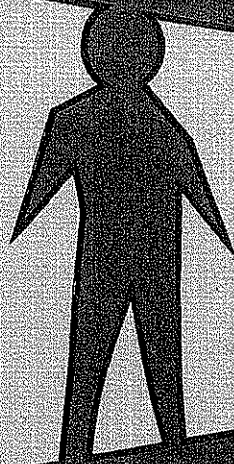


PERSPECTIVES

IN



MARCH, 1976

COVENANT EDUCATION

PERSPECTIVES IN COVENANT EDUCATION

VOLUME I

MARCH, 1976

NUMBER 2

Published semi-annually in September and March by
the Protestant Reformed Teacher's Institute.

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STATEMENT OF PURPOSE:

Perspectives in Covenant Education is a journal regulated and published semi-annually, in September and March, by the Protestant Reformed Teachers' Institute. The purpose of this magazine, in most general terms, is to advance the cause of distinctively Christian education as it is conceived in the Protestant Reformed community. More specifically, the magazine is intended to serve as an encouragement and an inducement toward individual scholarship, and a medium for the development of distinctive principles and methods of teaching. The journal is meant to be a vehicle of communication: a vehicle of communication, not only within the profession, but within the Protestant Reformed community and within the Christian community in general.

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Third Class Postage paid at
Jenison, Michigan 49428

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EDITORIAL COMMENTS

by Agatha Lubbers, editor-in-chief

The editors of **Perspectives** are pleased to report that the initial response to the journal has been encouraging. One reader wrote as follows: "I admire your ambition and zeal as laborers for Covenant education in undertaking another branch of learning and encouragement for teachers, parents, and friends through the pages of **Perspectives in Covenant Education**. May this labor also be blessed to the glory of our Covenant God."

Another reader wrote the following: "You are to be commended for beginning what promises to be a very worthwhile publication in our circles. May God bless you in this work. Under His blessing our schools, teachers, and parents will be strengthened. And the glory will be God's."

We are encouraged by these initial responses. In hope therefore we publish this second edition of the journal. May God use it for the development of the Reformed truths concerning the education of Covenant youth.

The P.R.T.I. has made the following

changes. Mr. Jon Huiskens, who served a one year term, has been replaced on the editorial staff by Dr. Roderick Kreuzer. Dr. Kreuzer teaches mathematics and science at Hope Protestant Reformed Christian School. He has been appointed to a three-year term.

Miss Winifred Koole, another member of the faculty of Hope P.R.C.S., has been appointed to the position of business manager of **Perspectives**. She will handle all correspondence concerning subscriptions to the journal.

We also express appreciation to Mr. Jon Huiskens for his willingness to serve and assist in this pilot venture of publishing a journal.

Although I have a few unpublished manuscripts on hand in my files, there is a continued need for manuscripts. They should be type-written and error-free, if at all possible. Send your manuscripts to the editorial office. Parents are also urged to write or respond to an article in the journal.

has been encouraging, we are somewhat disappointed by the **number** of people who have not subscribed to the magazine and could. We wish to express our appreciation to those who have subscribed and have so generously given gifts to make the continued publication of the journal a possibility. All current subscribers can use the attached envelope to renew their subscription for the 1976-1977 publishing year. If you know someone who has not subscribed, will you encourage him to

subscriber but are reading the magazine, won't you send in your subscription today?

Because this journal is intended to help teachers, parents, and friends of Covenant education, the editors wish to make the articles as pertinent as possible. If you have any suggestions for the improvement of the journal, we solicit your comments and suggestions.

PARENTAL EDUCATION

by Dr. Dwight Monsma

Dr. Monsma is a past president of the Board of Covenant C.H.S. He has also taught at one time at Adams Street P.R.C. School. He practices dentistry in Grand Rapids.

This phrase, Parental Education, is used by all of us to describe our system of Christian education. When asked by outsiders to give a reason for sending our children to our own schools, we answer that we feel that their education and rearing is our responsibility and not that of the state. We all feel this so strongly that we are willing to spend thousands of dollars each year to maintain schools for our children...and not only for our own children, but also for the children of our Christian brothers. Protestant Reformed people have also described their schools as Covenantal schools which reinforces the idea of Christians rearing their children to become mature Christians. Although the above statements are true, and we accept them as the basis of our educational system, many times we violate the principles implicit in such a system.

In the October, 1975 issue of **Perspectives**, Rev. David Engelsma spoke very

clearly about many of these principles. He directed his words primarily to our teachers, but each of us would profit by re-reading his article. I will quote from his words later in this paper to emphasize certain points that he made so well. While he described the Christian teacher, he also involved the Christian parent, the board and the church. I intend to examine the subject of Parental Education as it applies to parents, students, the school society and the board. However, of necessity, some of this will involve teachers, administrators and the church.

Definition of Parental Education

To reduce parental education to its simplest terms: it is the instruction of children by their own Christian parents. Parents of all ages the world over have done this every moment that they have spent with their children. Christian parents especially are called to instruct their children in the home by word and example. We must do this every waking hour to fulfill our God given calling.

But I want to focus our attention on the area of Parental Education that we call SCHOOL. Often school is referred to as

term because it implies that this part of a child's education is well organized. Very few parents are able to devote their talents and time exclusively to rearing their children through fifteen to twenty years of formal schooling. Nor would this be the ideal for most parents and children even if it were possible. Therefore Christian parents hire Christian teachers to teach their covenant children. This is the Christian school, this is covenantal education, this is the responsibility of parents. Parents must direct the teacher to rear and educate their children in such a manner that there will be complete harmony between home and school. Parents and teachers must communicate frequently to accomplish this goal. Anything we can do to improve this communication and make it more meaningful, will make our schools more parental.

The Philosophy of Parental Education

"Train up a child in the way he should go: and when he is old, he will not depart from it." Proverbs 22:6. This simple command with promise summarizes very succinctly all that God says to his people regarding their duty toward their children's education. Solomon directs us in Proverbs 1:7 & 10, "The fear of the Lord is the beginning of wisdom:". By following this truth, we as Christians make parental education Christian education. The next time that you use the book of Proverbs for family devotions, take note of the frequent references to the instruction of children by parents. In fact, the whole book speaks of father instructing son; and son hearing and obeying. Not only is this idea taught in Proverbs, but all Scripture impresses us with the necessity of fathers to teach their children. Passages such as Deuteronomy 3:9-10 command us to remember God's law and, "teach them to thy sons, and thy sons' sons." Chapter six commands us to diligently teach our

sittest in thine house, and when thou walkest by the way, and when thou liest down, and when thou risest up." Thus, the training of children should be a consuming interest for us and we must devote all of the time we possibly can to this great and glorious calling. Psalm 78 commands us to tell our children all the great things God has done for us and to teach them what God's law requires.

Thus we see that we do not need a complex philosophy of education, but have only to follow the clear and simple commands of Scripture. No Christian can have any doubt that it is the duty of the parents to teach and the obligation of the child to listen. When parents hire teachers to help them accomplish this goal, the parents are nonetheless responsible that their children are reared correctly. We cannot hire teachers who are unbelievers; we must be sure that our teachers confess God just as we do. Parents and teachers must work together toward their common goal which is the proper instruction of the covenant seed. Any time there is disagreement, it must be resolved between parent and teacher so that both can be most effective toward the child. To the extent that any of the above principles are violated, to that degree we lose parental education. It would be easy to have parental education if only one parent and one teacher were involved, but when many parents with many children hire many teachers to help them fulfill their covenantal obligation to rear their children, a host of problems arise. The solution of these problems as they apply to our educational system is the primary concern of this article. I hope that the discussion of these problems will be enlightening to all of us.

Practical Implications...For Parents

Parental education could properly be called Paternal education because most Scripture passages speak of the duty of

the father, rather than that of the mother. This does not mean that the mother is not involved, but rather that the responsibility of it falls on the shoulders of the father. In Ephesians 6:1 we read, "Children, obey your PARENTS in the Lord: for this is right." But in verse four it says, "And ye fathers, provoke not your children to wrath: but bring them up in the nurture and admonition of the Lord." Scripture puts the whole burden of education upon the parents. Therefore, they must use all means possible to fulfill this calling. When parents unite to found a school society based upon their common desire to educate their children, they must be sure that they are uniting with parents of like mind. They must agree together regarding the interpretation of scripture, must speak the same confessions, must want the same educational emphasis and must be willing to freely discuss these especially if disagreements arise. The most important decisions that these parents face is the choice of a teacher for their children. The teacher or staff of teachers is, in fact, the school; because they are called by parents to rear and educate their children. All the other entities related to our schools are simply means to implement this primary relationship between parents and teachers. Thus the society is not the school, the pupils are not the school, the board is not the school, nor is the building the school; only when parents have hired teachers can they say that they have a school.

But, in our schools, we do not let parents choose teachers for their children. In practice, school boards hire teachers without even giving the parents a chance to approve their action. Technically, I suppose, society members do approve the choices of the board when they approve the budget for the coming year. This, you must admit is one of the most oblique methods of approval possible, but we accept it because we have used it for such a long time. Parents are content to 'let the board do it', when they know that they

should be intimately involved themselves. It is true that the Board of Trustees and especially its education committee can most efficiently interview, evaluate and select teachers for our children. It is also true that this task has been assigned to them by the society as one of their primary duties and responsibilities. But we must involve parents in the final decision. Parents must be given the opportunity to meet with new teachers, talk to them about rearing their children, evaluate them and accept them to stand in their stead...before the board can extend a formal contract to them. The society of parents must give final approval to each teacher's contract each year if we are to maintain the principle of parental education. Perhaps our present method works efficiently, but we must not think pragmatically nor argue from this position... we must follow the principles of parental control. Parental control does not pass through the board to the teachers, but directly from parents to teachers. Parents must also control the board, but the board is only an expedient for certain parental tasks related to aspects of the school...the board is not charged to rear our children. The board may never stand between the parent and the teacher. But this often happens and is destructive of parental education.

I have emphasized repeatedly that parents must direct the teacher in the rearing process...because this is not usually done. There are many reasons why this relationship breaks down and some of them can be laid at the feet of parents. Parents who attend PTA meetings three or four times each year and participate with teachers in five minute conferences twice a year feel that they are among the top 25% of parents who use our schools...and they are! Yet, this formal contact is only superficial compared to the intimate communication necessary to make parental education a reality. What has happened to the good custom of inviting

the teacher into our homes as an honored guest? Are we too busy with 'our own thing' to be concerned with the person who is standing in our place as parent for six hours each waking day? Do you really know the person who is rearing your child? If we would socialize with our teachers more, we would have opportunity to talk about mutual concerns for the child we are both rearing. Parents should feel free to talk to teachers anytime about the children charged to their care. As much as fathers and mothers need to talk about their children; so they must feel the need to talk with the teacher of their children.

All too often, I fear, we as parents would rather talk to other parents about the teacher. Voicing our concerns to other parents, rather than to the person who is teaching our children, is a violation of Matthew 18. We may praise the teacher to each other, we should cooperate as parents to make his task easier, we should express our united confidence in him...but we may never discuss with other parents what we consider to be the failings of our teachers. If we feel that our teacher is not conducting himself as we would in the rearing process, then we must go to the teacher. The only person who can give answer to us for the teacher is the teacher. Nor can we get an answer by talking to a board member. He does not stand in our place to rear our child...only the teacher does. Nor do we talk to the board of trustees...we talk to the teacher only.

In this same connection, parents should consider the teacher to be one with themselves as a third parent to their children. Therefore it is inconceivable that parents would discuss a teacher's failure with their children. When we do that, we are undermining the parent-child relationship and are guilty of schism within our children, our teachers and ourselves. By doing this we are sowing the seeds of rebellion in our children, we are disrupting the confidence of others in our teachers, and we are limiting the effec-

tiveness of our teachers...besides being guilty of sin against the ninth commandment.

Practical Implications For The Society

One necessary instrument already mentioned is the school society. It is a group of like-minded Christians parents and friends who join together to help each other. Every father who wants to educate his children through the means provided by this society...must be a member. How can a father of the covenant dare to say before God and men that he does not have time to devote to the nurture of his children in school? Parental education is not just choosing the best school and then paying for it. Parental education must involve parents! Too many of us turn this duty over to others 'whom we trust' and then wash our hands of our children for six to eight hours every day. Such parents are indeed fortunate that we have dedicated teachers in our schools who are concerned with the rearing of their children; in fact so concerned that they have devoted their lives to this task. Most of us as parents, I think, fail to appreciate the great devotion of our teachers. They stand to serve us by serving our children each day of the school year. If we communicate this appreciation to them at every opportunity, they are encouraged in their calling.

However, having teachers whom we can trust, does not take away the responsibility of each father to be an active member of the school society. One annual meeting of two to three hours is not much of an imposition on a father's time...but I've heard this as an excuse. Even members of our school societies neglect these once-a-year meetings with the same excuse so that often only thirty percent of the membership votes to determine policy and board members for the coming year. I have noticed that many members are present only when a controversial issue is on the agenda of the

meeting. They feel their responsibility to the school only at time of 'crisis', but are content to let others shoulder their burden, as a parent, when only the ordinary hum-drum issues are scheduled to be discussed. These people give lip service to covenant education especially at times of crisis, but violate the true spirit of parental schools. They also expect to exert influence on policy grossly out of proportion to their numbers and participation. This is an inequity in our system and should be corrected. Mandatory attendance and participation of all parents (fathers) at the society level would improve this aspect of covenantal education.

Member fathers know that they may be asked to serve on the Board of Trustees of the school. This prospect frightens many fathers into abstaining from membership. Compulsory membership of all fathers of children attending the school, would also make them eligible to become nominees to the board. Therefore, it is important that our societies pass resolutions which would make membership in the society mandatory to all fathers who ask the school to rear their children. It is inconceivable to me that our schools can rear children whose parents have nothing to say about this God-given task. How can teachers rear my children unless I tell them how I know God wants me to do that? How can I know that they are following my direction unless there is open communication between us in the rearing process? If we truly believe that covenantal education (rearing of our children) is a parental obligation, we must do everything in our power to make it a reality. In the school society this means full participation of all the parents of the children in school.

Practical Implications For The Board Of Trustees

The Board Of Trustees is an instrument of the parents to serve certain needs

of the school. These men are members of the society who are willing to devote their time and talents to the welfare of the school. They too are servants to the parents and often have a thankless task. Though it is a position of honor and trust, the work calls for more soul searching, wisdom and patience. Every father would profit by experience in this area of kingdom service, but everyone is not qualified for this position. Boards must consider teachers to fulfill the needs of the school. This involves interviews, evaluation, bargaining, contracts, etc. Boards must provide finances for the support of the teachers and the educational needs of the students. They must provide a building, approve texts, pay for supplies and utilities, set policy, communicate with parents, propose budgets, collect monies, and do a host of routine tasks which are necessary to the daily operation of the school. No one who stands outside and is served by a board can fully appreciate the time and effort that these men devote to us.

However, there is some confusion among us regarding the exact position of the school board in the educational process. The board is not the school, but only trustees elected by the society (parents) to provide leadership to the society, care for the physical needs of the building, collect and distribute money for the operation of the school, encourage parent-teacher communication, support the teachers financially and spiritually, and in general to care for the school in the best interests of the parents. Some of us have the idea that the board 'runs the school' and is a watchdog for the parents overagainst the teachers. The effect of this idea is that there is a growing chasm between 'us and them'. In their zeal to perform what they believe is their 'God-given duty' of overseer, many boards completely break the direct communication which is necessary between

parents and teachers. Boards are not mediators between parents and teachers and may not become involved unless there is an impasse that cannot be settled after following the principles of Matthew 18. Board members must direct parents who call them regarding a teacher to go to the teacher. If they listen to the complaint, they will be influenced. If they repeat the complaint to others (even to other board members), they will compound the damage. If they make decisions on the board level based on the whisperings they hear, it will result in the complete destruction of our parental schools. Parents do not control the rearing process through the board (the board is not involved in the rearing of our children)...they can only do it through the teacher and themselves on a one to one basis. Yet, I know board members who consider it their duty to listen to every wind that a parent or student blows in their ears...and believe that the board must consider this hearsay when making decisions. I have recently heard of board members who conduct informal polls among their friends during Sunday evening visits. This smacks of gossip. They even feel that this is their duty and refuse to see that talk about teachers to others is clearly gossip. They must remember that they alone were elected to serve on the board...not they and their close friends. The board need not worry that they might not reflect the opinion of their public, but must rather be concerned that their decisions will be for the benefit of the school in its duty of rearing our children. This is not to say that they must not answer to parents regarding decisions they make. Channels are open for such communications at the annual meeting of the society, special meetings and any regular or special board meeting. As far as I know, board meetings are open meetings and cannot be closed to any society member. Thus there is ample opportunity for direct interchange of ideas between parents and the board without

gossip. Understandably parents hesitate to appear at board meetings, but the board could do much to encourage parental participation when they feel it is necessary. Contact with individual board members is no substitute for communication with the whole board...in fact it is likely to be gossip.

Among Protestant Reformed people the idea has developed that the school board is responsible for certain administrative duties. This idea has its roots in our humble beginnings as small schools where the services of a competent administrator were not available. In those days, when many of our teachers served us with little or no formal training in the field of education, let alone in administration, we relied on zealous board members to give direction to the school. Even then, however, this created poor direct communication between parents and teachers. Most of our schools are no longer in this handicapped position and boards would do well to rely heavily on their administrator and teachers. They are not only competent to give good advice to us, but also, because they stand in the place of parents before their children six hours each day, are in an ideal position to advise the board on most matters. This would not result in undue power for administrator or teacher unless weak men occupy board positions. It is incumbent upon boards to seriously consider well-grounded advice they receive from their teachers. Consult with them often and you will gain much better insight into the educational process of our covenantal schools.

Our boards are called to be 'benevolent employers' to our teachers in the name of the society. Boards must be zealous to provide salaries which are more than adequate for each teacher. They must ask themselves whether they as individuals would be willing to work hard for a teacher's salary. They must remember that these teachers have devoted their lives to us and our children and they must

be rewarded 'amply for it. They should be bold to champion teachers' financial needs before the society with sound proposals for collecting the needed money. I am always surprised when boards deny their teachers hundreds per year because they are afraid to ask parents for dollars per year. I have observed also that most teachers are hesitant to campaign for more money for themselves. Therefore boards and society members must do this.

A necessary part of our stewardship as parents toward our teachers in this day is a pension plan. Almost all of us hope to be beneficiaries of retirement plans provided either by our employer or by ourselves. All that our teachers have is Social Security and that is administered by the federal government. Though we are all forced to be enrolled in this system, we also realize that the benefits are not adequate to provide for all our needs during retirement. We, as parents, through school boards, are obligated to care for our teachers even after their years of service to us are completed. I believe that each of our school boards should consider this matter and come to our society meetings with well-grounded proposals regarding adequate retirement plans for our teachers. At best we pay teachers only a subsistence salary and we cannot expect them to be able to from that provide for their own retirement. It is incumbent upon us, therefore, to shoulder this burden for them. Most of our teachers are young, but, within twenty to thirty years many of our present teachers will be over sixty-five years of age and will want to retire. We should face this fact now so that we may adequately fulfill our obligation to them in the future. It is up to our boards to provide leadership in this matter.

Practical Implications For The Church

How does the church fit into this picture? The church must point the parent

and teacher to their God-given task of rearing covenant children. The church must encourage parents to establish Christian schools. The church should help young men and women prepare themselves to become acceptable teachers for our schools. The church can also help financially without violating the principle of parental education. However, the church must never interpose itself between the parents and the teacher. The consistory may not try to run the school in any way lest we fall into the errors of parochialism and parents become even less involved in rearing their children than they now are. God gives this task to parents only; but the church as well as the school helps parents in different ways to fulfill their baptismal vows. In fact, the church is called to do this not only by Scripture but also by the church order in Article 21.

Practical Implications For Teachers

Our teachers have prepared themselves at great cost to themselves for the privilege of helping us rear our children. There is a great honor indeed and I think that this is really what motivates most of our teachers to continue serving us so faithfully...year after year. Each of them has spent four to six or more years training at their own expense, often with great sacrifice...so that they would be prepared to help us rear our children. We as parents must be eternally grateful to them for their selfless dedication to a cause we often take so lightly. Therefore, we must be willing to sacrifice greatly to promote the welfare of our teachers in any way we can. We must urge our boards to be benevolent stewards of our money with regard to teachers' salaries...and we should support such proposals at society meetings.

What an honor for a new teacher to stand in the place of the parent with respect to his pupils. An awesome responsibility and an impossible task...but

one which will be done with God's grace and the help of parents, board and church. Since teachers stand in the place of the parent, they are empowered to do all that a parent must do. Teachers must love their covenant pupils and be concerned for their total welfare. Instruction, correction, reproof must be done in love toward the child for God's sake. Since this is true and we want it to continue, the teacher must keep an open line to parents. Many good means for this are available such as notes, phone conversations, word of mouth to the children; but the best way is directly with individual parents.

Although tactical problems exist, a teacher should try to arrange his time so that he can visit with each of his parents at length at least once each semester. He should initiate this contact with parents whenever the needs of the child call for such a conference. All too often the teacher feels that he has spent enough time contacting parents through the formal conferences that may be arranged at open house and PTA. I do not think that these contacts are sufficient to establish the rapport necessary between parents and teachers to facilitate rearing covenant children. Perhaps teachers could reserve one afternoon or evening for each set of parents per semester. Whether this discussion of mutual concerns took one hour or three, our mutual concerns should be strong enough to warrant the effort. Think of the great feeling of unity and cooperation that could be fostered by such an exchange. Time spent in this pursuit could easily save as much and more time in the educational process. It certainly would eliminate any misunderstandings between the school and home, which in themselves can cause time consuming and emotion-draining losses. Teachers already devote unknown long hours to serve parents, but I believe that more can be done to promote an appreciation and understanding of these efforts. Nor would these conferences be one-sided; because, I

am sure that teachers would learn much from parents that would enable them to be more effective in the task of rearing covenant seed.

Teachers, I have observed, are more hesitant than parents to administer discipline to children in school. Just because they do not use some of the methods employed by parents does not mean that they are indeed not disciplining the children. By word and example they lead the child to learn his lessons and also to respect authority for God's sake...and all of this is included in the idea of discipline. We as parents must not limit teachers either as to the methods they may or may not use which they consider effective. We must give our support to the teacher as they rear our children at school because they stand in our place before our children. We may not criticize the teacher before the child any more than the teacher may criticize us before the child. If we or the teacher does this we undermine the covenant relation with the child. Rev. Engelsma gets to the point when he says, "For parents to connive at their children's disrespect for any teacher, much more to foster disrespect, is for parents to assist in making rebels whom God will cut off from the land and is for parents to cut their own throats (it is the parent's own authority - in the teacher - that they are undermining.) There may no more be disparagement of teachers in the presence of children than a disparagement of each other by parents." (*Perspectives*, Vol. I, No. 1, p. 7 & 8) Of course, the same admonition applies to teachers. Besides the awful results described, engaging in such activities even between adults is a clear violation of the ninth commandment and Matthew 18. For teachers to merit such confidence from parents who entrust their covenant seed to them, it is mandatory that our teachers be truly Protestant Reformed in confession and walk.

Practical Implications...For The Administrator

Any school with more than one teacher must have an administrator or member of the staff who acts in that capacity. The administrator heads the staff to help the teachers be more effective in their task of rearing covenant children. The administrator must be a teacher who is called by parents to do this. He really assumes the role of parent to all the children in the school for the sake of the parents. He and the parents are working toward the common goal of rearing the seed of the covenant and there must be complete harmony between them; and this must be fostered by all. He is the director of the staff of teachers and must coordinate the school to fit the needs of the students. He must organize the learning (rearing) process so that it truly benefits the children under his care. As leader, he is truly the head of the school. He administers the school (teachers and pupils) for the benefit of the parents. He is also an advisor to the board. He should suggest school policy which they must consider and decide upon regarding specific problems that may occur. He must advise them of the physical needs of the school such as supplies, aids, classrooms, etc. He may consult with them regarding problems that arise during the year and may ask for advice if he is unable to solve them. He should advise the board about state requirements or new developments in the field of education. He should be consulted regarding the hiring of new staff members or the replacement of present teachers. He is charged with the execution of policy decisions made by the board or the society. One very important function of the administrator is that he provides communication between the board and the teachers and between the teachers and the board. It follows then, that if he is to be an effective administrator, he must be present at board and society meetings. Our school boards err when they restrict the

administrator to only certain parts of their meetings because they fail to see that unity must exist between them and the school. Boards often think of themselves as being the school and have an exaggerated idea of their own importance. But nothing could be farther from the truth. The teachers are the school...called by the parents to rear their children. The board is called by the parents to help the teachers perform their task. Any time the board makes the teachers' task easier, they are helping; anytime they get between teachers and parents, they are being obstructive of the whole educational process. Too often boards think of teachers and their administrator in terms of "we and them" when they should be thinking in terms of "US". How sad when we see evidences of disunity in the educational process among us. I am bold to say that these are usually caused by boards that foster antagonism between themselves (in the name of parents) and the teachers who are truly the servants of the parents. And they do this in the name of parental education!

Boards who limit the participation of their administrator in their discussions are fostering disunity in the school. If they feel that he must be limited, they are really saying that they do not trust him. Yet, they have hired him to rear their children! Where are their values...in their own little duchy of authority...or in the Christian education of their children? The administrator should be an expert in the field of education and his advice would be of immeasurable value to the board in almost all of its decisions because their most important decisions involve policy which effects the school. Therefore boards do well to weigh heavily the advice they receive from their administrator and teachers. Remember, these people spend their lives standing in the place of parents before the seed of the covenant. By the way, any advice the board considers; whether it comes from parents, teachers

or experts...must be more than just an opinion; it must be well-grounded opinions. Boards must be careful that they do not vacillate with every wind that blows. A situation of perfect trust should exist between parents and teachers. A good board and a competent administrator can do much to promote this if they are all working for the common goal of the rearing of the covenant seed.

Practical Implications...For Students

As far as our students are concerned, they must assume the same attitude toward the school and its teachers that they have toward their parents. Students in our schools must accept the work of the teacher as if it were the word of their parents, which it really is. This means that what the teacher says is law and must be obeyed. This also implies great trust on the part of students for their teachers and this will be the case if it is promoted in their homes. It is only natural that students will question this relationship and try to rebel against teachers just as they sometimes do against their parents. A favorite tact of students is to pit teachers against parents and parents against teachers. I think most teachers are aware of these attempts by students to undermine authority and therefore are in a good position to recognize a situation early and put a stop to it. Communication with the parents of such students should rectify this situation before it becomes a big problem.

Students must remember that their teachers are working to serve them and their parents. Teachers are helping your parents to rear you to be children of God. Therefore students have the obligation to obey teachers for God's sake. You, also, have the calling to take advantage of every moment of training that is offered to you at school. What you learn at a covenantal school will profit you for time and eternity. All too often children take for granted the heritage which is theirs by birth into a

covenant home. But please be aware of the great sacrifices which your parents make willingly for your sakes. They not only provide you with a home and all material needs such as clothes and food, but much more important than that they are rearing you in the fear of the Lord. They love you as their own children, but also as children of the covenant. Therefore they are concerned for your spiritual welfare both at home and at school. They willingly contribute one to four thousand dollars per year to our schools to assure themselves that you, their children, are receiving a Christian education at the hands of carefully selected teachers whom they have chosen to stand in their place for hours each day. Think these thoughts each morning as school begins, think these thoughts during the school day when you may be tempted not to make good use of your time, and think these thoughts when you return home and thank God for such parents. At the same time thank God for your Christian teachers who have trained themselves to be competent in their field of teaching. They have all spent years of their lives at great personal sacrifice so that they might be ready for this great calling. Teachers also spend untold hours each day searching for effective means to instruct and rear you as covenant seed.

Summary

In one sentence, Christian education will be parental education if parents honor teachers as they honor themselves. This implies that teachers are also deeply aware of their position and the awesome responsibility which they bear toward parents. The real object of this intimate relationship and the loving care involved in it is the covenant child and ultimately the realization of the kingdom of God. Each person involved in the mysterious process of Christian education is a saved sinner, and an imperfect member of Christ's church, a fellow earthly saint. If

we can bear with each others weaknesses and faults, if we can counsel with one another when problems arise, if we can forgive each other for God's sake,...we will experience the blessing of God in our mutual calling to instruct covenant seed for God's sake. Then the teacher, as a mature Christian, faces each day with renewed enthusiasm for his God-given task. He received his high calling to teach as a result of his own rearing in a covenant home, Christian school, formal instruction, study of God's word, and worship with the church. He is a devoted servant of God by dedicating his life to serve parents and children of the covenant. This position of teacher is certainly as great as the position of parent and is more influential if for no other reason than that a teacher has the opportunity to rear many more children than any natural parent. Besides, teachers are trained for their jobs and prepare for each day to make themselves more effective; whereas most parents have little if any preparation for their task and learn only through experience.

We, as parents, must respect our teachers as servants of God. Not only just servants of God, but servants to us for God's sake. We must honor our teachers for their devotion to us and our children. We must take care of their needs and speak well of them to our children. We must hold open the lines of communication with them so that they know how we expect our children to be reared. If they have a problem with one of our children, we must help them solve it. If we disagree with the conduct of one of our teachers, we must tell him and also try to resolve it between him and us alone. We must never feel that we dare not approach our teachers because then we are denying parental education. If a teacher makes

himself hard to approach, talk to him anyway and point out that he must have an open ear and an understanding heart toward you and your child because he stands in your place so much of the day. We must not yield to the temptation to gather support from other parents or even other students for our 'gripe' because in so doing we are really admitting that our position is so weak that we need others to help us. Worse than that, we are reveling in the sin against the ninth commandment and are engaged in backbiting. Nor may we go to the board or even the principal... we must deal with the teacher who is standing in our place as a parent before our child in school.

The quotation which Rev. Engelsma made from Martin Luther at the conclusion of his article in the October *Perspectives* deserves repeating here. Luther says: "I will simply say briefly that a diligent and upright schoolmaster or teacher...can never be adequately rewarded or repaid with any amount of money, as even the heathen Aristotle says. Nevertheless, this work is as shamefully despised among us as if it amounted to nothing at all. And still we call ourselves Christians! If I could leave the preaching office...there is no other office I would rather have than that of schoolmaster...; for I know that next to that of preaching, this is the best, greatest, and most useful office there is. Indeed, I scarcely know which of the two is the better. For it is hard to make old dogs obedient and old rascals pious; yet that is the work at which the preacher must labor, and often in vain. Young saplings are more easily bent and trained, even though some may break in the process. It surely has to be one of the supreme virtues on earth faithfully to train other people's children..." (Luther's Works, Vol. 46, pp. 252,253)

"...let the educators, who stand in *loco parentis* and represent divine authority...teach the children to submit to every ordinance of man for the Lord's sake..."

L. Berkhof

WHAT GEOGRAPHY FOR THE COVENANT CHILD IS

by Beverly B. Hoekstra

Miss Beverly B. Hoekstra has contributed an article in her field of specialization. She is a graduate with a masters degree from Colorado State College, Greeley. She has previously taught at the Loveland Protestant Reformed Christian School and currently teaches at Northwest Iowa Prot. Ref. Chr. School in Doon Iowa.

Geography is a study of spacial patterns in creation, the Heavens and the Earth, the product of the hand of God, a work beheld as being very good in the eyes of the perfect, all-knowing, all-seeing Artificer. Although the excellency of that work has been marred by sin, the Heavens still declare the glory of God and His righteousness (Psalm 19:1 and 50:6), and the earth, His handiwork. We, who not only dwell on the Earth under the Heavens but who shall inherit the Earth, certainly desire a study of the spacial phenomena of our temporal home for ourselves and our children.

In geography we study arrangements and interrelationships of people and places and other entities, whether great or small. Considering arrangements of situation, the surface of the Earth as a whole could be studied for placement patterns, while on the other hand it may be the frequency of particular things on the Earth, such as silicon or aluminum, very common items, or it may be a rather rare item, such as diamonds. It could be general, such as the placement pattern of all people on Earth, then again, it could be a very specific placement pattern, such as the placement pattern of Protestant Reformed people. It could be the distribution of all ant hills, then again, it could be

the distribution of a very select group of ant hills, such as that of the fire ant. We could study comparatively the distribution pattern of *The Chicago Tribune* with the pattern of *The Doon Press*. It may be the pattern of place and density of cancer patients in 1975 in the United States. It could be the number of people eaten by bears in 1974 in Montana. These are examples of parts or components of the one plan of God in the Earth even though the involved individuals of concern may not be aware of this. In this apparent human chaos there is an order. Among them, there may be children of God, struggling.

Dealing with interrelationships, one example will do. Let us use the example of a Protestant Reformed man who makes a living by working in Factory X. On Sunday morning he will arise and array himself in cloak and ornaments that have come from many different locations, and if there is the possibility that his wife sews, the materials are likely to have come from a number of places. Again, if the wife should even spin her own thread, one can still consider the place or places where the cotton or wool came from, and in the case of a modern man-made fabric, what the components are and where they came from. Where was the cotton field? Who handled the cotton since? Where did the sheep or alpaca live? Just one place? Where? Many places? Where were these places? Back to the man. He ate breakfast. Where did his food come from? How many terminals did some items have to change routes to get to his house? Where were these terminals? Maybe his wife bakes. Where did the flour come

from? Where did the sugar come from? How? Who all were employed in the growing of the crop? the reaping? the refining? the shipping? This man also reads the Bible. What factory bound it? Where was it last translated? When was it last translated? He has a car. Where did it come from? Where did the materials come from? Who was employed in the making and shipping of it? This man goes to church. What route does he take? Is it always the same one? How far is it? How many turns does he make? How far does he go before he makes a turn? How about the roads he rides on? What were they made of? Where did those materials originate? Who made them? What kind of weather was it? Cold? Hot? What were the road conditions? Dry? Wet? Slippery? The man arrives at church. Where does he park? Where do all the people in church come from? What was the pattern of their journey-to-church? Who is the minister? Where is he from? Just one place? From many? What places were they? Does his background influence him? If so, How? Where are there other Protestant Reformed Churches? Church is over. Do all the people of this church take the same route back home again? Maybe our man goes visiting. Does this change his route? We will skip over to Monday morning. This man dresses himself in overalls with the intention of going to Factory X. Where did these clothes come from? We again could ask the same questions that we asked about his Sunday apparel and more, but we will not use more space. He goes to work. Does he use the car? Is it the same car? What direction is work? How far is it? Does he take the car all of the way, or does he use another means of transportation also? If so, what is it? How far? Why does he do this? How far does he have to walk in addition? Is this method of going to work the shortest? the fastest? the most entertaining? Is it the same everyday? He arrives at work. What

is the factory like? What do they make there? Where do the materials come from? Where does the finished product go? Is there a small or large distribution area? Where is this area? Where do the people come from who work here? Why do they work here? All possibilities were not sifted but would be similar anyway. However, we can conclude that the average man of 1976 is involved in many interrelationships and is the recipient of many items that have caused many other interactions or interrelationships.

If all the answers to the above questions were found, what would it all mean? Would we then become the recipients of many little tidbits of knowledge? Perhaps, but more than just that. There were several organizations and kinds of organizations involved in what may have appeared as a chaos of unrelated questions. We will mention a few of them for examples. First, there was the sequence of events that provided this man with the needs and luxuries that he had. God uses many means to give to His people their daily needs, such as food and clothing and the preaching of the Word, as well as much luxury in many cases. How can we ever thank Him sufficiently for them? We cannot, but He draws forth praise and thanksgiving to Himself to His Own Magnificent purpose. Second, there were the clothing, car, road, and church edifice, to mention a few. These are consolidated groupings of elements to make one new complete entity. Third, there was the person or group of persons who were authorized to employ people in the factory. God has prepared and uses this type of a place for many people to work to earn money for supporting themselves, supporting the church, and giving alms. Fourth, there was a systematized plan of roads of which the man used a select few. If we would think here of how everyone came to church, we might have another pattern, perhaps of a wagon

wheel, or maybe half of one, or maybe even three-quarters or one-quarter of one, or maybe even the outline of a tulip. Fifth, there was the instituted group of persons who made up the one whole congregation of the militant Church in that particular place of which each believing person would be a pilgrim being prepared for his everlasting home. Sixth, there was also the predictive aspect in the life of the man himself. He would possess not only an outward organization of life, but also an inward love for truth which is a spiritual organization of experiences and events, some of which will have overt connotations, such as the use of the Bible and the Church institute and edifice. Thus many intricacies have made up one complete whole in but a few scattered moments in the life of one individual. It would remind one of many stones fitted together to make one beautiful structure. In the light of all this, one can appreciate all the more the fact that the Apostle Paul described the household of God as "the building fitly framed together groweth unto an holy temple in the Lord. Ephesians 2:19, 21."

The covenant child must be brought to see that many patterns, with pattern within pattern, and organization within organization, of many items and means contribute to the life of one person. He must also be brought to know what the patterns and organizations are and how they interrelate. Then in a special way he must understand that the patterns sometimes contribute to the life of one child of God and that he may be one of them. Following that, he must understand that many children of God pass through this world with many similar experiences. In it God will refine them to make them fit objects for glory.

Geography is a subject that would appear in the curriculum of most schools that offer courses in the sciences and the humanities. It is usually given a place in the curriculum among the social sciences,

but sometimes it is given a name among the humanities. There are also those who ignore it altogether. Shame on them!

As a science, geography is studied in detail by using a particular method called the scientific method appropriate especially for the cumulation of select quantitative data. This means that a problem is stated, an attempt is made to solve the problem by searching out related facts through observation, appropriate interviews, reading related materials, and in some appropriate cases testing by using related constants and variables, and a conclusion is drawn. Finally, in the more mature studies, recommendations are prescribed to similar phenomena that might be in the process of locating if it be an entity resulting from the imprint of man on the scene of creation.

Since science is a matter of knowing, then, the best methods and the best sources of information must be searched out to find the answer for a particular problem. This means, then, that the open mind, the mind that is open to Scripture, for that after all is the only open mind contrary to popular thought, will in appropriate instances explore the infallible data recorded in Holy Writ first. This data cannot be fairly overthrown and need no human verification. God in all His wisdom does not give to man information that the latter need verify for truth. One example will suffice. There are so-called modern geologists, brothers and assistants to geographers, who wish to prove the age of the Earth by testing elements. The problem is that the workers lack the wisdom to go to the proper source at the proper time, and therefore, their methods can properly be called unscientific.

Science is to know, and in a sense we can know many things but only through the use of the proper tools at the proper time. In this way we portray the gift of wisdom that God has imparted to us. Who can be more scientific than those to whom

God has imparted the gift of wisdom to use His creatures in the right way? Let us pray for that wisdom and for the grace to always follow the way of wisdom.

The name of geography among the humanities dates back to its history in classical Greece, and certainly it is most important in the realm of human relations and interrelationships, and holds within itself connotations of real qualitative aesthetic values. Did not God Himself upon His completion of the universe behold the work of His hands as being very Good? Is it not the home of man, the highest creature, the king in creation? More importantly, for us, is it not the temporal home of His chosen, the redeemed of the earth? Do not all human relationships take place in the Earth under the Heavens? More importantly for us, was it not the temporal dwelling of The Chosen One, the Redeemer of His chosen and of the earth? Is it not the place where the world as chaff serves the Church, the wheat? To ask these questions is to answer them. The earth is also a mammoth source of art and beauty, the like which no creature can compare. It is the work of The Creator. So great is this Work of Art that man will spend millions of dollars yearly to behold this work, while many chosen are even able to see in part a part of the Work of Art.

It does not make much difference in

which division of learning we place geography. Since it would be more usual for a Christian science department to include an aesthetic view than for a Christian humanity department to be scientific, perhaps the science department might be the better place. However, for an adequate study, both the scientific and the human and aesthetic views are of primary importance and must properly be incorporated into one complete subject for the covenant child.

The earth, the world, the cosmos is an entity which exists closest to man physically, but which often has been ignored by man intellectually. May we not be named among them. We must know God in His work of creation. We must know God in His work of preservation, His preservation of things, and also His preservation of His Church. We must know God in His work of redemption. It will better help us to look forward to the Advent of Recreation when there will be no more contamination and unrighteousness under Heaven.

The teaching of geography, then, is mandatory at all academic levels. It is expedient that the covenant young person in his pilgrimage to his everlasting Home be better equipped to better know God and the ways of God in Creation. Who can better know God than those to whom the riches of His heritage are bestowed?

P O T P O U R R I

“What Do We Gotta Learn This For?”

by Mr. Peter Vander Schaaf

Mr. Peter Vander Schaff is a former student in the Protestant Reformed Christian Schools and now teaches in the

junior high grades of the Hope Protestant Reformed Christian School. He graduated in 1974 from Calvin College. His

contribution was previously published in the Hope P.R.C. School HIGHLIGHTS.

The question above is heard often by the teacher as he tries to explain Newton's laws of matter, causes of World War II, the main theme of a poem, or the intricacies of English grammar. As often as not the student who asks the question already had an answer for it. He thinks, if he does not say, that if the subject matter is not "practical", then it is no good at all. Whatever the student's attitude, however, the question is a good question, and deserves a good answer. I have heard the question in every class that I teach except Bible. For that reason I will give a short explanation for Christian liberal arts education in general rather than for any one subject in particular.

The purpose of Christian liberal arts education is not to train the child of God for any specific calling. Instead, it is to equip him with knowledge - knowledge of creation itself and of what goes on in God's creation - with which he can work out his salvation with fear and trembling in whatever calling God gives him. Christian liberal arts education equips the child of God with knowledge with which he can live wisely, that is, according to the Word of God. It does this both in a negative and a positive way. It strengthens the Christian against the ties that are so prevalent in the world around us, ties such as the theory of evolution and the belief that man progresses up as he builds that man progresses up as he builds civilization. On the other hand it helps the Christian to profess God's truth as it applies to all areas of life, and it helps him to see God's hand in all things as God upholds all things by His power and guides them to the revelation of His glory.

I will use the study of the body - biology - as an example. It is "known" by the ungodly world that man evolved from lower forms of life. It is also "known" that man is, therefore, nothing more than an intelligent animal governed only by the

chemical reactions that go on within him. In accordance with this false knowledge man devises plans to control and "improve" human behavior by means of chemicals and by actually changing the operation of the brain. In addition to this man seeks to control human population levels in the same way that he controls the population of dogs. Having the wisdom of Scripture, the child of God knows that man was made by God a moral, rational being, and given to bear the image of God. In the study of biology the child of God learns how the brain, the nervous system, and the body structure itself enable man to be rational, moral, and, as man did at creation, to bear the image of God. Possessing this knowledge the child of God is strengthened against worldly distortions of science and gives a clearer witness against them. He seeks with deeper conviction to be controlled and "improved" (to use the world's term) only by the Word of God and the Holy Spirit. In faith, he carries on the biological renewal of Christ's church on this earth. To the extent that covenant youth have an understanding of biology that is in accordance with and based on Scriptural truths concerning the nature of man, to that extent will they have a strong, clear defense against science, falsely so called. Also, they will be able to say with deeper knowledge and greater appreciation, "I am fearfully and wonderfully made."

It is not the calling of the child of God to avoid knowledge. It is his calling to seek knowledge to the extent that he is able, and to apply this knowledge to his walk in accordance with Scripture. It may be that knowledge is not always directly related to one's job; but it is always related to and "usable" in the antithetical life of the Christian. It is useful to the mind that sees God's hand in all things and praises Him for his power and great glory. The value of Christian liberal arts education is that it imparts knowledge to this end.

SLOW LEARNER

The poem "Slow Learner" was contributed by Sue Terpstra Looyenga, a former student in the Prot. Ref'd. Chr. Schools. Sue wrote this poem as an expression of her feelings for a child whom she was tutoring. Sue writes: "Never have I witnessed such patient diligence in a child who must struggle daily to make a hardly passable grade." Sue graduated from Covenant C.H.S. in 1972. She has attended Grand Valley State College and has attended banking school. She is the wife of David Looyenga.

You sit beside me, and your pen is poised.
Your face, a study in determination,
Turns to me, searching for an answer.
And I, -- I am amazed at this young determination.

Time and again you have known failure,
And tried once more, and failed again.
And still you will not bury that small talent.
I marvel at your will to try again.

You count your gains, content, in inches,
While others count them mile by mile.
And how you beam upon "just passing",
And winning Teacher's special smile.

How many times in anger you could find me,
Disturbed that I again had failed to make
A big success of some small undertaking.
Oh, what a lesson I from you could take!

Would that I had your faith and patience
That discontent could not within me rise!
But, child, I am the slowest learner
When it comes to being wise.

-Sue Looyenga

THE INTERMEDIATE TEACHER AND ASTRONOMY

by Roland Petersen

This essay was presented as a speech by Mr. Roland Petersen at one of the sectionals of the annual convention sponsored by the P.R.T.I. in October, 1975. Mr. Petersen serves as principal at Covenant Christian High School and teaches an Earth-Space Science course.

This is not intended to be an "apologia" for the teaching of astronomy at intermediate level. This could easily be the subject of another paper at a later date. Let it suffice to say that the writer considers that astronomy should and must be taught in the intermediate grades and that the objective of the teacher is that the students gain mastery of a certain mass of material.

The main difficulty in science instruction today is not paucity of material. Texts, numerous high-interest books, and easy-to-use equipment are readily available. If there is a problem, and I believe there is, the problem is teacher preparation. Most of us, even those who have majored or minored in the sciences, have never had the opportunity to take a formal course in astronomy or teaching astronomy. At best (or worst!) most intermediate teachers have studied astronomy only as a short unit in a watered-down physical science course, a course that is required by many colleges of "non-science majors." In the remainder of this paper I would like to suggest and briefly comment upon the content of a minimum course which we shall entitle "Astronomy for the Intermediate Teacher."

Before we begin to develop this course of study let's emphasize once again that science below junior high school level

should stress observation and identification rather than theory. The formal study of matter, mass, energy, atoms, molecules, elements, weight, gravitation, inertia, the kinetic theory, motion, and so forth can well wait until the seventh or eighth grades. By the time the student enters junior high school, however, the bright stars and well-known asterisms, several planets, the sun and the moon, and certain "deep-sky" objects should be old friends, friends to be called by name. Polaris, Vega, Arcturus, Cygnus, Orion, Betelgeuse, Alcor-Mizar, Luna, Sol, M-13, M-31, The Pleiades, the Milky Way, the Great Square, the Summer Triangle, the Keystone, the Northern Crown... are but a sampling of the riches of the celestial sphere, one of the pages of that "most elegant book" of God's universe. The student also should have made the acquaintance of the more common trees and shrubs, wild and garden flowers, birds, insects, fishes, and mammals, both wild and domestic - to name a few. It is a sad commentary upon education that, of all those who graduate from high school or college, only a small handful learn to read and enjoy the magnificent pages of God's "Book of Creation."

I am reminded of my father, and others like him, who, with only an eighth-grade or lesser education, put me and most of us to shame. As, in his old age, he walks the fields and woods of his native Michigan, he reads the book with profound enjoyment, calling things animate and inanimate by their names - often by their Latin names! To this day a walk with my father through the fields and woods of his small farm ranks as one of

life's greatest pleasures. Geology, botany, zoology, astronomy, meteorology, ecology, chemistry, and other disciplines of science are formally unknown yet practically well-known. A lifetime of observation has given an understanding of nature which is without doubt one of my father's most-prized and most-enjoyed earthly possessions.

Now, then, back to the course of study for teachers of astronomy in the intermediate grades. To begin with, the teachers should be familiar with two cosmologies. The first, of course, is the present system based upon the work of Copernicus, Galileo, Kepler, Newton, and others, as confirmed, expanded, and modified by astronomers up to the present day. We will return to this cosmology presently.

The second cosmology had its roots in ancient Greece, grew to maturity in Egypt, and flowered in Europe. It was transplanted in Rome where it grew vigorously and soon became part of the thick forest of dogma that was both the glory and the shame of the medieval Church.

We begin with this second and scientifically discredited cosmology not only because it is a major part of the history of astronomy, but we **must** study it because without it one cannot understand medieval science, medieval theology, or medieval literature! The late C.S. Lewis in his excellent little book, **The Discarded Image, an Introduction to Medieval and Renaissance Literature**, mentions three works which he calls "perfect examples" of medieval thought. They are as follows: Aquinas' **Summa Theologica**, Dante's **Commedia Divina**, and the **medieval cosmological model**. Lewis' book, although intended for the serious student of literature, is required reading for our course! Let's listen to Lewis on one of his favorite topics, the "discarded image," medieval thought and medieval cosmology.

At his most characteristic, medieval man was not a dreamer nor a wanderer. He was an organizer, a codifier, a builder of systems. He wanted a 'place for everything and everything in the right place'. Distinction, definition, tabulation were his delight. Though full of turbulent activities, he was equally full of the impulse to formalize them. War was (in intention) formalized by the art of heraldry and the rules of chivalry; sexual passion (in intention) by an elaborate code of love. Highly original and soaring philosophical speculation squeezes itself into a rigid dialectical pattern copied from Aristotle. Studies like Law and Moral Theology, which demand the ordering of very diverse particulars, especially flourish. Every way in which a poet can write (including some in which he had better not) is classified in the Arts of Rhetoric. There was nothing which medieval people liked better, or did better, than sorting out and tidying up. Of all our modern inventions I suspect that they would most have admired the card index.¹

This impulse is equally at work in what seem to us their silliest pedantries and in their most sublime achievements. In the latter we see the tranquil, indefatigable, exultant energy of passionately systematic minds bringing huge masses of heterogeneous material into unity. The perfect examples are the **Summa** of Aquinas and Dante's **Divine Comedy**; as unified and ordered as the Parthenon or the Oedipus Rex, as crowded and varied as a London terminus on a bank holiday.

But there is a third work which we can, I think, set beside these two. This is the medieval synthesis itself, the whole organization of their theology, science, and history into a single complex, harmonious mental Model of the Universe. The building of this Model is conditioned by two factors I have already mentioned: the essentially bookish character of their culture, and their intense love of system.²

In speaking of the perfected model as a work to be set beside the **Summa** and the **Comedy**, I meant that it is capable of giving a similar satisfaction to the mind, and for the same reasons. Like them it is vast in scale, but limited and intelligible. Its sublimity is not the sort that depends on anything vague or obscure. It is, ... a classical rather than a Gothic sublimity. Its contents, however rich and various, are in harmony. We see how everything links up

with everything else; at one, not in flat equality, but in a hierarchical ladder. It might be supposed that this beauty of the Model was apparent chiefly to us who, no longer accepting it as true, are free to regard it--or reduced to accepting it--as if it were a work of art. But I believe this is not so. I think there is abundant evidence that it gave profound satisfaction while it was still believed in. I hope to persuade the reader not only that this Model of the Universe is a supreme medieval work of art but that it is in a sense the central work, that in which most particular works were embedded, to which they constantly referred, from which they drew a great deal of their strength.³

Now what was this Model of which Lewis writes really like? To answer would require volumes and the study of a lifetime. There were almost as many variations upon certain basic themes as there were astronomers, theologians, and philosophers. But there were basic themes. The Model was geocentric. The Model stressed perfection of shape and motion. The Model was hierarchical. A spirit world of angels and archangels, the Devil and demons, of "Intelligences" was an integral part of the Model. Man and the Earth stood at the center of the universe but at the bottom of the celestial hierarchy.

And if the reader will suspend his disbelief and exercise his imagination upon it even for a few minutes, I think he will become aware of the vast re-adjustment involved in a perceptive reading of the old poets. He will find his whole attitude to the universe inverted. In modern, that is, evolutionary, thought Man stands at the top of a stair whose foot is lost in obscurity; in this, he stands at the bottom of a stair whose top is invisible with light.⁴

The cosmology of the medievals was that of Claudius Ptolemy. It had been altered and bent in many efforts to conform it to observed data, but it had survived, largely intact until the day of Johannes Kepler. Here is Lewis' description of the classic geocentric universe.

The central (and spherical) Earth is surrounded by a series of hollow and transparent globes, one above the other,

and each of course larger than the one below. These are the 'spheres', 'heavens', or (sometimes) 'elements'. Fixed in each of the first seven spheres is one luminous body. Starting from Earth, the order is the Moon, Mercury, Venus, the Sun, Mars, Jupiter, and Saturn; the 'seven planets'. Beyond the sphere of Saturn is the **Stellatum**, to which belong all those stars that we call 'fixed' because their positions relative to one another are, unlike those of the planets, invariable. Beyond the **Stellatum** there is a sphere called the First Moveable or **Primum Mobile**. This, since it carries no luminous body, gives no evidence of itself to our senses; its existence was inferred to account for the motions of all the others.

And beyond the **Primum Mobile** what? The answer to this unavoidable question had been given, in its first form, by Aristotle. 'Outside the heaven there is neither place nor void nor time. Hence whatever is there is of such a kind as not to occupy space, not does time affect it.' The timidity, the hushed voice, is characteristic of the best Paganism. Adopted into Christianity, the doctrine speaks loud and jubilant. What is in one sense 'outside the heaven' is now, in another sense, 'the very Heaven', *caelum ipsum*, and full of God as Bernardus says. So when Dante passes that last frontier he is told, 'We have got outside the largest corporeal thing (del maggior corpo) into that Heaven which is pure light, intellectual light, full of love' (*Paradiso* XXX, 38).⁵

The Model was a satisfying sort of universe. The common man, standing in the darkness, could observe a meteor's passage and feel certain that he had witnessed the fall of some celestial being who, like Satan, had been cast out of Heaven. The stars could easily be identified with the Heavenly Host. The "music of the spheres" was not a figment of the poetic imagination. It was a real celestial harmony, although spoiled, as Milton points out, by the loss of the bass through the fall of man and the curse. Read the "Nativity Ode." Read a portion of the **Comedy** and, while reading, try to put yourself back on that central Earth surrounded by crystal spheres, each of which is inhabited by celestial creatures,

all singing the praises of God. Finally, one last comment concerning Lewis and his obvious love for the "Discarded Image." The *Narnia* books and the fiction trilogy of Lewis contain numerous references to the medieval Model. How many can you find?

The first cosmology mentioned is that of the present. To me, this one isn't half as much fun. It has none of the obvious orderliness of old systems. The spiritual world, angels, demons, Intelligences, has no place in this system. There is no obvious perfection of shape and motion. Everything is in motion, but those who seem to know tell us that the whole business is running down! The only real advantage that the present system enjoys over the old is that the present seems - especially as far as the Solar System is concerned - to be true while the old is obviously false.

Well then, if we must discard uniform circular motion, perfect sphericity, crystal spheres, celestial harmony, the Heavenly Host, and all the beautiful yet erroneous bases of the medieval Model, what can we substitute as a basis or bases for a modern cosmology? Perhaps the best starting point is the idea of "orbiting bodies" as this includes a number of fundamental ideas.

Johannes Kepler (b. 1571), an eccentric genius of the early seventeenth century, derived three "laws" from his analysis of the positional data of Mars, data that had been painstakingly compiled by his even more eccentric mentor, Tycho Brahe (the man with the golden nose). These three "laws," although without formal mathematical basis at the time, finally sounded the death knell of the Model and all geocentric systems. One must not suppose that the scientific, theological, and philosophical communities received Kepler's work with open arms. Heliocentricity, although it had been around for two-thousand years or more simply was not an easy pill to swallow!

Luther, in one of his Table Talks, had in his usual blunt way given his opinion of the 'new astrologus' who would prove that the earth moves. 'The fool will upset the whole science of astronomy, but as the Holy Scripture shows, it was the sun and not the earth which Joshua ordered to stand still.'... Already two years before the publication of the book of Copernicus, Melancthon wrote to a correspondent that wise rulers ought to coerce such unbridled license of mind. And in his *Initia Doctrinae Physicae*, published in 1549, he goes fully into the matter in a chapter headed: 'Quis est motus mundi?' First he appeals to the testimony of our senses. Then he serves up the passages of the Old Testament in which the earth is spoken of as resting or the sun as moving. Finally he tries his hand at 'physical arguments,' of which the following is a specimen: 'When a circle revolves the center remains unmoved; but the earth is the center of the world, therefore it is unmoved.'⁶

A beautiful proof...

The writer obviously is not sympathetic to a Christian point of view. Nevertheless, the arguments are typical of the sixteenth century mind. He wrote, a generation before Kepler, against Copernicus, but the same reasoning was directed against Kepler and his cosmology.

What are Kepler's three "laws?" (Remember, the teacher must know them!) Briefly and as simply as possible they are as follows:

1. The planets, including the Earth, move around the Sun in elliptical paths. The Sun is at one focus of the ellipse.
2. The radius vector (line connecting the Sun and the planet) sweeps equal areas in equal times.
3. The squares of the periods of any two planets are proportional to the cubes of their mean distances from the Sun.

This new model was still incomplete. Although Kepler had accurately described the planetary motions and had re-introduced order into God's cosmos (an order far more profound but far less poetic than the old), he could not answer a

number of fundamental questions. He had told us "what"; the "why" remained unanswered. Why does planetary motion continue, apparently unchanged, over long periods of time? Why is the velocity of the planets not constant? What keeps the planets in their appointed paths?

It remained for Isaac Newton, who possessed one of the keenest minds of all history, to finish the work. His "laws of motion" and his "law of universal gravitation" tied together the remaining loose ends, except for a few special cases best left to Dr. Einstein, and started a new era in astronomy. Newton's "laws," and you should know these, too, are as follows:

1. Every body remains in a state of rest or uniform motion unless acted upon by an outside force.
2. Acceleration is directly proportional to the force in the direction of the straight line in which the force acts.
3. For every action there is an equal and opposite reaction...
4. Gravitation. Every particle in the universe attracts other particles with a force that varies directly as the product of their masses and inversely as the square of the distance.

Before we leave Newton, it should be said that his work with the calculus and the reflecting telescope are but a few of the things for which he is remembered!

Instead of examining the new model from the Earth outward, let's use the reverse technique and begin with the largest known celestial objects and work back down to the Earth. These largest known objects are the clusters of galaxies that seem to extend endlessly into the vastness of space. The billions of stars that constitute a single galaxy all orbit - following Kepler's three "laws" as refined by Newton - slowly around the galactic center. Globular clusters, satellites of the galaxy, each containing as many as a hundred-thousand (or more!) stars bound together by mutual gravita-

tional attraction, also swing around that center of mass in the galactic nucleus. Scattered throughout the galaxy, but particularly in the spiral arms, smaller open clusters of hundreds of stars are found. The best known open cluster is the Pleiades. Joining them in the orbital motion of the galaxy are multiple star systems. These celestial whirligigs, binary and larger systems, also revolve around their common center of mass. Then, there are stars with a planet or planets, stars like our sun with its nine known planets and its collection of those cosmic ice cream cones called comets. Here and there throughout the galaxy are immense clouds of gas and dust, some of them visible to the unaided eye, the nebulae which glow in the light of nearby stars or which glow redly in the light that characterizes the excited hydrogen atom.

So here we stand on a smallish satellite orbiting a rather ordinary yellow star (The astronomer would say, "type G star.") and look outward into the almost unthinkable immensity of the cosmos. The star around which we make our yearly orbit - elliptical, of course - is located well out in one of the spiral arms of a rather ordinary galaxy which in turn is one of an association of galaxies. This group of galaxies includes the Magellanic Clouds and the great spiral in Andromeda. Where the greater associations of galaxies lead us, no one knows!

The center of the universe, then, is unknown and probably unknowable. Yet in a very real sense, and this must be imparted to your students, man does stand at the center of the Cosmos. This ordinary, smallish planet is unique in that it is the home of man. On it God calls His People out of a fallen race. It is on this planet that the sovereign Creator calls the Church of Christ to His service that His name may be glorified. God has given us the Earth and the Cosmos to use to His glory. But this is a matter for yet another paper...

Finally, it is necessary that the teacher become familiar with the night sky. This requires repeated observation. One can work alone, but viewing with an experienced observer is best. No apparatus is necessary although a pair of low-power binoculars is helpful. (7 X 35 or 7 X 50 binoculars are best. Higher powers are difficult to hold still without a tripod.)

You will need a good star map, a map of the type that shows the heavens as they appear during the evenings of a particular month. The best of these, in my opinion, are those found in the magazine *Sky and Telescope*. Printed white on dark blue, they are easy on the eyes. Simple enough for beginners, they contain sufficient detail to satisfy even experienced observers. *Astronomy* and *Natural History* magazines also publish monthly maps, but I find them somewhat inferior to the above.

Begin your observations with the stars near the north celestial pole. Then, having learned the circumpolar constellations, move southward. A few evenings should suffice to familiarize you with the basics. Where you go from there is up to you.

When I heard the learn'd astronomer,
When the proofs, the figures, were ranged
columns before me,
When I was shown the charts and diagrams,
to add, divide, and measure them,
When I sitting heard the astronomer where
he lectured with much applause in the
lecture room,
How soon unaccountable I became tired and
sick
Till rising and gliding out I wander'd off by
myself,
In the mystical moist night-air, and from
time to time
Look'd up in perfect silence at the stars.⁷

1 Lewis, C.S., *The Discarded Image, An Introduction to Medieval and Renaissance Literature*; Cambridge University Press, 1964; p. 10

2 *Ibid*, p. 10-11

3 *Ibid*, p. 12

4 *Ibid*, p. 74-75

5 *Ibid*, p. 96-97

6 Dreyer, J.L.E., *A History of Astronomy From Thales to Kepler*, Dover Publications, 1953, p. 352,353

7 Whitman, Walt, *Leaves of Grass*; J.M. Dent and Sons, 1947

THE BICENTENNIAL YEAR

by Mr. Fred Hanko

Mr. Fred Hanko teaches in the junior high school of Hope Protestant Reformed Christian School. He serves as assistant principal and writes a weekly essay on the "Wednesday note" to the parents of Hope school. The following essay served as the initial contribution of 1976, the U.S.A.'s Bicentennial Year.

I know that I really don't have to remind you that this is the beginning of the Bicentennial Year. In fact, I suspect that already with the year just beginning you would prefer not to be reminded. For months now we have been bludgeoned

with that information by means of coins, books, advertising, and all sorts of means. It is not my purpose to add to the clamor. I just want to make a few observations that may help to retain a proper perspective and to point out some direction for Christian parents and teachers during this year.

In the first place, we are going to have to work hard to counteract the great barrage of propaganda that is already beating upon us. The Declaration of Independence, which is the focus of this year's celebration, was an act of rebellion supported by ideas that are contrary to the

teaching of Scripture. We will have to be careful to avoid the blind adulation of the "founding fathers" that is so much a part of the celebration.

If we use our Christian perspective to analyze and criticize, we have an excellent opportunity this year to increase our knowledge and understanding of the history of our country. It will be easy to arouse interest in our history. There will be available throughout this year many new and excellent materials that we and our children will be able to use. If we use these materials wisely, we will gain greater insight into the things that God has done in our land.

Now is a splendid time to remind ourselves and our children of the great benefits that God has given us in this country. We have the great privilege that we may worship God without interference from our government. God has given us the opportunity and the prosperity so that here we can maintain schools to bring up our children in the way that God has commanded us. We have the means and the freedom to witness in this land and to preach the Gospel of Christ to those outside of our churches. Let us appreciate

these benefits with gratitude to God and resolve to use these benefits with all our might.

While we focus upon our country and our government, we will have many opportunities to teach our children about their responsibilities and obligations. While many today mock those who rule, we must increase our efforts to teach our children respect for those who are in authority because they have been placed there by God. While obedience to authority steadily declines, we must insist upon strict obedience to those in authority for God's sake. We must emphasize by teaching and example the obligation we have from God to use the resources of this rich land as faithful stewards.

All of this is training in citizenship for those who are also citizens of the kingdom of Heaven. In fulfilling our duties here we will "seek a better country, that is, a heavenly". This bicentennial year gives us many opportunities to teach these things in our homes and in our school. Let's not be drowned in propaganda or carried away with false emotions, but let's use these opportunities for Christian training.

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