=mediocre, 4=poor, 5=DID NOT READ.

___Evolution and the Christian School—J. Kuipers

___Two Student Letters on Grade Getting—D. Coray

___Thank You—I Have My Occupation—G. Rey

___Special Feature: Community Ideal in Christian Education—R. Klapwyk

___Since John Can't Write—F. Herfst

___Conferences Are for Kids—L. Bartleson

___Critique and Response to *Scientific Creationism*—C. Menninga, H. Morris, S. Jansma

11. Tell us more:

a. On what topics would you like to see articles in CEJ?

b. Whom should we contact to write articles for CEJ? Where is s/he?

c. Would *you* be willing to write articles or reviews for CEJ?

___Yes ___No ___Maybe

Topic:

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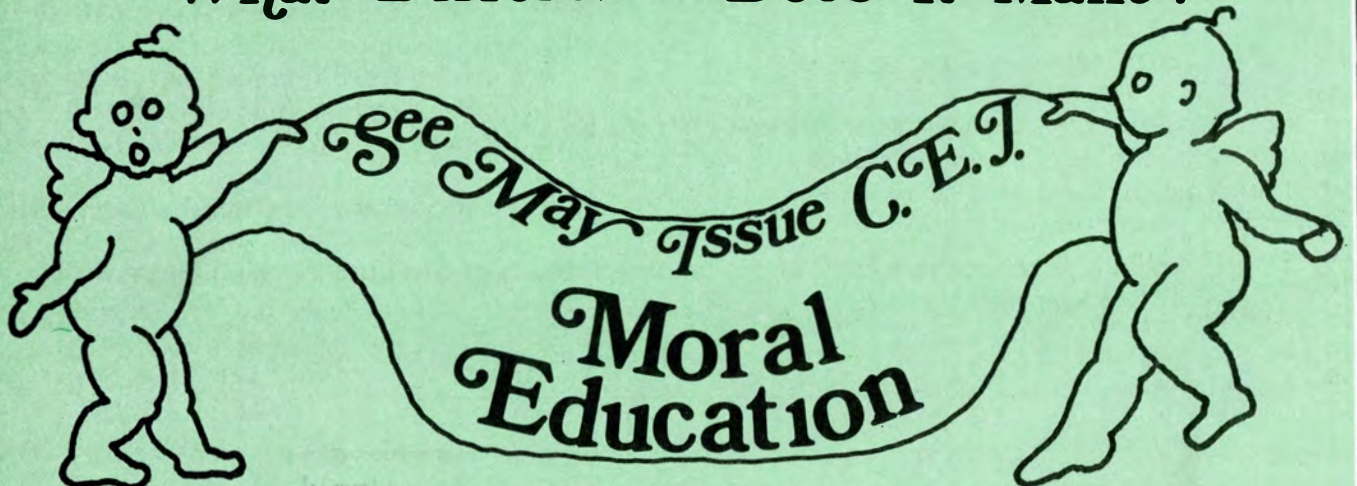
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A CRITIQUE-REVIEW OF SCIENTIFIC CREATIONISM

by Clarence Menninga*

Since copies of the book Scientific Creationism were recently distributed to all member schools of the National Union of Christian Schools and since CEJ is an open forum for dialogue and debate on issues current in Christian schools, it was deemed appropriate that the following two essays be published in these pages. The first essay is a critique; the second a response to the first and a defense of the views in the book. Both are filled with vigorous assertions and are sharply critical of the other viewpoint. Together they represent the contrasting viewpoints present in the Christian scientific community.

Dr. Menninga informs us that he has written to Dr. Morris to suggest that the discussion of these and other issues of science and Christianity be continued in personal correspondence, and that such correspondence as takes place be made available to other interested educators.

-Managing Editor

Scientific Creationism edited by Henry M. Morris, Creation-Life Publishers, San Diego, 1974.

This book, written especially for teachers, is concerned with ideas regarding the origin and history of the earth and the living organisms which are found here. The authors who have contributed to the writing of the book are devout Christians who believe the Bible to be the infallible, inspired word of God. The theological viewpoint which forms their perspective on the subject at hand is expressed in the Credo of the Creation Research Society in which they affirm of the Bible that "all its assertions are historically and scientifically true in all the original autographs." This view is evident throughout the book and is expressed especially in

*Clarence Menninga is Professor of Physics (Geology), Calvin College, Grand Rapids, Michigan.

a literalistic exegesis of the Bible. By comparison, we Reformed Christians also affirm the infallibility and inspiration of Scripture, but we practice grammatical-historical exegesis in which we attempt to understand the Bible through its words and sentences as they were understood by the human writer and his hearers (readers) in the historical context in which the writing was done. The difference between the two views concerning the proper extent of literalism in Biblical exegesis is one of degree, to be sure, but the view of the authors of *Scientific Creationism* tends to be much more literalistic than the view expressed by John Calvin in his *Institutes* and his commentaries.

The book presents two "models" for explaining and accounting for the origin and history of the earth and its living organisms. One of these models is called "evolutionism," and is based on the theory of evolution as it is understood by the authors of the book. The other is called "crea-

However, I find the view of science presented in this book to be in conflict with what I think is the correct view of science. Also, I find the view of Scripture as it relates to science to be at odds with what I think is the Reformed view of Scripture as it relates to science.

tionism," and is based on the Bible as it is understood by these authors. This creationism model is claimed to have the characteristics of a scientific model or theory and is presented as an alternative to their evolutionism model. Only in chapter 8 (not included in the edition intended for American public schools) do the authors explicitly claim that their creationism model is the view which is taught in the Bible.

The various authors then marshal arguments in support of their creationism model and in opposition to their evolutionism model. Arguments are drawn from various fields, but considerable attention is given to the study of fossils, the ages of rocks, the history of man, and the study of thermodynamics.

I really would like to say complimentary things about this book. After all, the authors are sincere

Christians, trained in the sciences, **who are trying** to apply their Christian faith and viewpoint to the teaching of science and to the evaluation of existing ideas and theories in science. How can one find fault with that?

However, I find the view of science presented in this book to be in conflict with what I think is the correct view of science. Also, I find the view of Scripture as it relates to science to be at odds with what I think is the Reformed view of Scripture as it relates to science.

Science is a human endeavor, and a scientific theory is a set of ideas formulated by man in an attempt to organize and understand observations he has made and experiments he has done. If that theory is found to be unsatisfactory or inadequate, man can modify it or even discard it. Since that is how science operates, it seems to me that it is terribly improper to suggest that any scientific theory could ever be a competitor to a God-given revelation. God's revelation of Himself as creator of the universe is simply not on the same level as the scientific theory of evolution.

Furthermore, the authors of *Scientific Creationism* ask me to make a choice between their understanding of the Bible and a theory which is the product of scientific study. I refuse to make that kind of choice. That is like asking us to choose whether we want our diseases to be healed by God or by medical science. The Bible says that it is God who "heals all our diseases" (Psalm 103:3), while modern medical science uses drugs, surgery and treatments of various kinds. Some extreme literalist Christian groups do, in fact, choose against medical science, but we Reformed Christians insist that we want both medical science and the faith that affirms God's healing activity and power. A better comparison might be the suggestion that we must choose between God's providence and the laws of physics. The Bible says that it is God's providence and care which directs the seasons (Genesis 1:14, 15; Psalm 104:19) and the motions of stars and planets (Psalm 19:6; Job 38:33). On the other hand, the scientific description of those phenomena is incorporated into Newton's laws of motion and of gravitation. Again, we Reformed Christians refuse such a choice. We claim that the scientific explanation is at a different level or from a different perspective than the God-given revelation, and that both the Biblical revelation and the scientific explanation are legitimate and valid.

I object strongly to some of the persuasion techniques employed in *Scientific Creationism*. In par-

ticular, eminent authorities are quoted out of context, and these quotations are used to argue for an idea which the quoted authority does not support. For example, a paragraph from a book by Henry Faul is quoted on page 141 to support the idea that radiometric dating is unreliable. That quoted paragraph is from a chapter in Faul's book in which he discusses the determination of the ages of sedimentary rock strata by the radiometric dating of certain kinds of samples found within those strata. His discussion includes a section entitled "Questionable reference points" in which he points out that some kinds of samples are not reliable for dating purposes, and it is from that section that he is quoted. Faul is honest and open enough to recognize that radiometric dating has limitations—not all kinds of samples give reliable results—but he

**However, the Second Law of Thermodynamics
cannot be used as a valid argument against
the occurrence of evolution on the earth because
the earth is not a closed system.**

certainly claims that reliable results can be obtained by radiometric dating. Such out-of-context quotations by the authors of *Scientific Creationism* are certainly misleading to the reader of the book. If that is an intentional deception, those authors should be strongly criticized for their dishonesty. If it is unintentional, they should be strongly criticized for their lack of understanding of a subject which they have chosen to discuss in print.

The authors present many arguments in an attempt to refute or cast doubt on scientific ideas which are in conflict with their creationism model. For example, they claim that radiometric ages of rocks are not reliable, and that thermodynamics makes evolutionary development impossible. Many of the authors' arguments are fallacious, and many of their claims are false. The remainder of this critique of *Scientific Creationism* deals with some of the technical details discussed in the book. Space does not permit a complete discussion of all the book's flaws, and I suspect that my own limitations of knowledge and understanding would allow some to slip by unnoticed. However, there are some which I want to call to your attention.

The Second Law of Thermodynamics can be stated in various ways. One common statement is "in a closed system, heat never flows from a colder body to a hotter one." Other statements include

"in a closed system, energy runs downhill," and "in a closed system, all changes are in the direction of increased disorder (or increased entropy)." So far as we know, this Law holds without exception.

However, the Second Law of Thermodynamics cannot be used as a valid argument against the occurrence of evolution on the earth, because the earth is not a closed system. "Closed system" means that no energy is added or removed from the system. Addition of energy to a given system makes it possible for the order of the system to increase, as, for example, in the growth of a plant. Therefore, the authors of *Scientific Creationism* have misapplied Thermodynamics in their arguments against evolution.

Actually, it has been pointed out by other Christian writers that the Second Law of Thermodynamics cannot properly be applied as an argument against evolution. These include Russell Maatman, Dordt College, in his book "The Bible, Natural Science, and Evolution" (pp. 129-130) and J. A. Cramer, Wheaton College, in an article entitled "General Evolution and the Second Law of Thermodynamics" in the Journal of the American Scientific Affiliation of March 1971. Both writers reject evolution as an explanation of the origin and development of living organisms, but they agree that the Second Law of Thermodynamics cannot be used to argue against evolution.

I consider it an improper and awkward literalism to equate the Second Law of Thermodynamics with God's curse on man's sin (p. 212). Our digestion of our food and all of our life processes take place in accord with the Second Law. The production of energy by the sun also occurs in accord with the Second Law, yet the sun was certainly shining before the fall of man into sin. The changes which occurred as a result of man's sin were certainly drastic. It is not possible to say certainly whether that change involved physical laws such as the Second Law of Thermodynamics, but I think that it did not. If it did, then it is simply not possible for us to imagine or conjecture about natural processes prior to the fall. It is apparent, though, that plants grew, people ate, and life existed.

The section of *Scientific Creationism* which I am most highly qualified to judge is Chapter 6, which deals with measuring the age of rocks and the earth. Reading that chapter leaves me with a sense of deep frustration, because it would take me more time and more pages than I have at my disposal to do a thorough critique. Therefore, I will comment only on a few claims in the book which I consider to be the most glaring errors or misunderstandings.

1. The book suggests several times (pp. 139, 142, 146, 148, 162) that decay rates of radioactive materials may not be constant. In fact, during more than 70 years of study involving about 1000 different radioactive isotopes, no examples of changing decay rates have been observed.

The book also states that the rate of any process is dependent on existing conditions, which is true. The atomic nucleus has been studied extensively, and the physics of radioactive decay is well enough understood that the factors which would affect decay rates are known. On that basis, we would not expect any appreciable changes in decay rates under any conceivable conditions on the earth. An experiment has been done with beryllium-7, which is the radioactive isotope which we would expect to be the most sensitive of all isotopes to changing conditions, and it was studied under the most drastic differences in chemical conditions which could be conceived; the result was a difference in decay rate amounting to 0.07 percent, certainly an insignificant amount. So I judge that we can confidently conclude that no appreciable changes in radioactive decay rates have occurred during the history of the earth.

The authors of this book also suggest that uranium-lead age measurements could be in error because of a neutron bombardment of the earth at some past time. In actual fact, if such a neutron bombardment were to occur it would have a measureable and predictable effect on other earth materials as well; no such effect is observed, and therefore we can confidently conclude that no such bombardment has occurred.

2. The authors also quote from two papers on Hawaiian basalt rocks (pp. 146-148) in support of their claim that the potassium-argon method of age determination is unreliable. In actual fact, however, those papers point out that care must be taken in selecting samples for dating, but they do not support the claim that the K-Ar method is generally questionable. The paper by Noble and Naughton deals with "pillow" basalts which were formed by lava extruded directly into water deep below sea level on the flanks of Hawaii. The rapid chilling of the lava by water forms a glassy rim on the surface of the pillow, and Ar-40 was found trapped in that glassy rim. The interior of the pillows is more crystalline, and samples from that crystalline rock contains no trapped Ar-40 and gives the correct age of the rock. The paper by Funkhouser and Naughton deals with lava containing phenocrysts, which are larger crystals imbedded in a finer-grained matrix. Those phenocrysts contain some trapped Ar-40, apparently in small voids found within those

crystals. The finer-grained matrix contains no trapped Ar-40 and gives the correct age of the rock. The conclusion is that one must exercise some care in selecting samples for age determination. The people who are doing such measurements know that.

I have already criticized the authors for an out-of-context quotation from Faul related to age determinations. I consider it equally reprehensible to quote fragments of a research paper in an attempt to lend credence to some idea or conclusion which is, in fact, not supported by the research reported in that paper.

3. The authors state (p. 133) that "rocks are not dated radiometrically" but that "approximate ages . . . were worked out long before. . . ." That statement is simply false. A very slight acquaintance with the literature and with the history of science for the past 200 years will show that a considerable revision of age estimates was the direct result of radiometric dating. The *sequence* or order of rock layer deposition had been worked out before by studying rock strata in various parts of the world, but the age in years was previously unknown. I find it interesting that the radiometric measurements confirmed the correctness of that sequence, and I conclude that that is a strong argument in favor of placing confidence in radiometric age determination.

The facts of the matter are as follows for age estimates prior to the use of radiometric methods:

- a. 1841—Hitchcock, in a geology textbook, suggests that geologic time is vast, but states that no reliable estimate can be given.
- b. 1863—Emmons, in a geology textbook, suggests that geologic time is vast, but states that no reliable estimate can be given.
- c. 1883—Dana, in a geology textbook, quotes an estimate of 48 million years for the age of fossiliferous rocks based on sedimentation rates, but adds that many geologists consider that estimate to be too low.
- d. Circa 1890—Lord Kelvin publishes an estimate based on the cooling rate of an initially molten earth, giving the age of the earth at not more than 40 million years.
- e. Circa 1895—Joly publishes an estimate based on the salinity of the oceans, giving the age of the oceans as about 100 million years.
- f. 1897—Rice, in a revision of Dana's book (1883) repeats Dana's statement and adds that it is "probable that geologic time from the beginning of the Cambrian is measured by tens of millions, rather than by millions or by hundreds of millions, of years."
- g. 1909—Sollas publishes a paper in which he gives an estimate, based on sedimentation rates, of 80 million years for all sedimentary rocks, including pre-Cambrian.

The first suggestion that radioactivity might be useful for measuring ages of rocks is credited to Rutherford in 1905. The earliest publication of such measurements was by Arthur Holmes in 1913. Those results and later modifications are as follows:

- a. 1913—Holmes gives the date of the Cambrian (oldest fossiliferous rocks) as somewhat more than 430 million years, and the oldest measured rock at 1.3 billion years.
- b. 1937—Holmes gives the age of Cambrian rocks as slightly more than 450 million years, the oldest rocks known were measured at 1.75 billion years, and estimates for the age of the earth were at least 1.9 or 2.0 billion years. The ages of the various geologic periods were also given, based on radiometric measurements. These results for rocks since Cambrian time are very similar to ages accepted today.
- c. 1949—The age of the oldest lead deposits on earth was given as 2 billion years. The earth must be appreciably older still.
- d. 1957—The ages of meteorites and the age of the earth were revised to 4.5 billion years.
- e. Present—The age of the earth is given as 4.65 billion years, and the beginning of the Cambrian as 570 million years.

This comparison between the ages of rocks as estimated before radiometric dating and the ages determined by radiometric dating demonstrate that the ages of rocks really are measured by radiometric means, and that these ages are grossly different from those earlier estimates.

I could go on and on, pointing out other scientific errors in *Scientific Creationism*, but if you are not convinced by now that the book is quite deficient, I suppose you will not be convinced no matter how weighty the evidence might be.

One issue remains to be resolved. Someone might say to me "You have a Ph.D., and Henry Morris has a Ph.D. Why should I believe you rather than Morris?" In response I could list several reasons, but I will make just one recommendation: pick out one statement or claim in which Morris and I are in clear disagreement, and check it out yourself.

Finally, I object to the claims of near-infallibility and to the narrow view of Christianity which

is found there. For example, it is stated on page 244 that the Biblical exegesis which allows a literary framework view of Genesis 1 is "out of the question for any real believer in the Bible." Yet there are Reformed scholars, Bible-believing Christians, who say that the literary framework view is a valid Biblical exegesis.

This critique may seem very harsh, especially since we insist that we should be open to hearing and considering the views of other Christians. But the views presented in this book are certainly not representative of the views of Christians active in science. The Reformed view, for example, allows

Christians to engage honestly in scientific study without being afraid that their discoveries will destroy their Christian faith, because science doesn't compete with faith. The history of many confrontations between science and theology has shown the Reformed view to be far superior to the view presented in *Scientific Creationism*. It is a matter of considerable concern to me that such views have received a sympathetic hearing on the part of so many members of Reformed Christian churches. Let us be on guard so that we do not throw away our Reformed heritage for an unsatisfactory substitute.

RESPONSE TO A CRITIQUE-REVIEW OF SCIENTIFIC CREATIONISM

by Henry Morris and Sidney Jansma*

Professor Menninga, in his review of *Scientific Creationism*, provides readers of *The Christian Educators Journal* with a clear testimony of his own faith in theistic evolution, but unfortunately provides a very distorted view of the book he is reviewing and of the scientific evidence (as well as the Biblical evidence) for special creation. Furthermore, he frequently uses the phrase "we Reformed Christians," or equivalent, as though his views on this subject were shared by all those committed to the Reformed faith. If he is right in this assumption, it is a matter for grief on the part of Bible-believing Christians everywhere; if he is wrong (as, indeed, he is), then his attitude is arrogant, to say the least.

He says, for example, that "we Reformed Christians . . . practice grammatical-historical exegesis" in attempting to interpret the Bible, as though creationists did otherwise! It is, in fact, precisely such exegesis that prevents creationists from distorting Genesis into an evolutionary meaning which the author of Genesis explicitly tried to preclude. It is significant that neither Professor Menninga nor any other critic, to our knowledge, has ever attempted to answer the arguments given in this and other creationist books showing the

literal interpretation of Genesis to be the only valid interpretation, consistently accepted as such not only by Moses but also by Christ and the Apostles. If these arguments are in error, then why will no "Christian evolutionist" ever undertake to explain *how* they are in error? Menninga shrugs the problem away simply by saying (with no proof but his own assertion) that "God's revelation of Himself as creator of the universe is simply not on the same level as the scientific theory of evolution." This type of Biblical exegesis is neither grammatical nor historical but is illusory and destructive, capable of making any passage in Scripture mean whatever some "scientist" might like it to mean.

Professor Menninga makes a serious charge when he says the writers of *Scientific Creationism* quote authorities out of context as a "persuasion technique." No intimation was suggested in the book that the authorities cited were creationists or that they would agree with the writers. With few exceptions, every quote in the book was from an evolutionist; in fact, had only creationists been quoted, Professor Menninga would undoubtedly have discounted the entire argument because of their "literalist" bias. Evolutionists were quoted simply to document the *facts* reported in the book, knowing that at least *they* could not be charged with coloring these facts to support creationism. That this is an effective mode of argumentation is obvious from the consternation it seems to cause

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those Christians who, like Menninga, have so unnecessarily compromised with the evolutionary system.

That the quotations used have *not* been taken out of context, insofar as the facts are concerned, may be confirmed by anyone who wishes to check them out. Full documentation was included for just this purpose.

The Second Law of Thermodynamics is a statement of the empirical fact that every system tends to go toward increased disorder.

This law entails an obvious contradiction of the evolutionary philosophy....

Only two specific scientific arguments in the book were criticized by Professor Menninga, one based on the Second Law of Thermodynamics and one which questioned the constancy of radioactive decay rates. Both of these arguments, as presented in the book, have been grossly distorted by Menninga, which is an interesting commentary on his own charge of out-of-context distortion of evolutionary authorities by the writers.

The Second Law of Thermodynamics is a statement of the empirical fact that every system *tends* to go toward increased disorder. This law entails an obvious contradiction of the evolutionary philosophy, which assumes the universe to have evolved upward from primeval randomness to its present state of high order and complexity. Dr. Menninga dismisses this argument offhandedly, by saying merely that "the earth is not a closed system." This is the standard naive defense offered by evolutionists against the creationist implications of the Second Law.

Now, Dr. Menninga may not agree with the extended discussion of this very point in *Scientific Creationism* (pages 42-46), but he at least ought not to ignore it! There it is shown that disorder will always increase in an *open* system (actually "closed systems" do not even exist except as an idealized concept for definition purposes) unless there is a created *program* associated with the system to direct its growth into a higher degree of order and also a created *converting mechanism* available and able to transform the environmental solar energy into the highly specific work required to effect this growth. The postulated evolutionary origin of life and the plants and animals of the worlds through geologic time meets neither of these essential criteria, and thus is specifically

negated by the Second Law.

If Professor Menninga has evidence which refutes this argument, he should present it.

In his discussion of radioactive decay rates, Menninga fails to acknowledge some recent data. Though ordinary environmental factors do not usually change these decay rates, over a dozen radionuclides have indeed had their half-lives changed by such factors, some to much greater degree than the 0.07 percent admitted by Menninga (see *Chemical and Engineering News*, April 7, 1975, p. 2). The concept of past changes in the neutrino flux, as pointed out in the book is today being seriously considered by a number of scientists at least as knowledgeable on the subject as Professor Menninga. Dr. H. C. Dudley, Professor of Radiation Physics at the University of Illinois, for example, has published a whole series of papers on the concept of the "neutrino sea," according to which decay rates must be regarded not as constants, but as variables.

It was not this factor alone, however, but many others, which were pointed out in the book as making all radiometric dates at least suspect. This was all ignored by Dr. Menninga. The fact that rocks of *known* age (e.g., rocks formed by recent lava flows) always give radiometric ages vastly in excess of their true ages, whether dated by potassium dating or by uranium dating, clearly shows the unreliability of radiometric dates calculated for rocks of *unknown* age (after all, they also are

In his discussion of radioactive decay rates, Menninga fails to acknowledge some recent data.

igneous rocks, formed in essentially the same way as these recent lava rocks).

Dr. Menninga also charges the writers of *Scientific Creationism* with falsehood when it was pointed out that the geological ages had been worked out long before the advent of radiometric dating. However, he does recognize that "the order of rock layer deposition" had been worked out prior to that time, and that is precisely what constitutes the geological ages! As he points out in a rather selective outline, even the "approximate ages" (measured in years, as well as "geologic ages") had already been worked out by various other physical processes, although these estimated chronologies are continually being enlarged. Less than 30 years ago, the "age" of the earth had been set by uranium dating, galactic expansion and

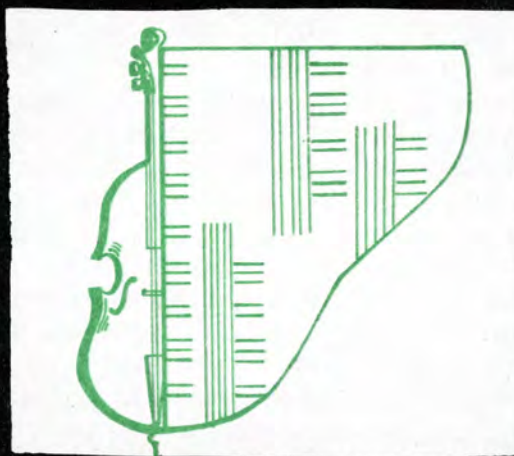
other processes to be two billion years, whereas now it is about five billion years!

In the context of this discussion in *Scientific Creationism*, it was being shown that neither radiometric dating nor any other physical method is used as the final arbiter in determining the geological ages of rocks. Rather the fossils, based on "stage of evolution" are the determining factors. Menninga ignored all of this in order to criticize a very minor point, and even that without justification.

A couple of other remarks by Menninga must be noted. He implies that Henry Morris is not really trustworthy like himself, but completely over-

looks the fact that, although Morris was the editor, the book really represents the composite contribution of 23 scientists, 19 of whom have doctorates and all of whom are at least as honest, qualified, and knowledgeable as Professor Menninga. None are infallible, of course, and there may well be mistakes and deficiencies in the book, but they have not been pointed out by Professor Menninga in his review. If he is representative of the views of "Christians active in science," as he claims (more so than say, the 500+ well-qualified creationist scientists in the Creation Research Society), then Christian intellectuals have indeed drifted far from their Biblical and scientific heritage.

Music Education and Aesthetics



by Craig Parker*

Of what importance is aesthetics to a music educator? Certainly there are enough important questions lying totally within the realm of music education itself. For example, will we ever find ultimate, final answers to such questions as these: What are the most important aspects of music that my students should learn? What are the most effective teaching methods to use in music education? What musical skills, concepts, and attitudes should my students have learned and appropriated when my time as their teacher is over? How do I adequately evaluate student progress in learning?

I would like to stress my belief that the Christian music educator must deal with such questions in a deliberate, orderly manner. Ideally the educator would with extensive reading, research, concentrated thought, prayer, and, I hope, discussions with other educators in the arts, develop and articulate a philosophy of music education. However, it is not my main intention here to encourage music educators to philosophize about their profession. Rather, my concern lies with the need to base such a philosophy on a Christian aesthetic—a philosophy of musical art itself. Before a music educator can validly and effectively philosophize about teaching his art, he must first articulate an aesthetic; he must deal with the most basic problems of the art, which concern, among other things, the nature and

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function of music; the relationship between the art of music and the Biblical revelation of truth; the relationship between emotion and music; descriptions of the musical activity of the composer, the performer, and the listener; and the meaning of music. Once the music educator has come to certain beliefs about musical art itself, he or she will then be ready to deal with questions of an educa-

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tional nature. Speaking from personal experience, I allow that such a scholarly pursuit is unquestionably a difficult, time-consuming task. However, the rewards in educational benefits for teacher and students far outweigh the efforts.

I should now like to suggest a possible basic outline for the organization of a Christian aesthetic. An appropriate beginning would be to define the raw materials of music, that part of the art which has always operated according to created law and order and which was "built into" creation by God. Next, consideration should be given to the act of musical creation. In other words, how a composer creates with the raw materials. Finally, the relationship of a musical creation to its creator, to the interpreter, and to the one who perceives, the listener, needs to be discussed. Admittedly, many areas of an aesthetic nature are not included in the outline. However, the most basic and important issues of musical art are, I feel, mentioned. A treatment of these would naturally lead to other questions of a more specific nature. I will deal first with the first of the topics - the raw material of music.

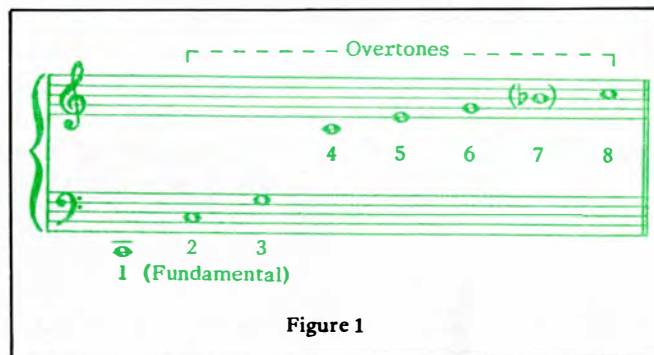
The raw material of music is that part of the art which God "built into" His creation. I consider the raw material to be pitch, with the series of partials, or harmonics, which form the internal structure of any pitch (Fig. 1). I am presupposing the factor of duration, which is inextricably associated with pitch. Harmonics are usually inaudible as separate pitches; however, their presence may easily be demonstrated. If one were to pluck the "C" string in a 'cello, the entire string would vibrate and sound the audible fundamental tone "C." The string is not *just* vibrating in this fashion, however. It is also, simultaneously, dividing itself into halves, each half vibrating twice as fast as the entire string,

producing the first overtone. The string is at the same time dividing itself into thirds, each third vibrating three times as fast as the entire string, producing the second overtone; into fourths, fifths, and so on to infinity, with the vibrating sections of string and the corresponding intervals between overtones becoming smaller and smaller. The Creator has placed within every musical sound this very mathematical system of organization. The harmonics are seldom, if ever, present in equal intensity from one sound to the next. Various aspects of the vibrating medium (shape, size, material), the type of resonating chambers, the method of activation of sound, bring about an intensification of some overtones and the suppression of others. This variety of intensification of overtones is what causes the difference in types, or qualities of sound.

The raw material, then, is the system of partials within pitch. The late American composer, Alvin Etler, has made an interesting comment on human perception of this raw material:

The overtone series is a bona fide phenomenon of the raw world of nature—the only such one in our experience with tones. A physical law ensures that a vibrating string in Bombay or Peking will produce the same superstructure as a similar string vibrating in Arezzo or Leipzig. Yet the perceptions aroused by the one in Bombay have prompted choices leading to a linear music with highly sensitive and well-codified microtonic divisions of the octave, which Western ears can hardly even identify, and to a heterophonic method of combining a melody with itself which takes little or no account of whatever tones may be sounding simultaneously. In contrast, the string vibrating in Arezzo spawned a tightly circumscribed system of chord structure and root sequence, together with a highly arbitrary, if thoroughly practical, division of the octave into twelve ostensibly equal intervals (Etler, Alvin, *Making Music: An Introduction to Theory*. New York: Harcourt Brace Jovanovich, 1974, pp. 1-3).

To certain individuals God has given special creative gifts in working with musical raw materials.



We call these people composers. Now I will consider the act of musical creation itself and, in doing so, will deal with two fundamental questions: (1) What is involved in the act of musical creation? and (2) Why and for what purpose does a composer create?

It would seem logical that the best answers to questions involving composition would come from composers themselves. However, composers are not all agreed on what takes place during the process of composition. Because of the diverse viewpoints, I want to argue that composers function in different ways. Even one composer does not always work consistently the same way. There are, however, two characteristics of musical composition which consistently recur in composer accounts; one is that composers work with ideas that are *musical*

There are, however, two characteristics of musical composition which consistently recur in composer accounts; one is that composers work with ideas that are musical ideas, mental pictures, or notions in musical terms

ideas, mental pictures, or notions in musical terms (a theme, a phrase, a motive, or perhaps just a rhythmic figure). Some composers have tried to describe this notion of a musical idea, among them Roger Sessions, Paul Hindemith, and Wolfgang Mozart. The Sessions description is typical:

What I have called a 'musical image'—a pattern of tones, which can mean anything from the simplest and shortest possible rhythmic or melodic or even harmonic fragment to something considerably more elaborate—will seize the attention of a composer, assuming for him a very clear and definite character and setting his musical imagination in motion along a very clear line that this character determines. It is the definiteness of the character and the 'setting in motion', as I have described it, that constitutes the significance of the musical idea for him (Sessions, Roger. *Questions about Music*. Cambridge: Harvard University Press, 1970, p. 81).

While composers differ in the source of ideas, the ideas themselves must be musical ones.

The other characteristic which seems normally involved in musical composition is that the composer feels strongly about these musical ideas, more intense about some than about others. To have a better understanding of how composers feel

about their materials and creations, we could reflect on what God has revealed to us about the intensity of His own feelings toward His creation. The incarnation, death, and resurrection of Jesus Christ give us some indication of God's feelings toward His human creations. I believe that composers' reactions and responses to their materials and creations are, in a finite way, similar to those of God. The serious composers—the artists—not only have ideas in terms of their medium; they also have intense feelings about their ideas. For most composers, whatever emotions are present during the act of composition are primarily a result of their feelings about their materials. While emotions resulting from events in other areas of life may be present and may have some bearing upon creational activity, it is my contention that the *primary* motivation for composers during composition is the intensity of their emotions and feelings about their musical materials alone. I thus reject the romantic viewpoint that primary motivations for an extended period of compositional activity are emotions resulting from extra-musical events. In support of this point I quote the Mexican composer Carlos Chavez:

One often hears stories of Chopin's sufferings and love worries being the basic inspiration for his music. It may very well be so, but at the time the man was actually composing there is no question that his mind could not possibly be occupied with anything else but music (Chavez, Carlos. *Musical Thought*. Cambridge: Harvard University Press, 1961, p. 29).

It seems to me that the nature of serious musical composition, with an extended period of weeks, months, or years between beginning and finishing a composition, does not allow for the over-riding influence of emotions other than those resulting from the composer's attitudes about the materials themselves. Serious musical composition demands an intensity of concentration and attention to matters at hand. Serious composition requires the total involvement of the creator—head and heart, intellect and emotion. This leads us directly into the matter of musical inspiration. I quote some composers on this issue:

Alvin Etler:

Inspiration is neither more nor less than a capacity for total involvement, usually by the route of hard and persistent cultivation. Technique without imagination is, of course, sterile, but imagination without technique is even worse. If you doubt this, get hold of the published Beethoven sketchbooks and follow the evolution of some of his more inspired ideas. Inspiration for him consisted in a dogged pursuit of a concept (*Making Music*, p. 41).

Carlos Chavez:

Inspiration is a state of mind . . . in which all the mental, psychic, and spiritual forces of the individual concur intensely for a single purpose—that of creating, composing, or investigating: a total concentration of human faculties in a given direction. We do not call all cases of concentration inspiration but all cases of inspiration involve concentration (*Musical Thought*, p. 30).

Benjamin Britten:

Obviously it is no use having a technique unless you have ideas to use technique; but there is, unfortunately, a tendency in many quarters today to believe that brilliance of technique is a danger rather than a help. This is sheer nonsense. There never has been a composer worth his salt who has not had Supreme technique. I'll go further than that and say that in the work of your Supreme artist you can't separate inspiration from technique. I'd like anyone to tell me where Mozart's inspiration ends and technique begins (*The Composer and the Listener*).

Composers may be inspired to write a piece of music by viewing a beautiful landscape or by reading an intriguing poem, but if the resulting music is itself going to be inspired, they must have this capacity for involvement with and concentration upon their materials. They must not only work on their materials, they must allow the materials to work on them.

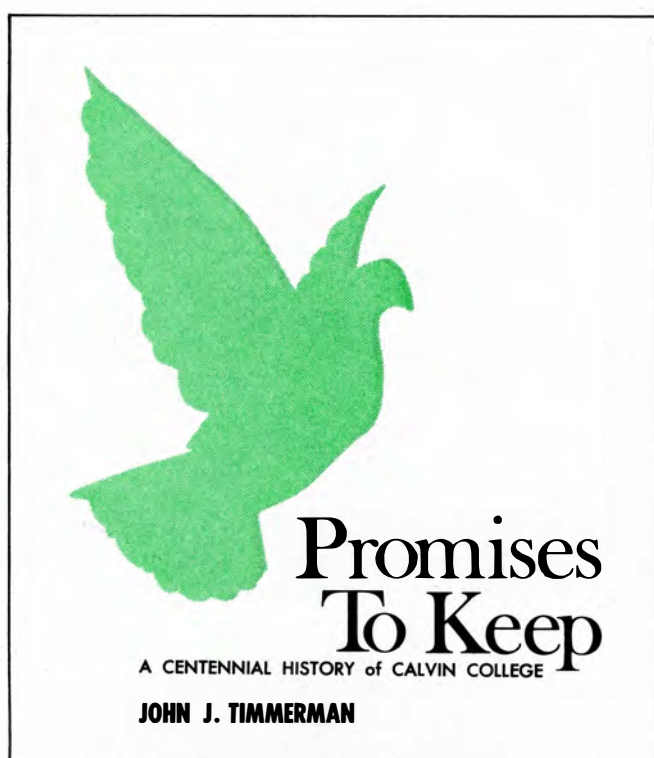
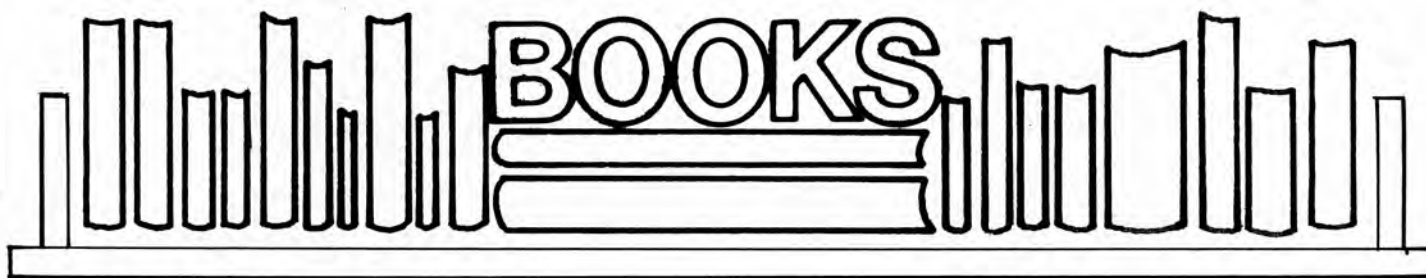
To summarize what is involved in the act of musical creation, then, I say first that composers think with musical thoughts. Just as you or I usually express our ideas and thoughts in verbal terms, composers express their musical ideas in musical terms. Second, in working out the various implications and possibilities of a musical idea, composers must become involved with their art. Great composers are capable of working at a level of intensity, both of thought and feelings, that is rare among human beings. And the greater their capacity for involvement with their art, the greater will be the resulting expression of that involvement, the music itself. In other words, the quality of a work of art is neither more nor less than the quality of the creator's experience itself and neither more nor less than the skills with which that experience has been expressed in musical terms.

This far I have tried to explain what I consider is involved in the normal creative activity of composers, based upon a sifting of their writing and, to a small degree, upon my own meager experience in composition. This is a crucial matter for the development of a Christian aesthetic, for if I, or anyone else, is wrong about the process of composition, there will undoubtedly be elements of error in our

conclusions about art itself: its purpose, its ultimate significance. If I am correct that the compelling motivation of composers to create derives primarily from the strength and intensity of their feelings about their materials, we have within that motivation an answer to the question, why do composers create? For what purpose do they create a work of art in music? Composers have an intense interest in, a love for, an enjoyment of, their materials, musical sound. People who write music, in searching out and working out the various implications and potentials within their musical ideas, are ultimately striving for a better understanding of a part of reality that is truly significant for them, a part of reality that they love and feel strongly about. I am speaking of the reality of musical sound.

To summarize what is involved in the act of musical creation, then, I say first that composers think with musical thoughts.

Here it is important to realize that composers, during composition, are not *just* striving for a better understanding of their materials. Because of my belief in the intimate connection between the composer and composition itself, that is, composers are not involved in just an intellectual experience, nor in a purely emotional experience, I argue that the creation of a musical work is for composers a "being" experience. The work that they create is an expression, to themselves and to others, of what that "being" experience was. I agree with Roger Sessions' view that musical composition is such a being experience that composers are exploring not only the potentials within musical sound but also the area of human response to musical sound. They are exploring their own humanity. In fact, the search for identity is inextricably tied up with the act of musical creation. If any one piece of music is an expression of its creator's experience during the act of creation, I would say that embodied within any one piece of music are significant glimpses of the composer's "being:" glimpses of personality, of basic beliefs about self and about art, of whatever discoveries and insights about the structure of musical reality there were during the creation of the work. The art of music has the potential of embodying treasures of this sort within its creations. The capability of human listeners to tap the resources is another matter, with far-reaching implications for the profession of music education.



PROMISES TO KEEP: A CENTENNIAL HISTORY OF CALVIN COLLEGE by John J. Timmerman. Grand Rapids, Michigan 49502: Wm. B. Eerdmans Publishing Co., 1975. 197 pp. \$6.95. Reviewed by *Norman De Jong*, CEJ book review editor and principal of the Bellflower Christian Schools, Bellflower, California.

From the preface through the index of persons, here is a thoroughly enjoyable and highly significant book. Written in the lucid and engaging style that has always marked Timmerman's writing, the book recounts and analyzes in such a fascinating way that you will likely want to complete it once you have begun.

The structure of the book is basically chronological, progressing from Calvin's early struggles and bloated teaching loads to the multi-million dollar complexity it is today. Throughout, the historical analysis is a finely painted mix of broadly stroked panoramas and intriguing detail. Nowhere does that detail become cumbersome, and nowhere does that sweeping vista leave the reader hungry. In one instance the chronology becomes badly bent and that is understandable, for most in Christian Reformed circles have been awkward in treating the episode that was Grundy College (cf. pp. 124-25).

Timmerman shows his refined character in Chapter IX, where he does a fair and excellent job of analyzing and reporting the 4-1-4 curricular innovation, which he supports as a member of the loyal opposition, but with less than 100% commitment. Similar fairness is evidenced throughout the book, balanced as it is with the collection of the glorious and not so glorious events.

What makes the book truly worthwhile, though, is the deftly woven theme of "promises to keep." In unobtrusive and yet compelling fashion, the religious faith that initiated the college keeps coming through to remind us of present and future responsibility. This is more than mere history; it is another testament of vision on an institutional scale.

If you love good reading, order your copy today.

TO FIND A BETTER LIFE: ASPECTS OF DUTCH IMMIGRATION TO CANADA AND THE UNITED STATES—1920-1970 by Gordon Oosterman, et. al., Grand Rapids, Michigan: NUCS, 1975. 103 pp. Reviewed by *Norman De Jong*, CEJ book review editor and principal of the Bellflower Chris-

tian Schools, Bellflower, California.

An in-depth study of immigrants' problems has been sorely needed as a means toward helping second-generation immigrant youth understand their parents, their church, and their own behavior. This book should prove beneficial toward those ends, but not without astute handling by classroom teachers.

Although it is never stated, *To Find A Better Life* seems aimed primarily at youth of high-school age. Thus it lacks the eye appeal and exciting format needed to catch and hold the interest of younger students. The only illustration appears on the cover. Inside there is an excessive amount of print, each page possessing a monotonous sameness coupled with tight margins.

If this book read like one of Mark Twain's novels, the format could be ignored, but it does not. The first two chapters especially are too scholarly and fact-filled to excite many young students. From then on, the human interest comes to the fore and the scholarly tone begins to disappear. The teachers who use it may want to consider the option of assigning chapters one and two at the end of the study, rather than as the introduction.

This reader found a wealth of significant and interesting information that could lead to greater understanding, but he also found a good deal of repetition and a surprising lack of humor. There are a few "funnies" on pages 69 and 70, but the Yankee-Dutch humor which helped so many older immigrants laugh at themselves is noticeably lacking. The book excels in its accounts of trial and extreme hardships, provoking sympathy on the part of the reader. Such an approach certainly cracks the apathy many of us share, but it does not produce the seasoned understanding and the wise, discerning appraisal of present attitudes and practices we need.

I was disappointed with this book, but that may be because my expectations were high and I was aware of an urgent need for this type of material. We need to understand our immediate past if we are going to handle the present, and this book can certainly help, not only in Canadian schools, but also in those US communities that have an interest in someone other than themselves. Since this book is practically the only material of its type available, we need to use it and apply our best pedagogical skills to it. This book could be used not only as an effective classroom tool, but also as a worthwhile gift to those who can reminisce about their own immigration experiences.

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