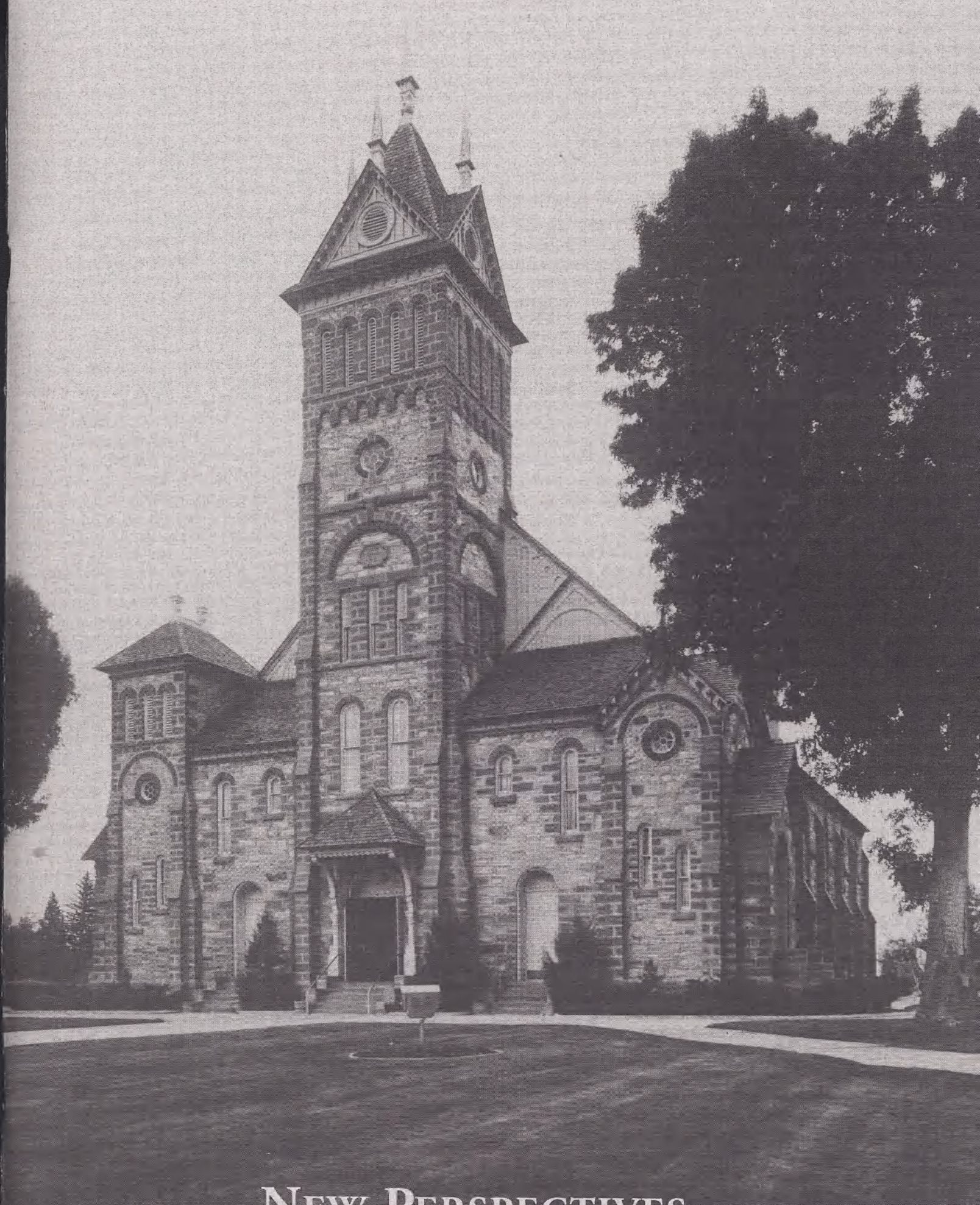


NEW PERSPECTIVES

Spring Semester Vol. 13, # 1 April, 1996

Editorial

I was startled one morning listening to the news to realize what I was hearing: One journalist interviewing another journalist as an expert in international relations. As several recent books and articles indicate--because some journalists have become celebrities, they have also assumed the role of experts. For example, newcasts now often contain only brief first hand statements by presidential candidates followed by lengthy explanations and interpretations given by journalist "experts".

Explanation and interpretation have a place. That place is after we've read or heard the primary sources for ourselves.

Even those qualified as experts because of extensive education or experience will usually admit how little they know and how much remains to be discovered. I am always unsettled by how benignly and naively voters, citizens and juries accept the word of experts. And only the rarest of students asks questions of textbooks or teachers. Even if they sense something is wrong or see contradictions, they let it pass.

We need to be primary source listeners and readers. We ought never to depend totally on the interpretation of others. Not even the experts! And we need to teach our students to do the same.

Randall D. Miller
Book Review Editor

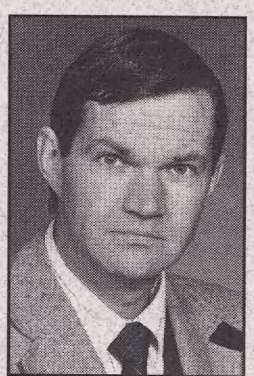
Policy Statement

New Perspectives is published semi-annually by Ricks College. It welcomes research articles, reports of significant activities, essays, poetry, short stories, book reviews, art, photography, and other work of an academic or artistic nature.

Research articles should be submitted using textual citation in parentheses giving author, date and/or page rather than footnotes or endnotes. If large numbers of footnotes are used (over fifty), or there are several information footnotes, then endnotes or footnotes are acceptable. A Works Cited page should be included. Whenever possible, submission of a hard copy and computer diskette using Word Perfect format and 3.5 inch diskette is requested. Submit manuscripts to any one of the editors.

Opinions expressed are those of the individual authors and are not necessarily shared by the editorial board, by Ricks College, or by The Church of Jesus Christ of Latter-day Saints.

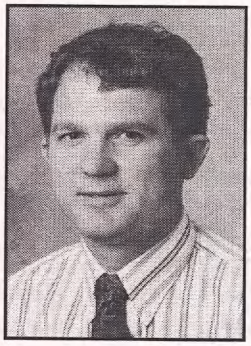
Mailing Address:
New Perspectives
Ricks College
Rexburg, Idaho 83460-0895



Cover:
Photography by Gary B. Pearson
Front cover - Paris, Idaho Tabernacle
Back cover - Heber Tabernacle

Table of Contents

Letters to Editor



by
Stephen Ott
Chemistry Department

Dear Editors,

I would like to thank those who dedicate their time to publish the *New Perspectives* magazine. My personal interest lies mainly in the doctrinal and historical articles that are included, and I have seen many excellent ones.

I also want to make the editors and readers aware that *New Perspectives* is now referenced by other periodicals. *BYU Studies* compiles a yearly bibliography of articles that are of particular interest to the LDS community. *BYU Studies* has recently added *New Perspectives* to its list of regularly reviewed periodicals. The most recent bibliography (for 1994) was published in Volume 35, Number 2 of *BYU Studies* and includes at least 15 references from New Perspectives.

I know that many researchers have found the yearly bibliography in *BYU Studies* an excellent resource for quality articles on LDS issues, and I am pleased to see that it now directs people to *New Perspectives* as an additional resource.

Sincerely,
Steve Ott

by
Thomas Liau
Library Director

Dear Editors,

I have enjoyed and appreciated Jeff Anderson's article, "Islam and the West: Bases of Cultural Conflict," in the December 1995 issue of *New Perspectives.*

I am in accordance with Jeff's assertion that there is no superiority in any culture. The author cautions us about the danger of our ignorance toward other cultures. If all peoples from different parts of the world would learn more about themselves, many misunderstandings, conflicts, or even wars could be avoided. A case in point, before coming to the U.S., I always thought that Chinese were the most hard-working people in the world. It is not so. Having lived in this country for 29 years, I have come to realize that Americans are just as industrious and hard-working as peoples in other parts of the world.

I want to thank Jeff for his insight and his reminding us that we ought to respect and understand different cultures.

Sincerely,
Tom Liau

What is Right with America

by
Gary L. Marshall
History Department
Academic Lecture given at
Ricks College November 9, 1995

I appreciate the opportunity to talk about the things that are "Right with America." May I share, to begin with, a quote by President Hinckley that has become a favorite for me. President Hinckley recently said the following during an interview conducted in Nauvoo: "I see so many good people everywhere - and there is so much good in them. And the world is good. Wonderful things are happening in this world. This is the greatest age in the history of the earth. We have every reason to be optimistic in this world. You can't, you don't, build out of pessimism or cynicism. You look with optimism, work with faith, and things happen" (Elder Jeffrey R. Holland, "Stalwart and Brave He Stands: President Gordon B. Hinckley," Ensign [June 1995], p. 4.). There is in that statement a wonderful, refreshing spirit of optimism and hope.

I also wish to share two short experiences I have had in the past few weeks. A week ago I received a note from one of my students. It was a positive note, and I appreciated the kind comments. But the student said something that caught me a little off guard and at length concerned me. This student said that my optimism was appreciated, but that some of the students in my American Heritage class saw the optimism as corny. Well, I lost a little sleep the next night wondering about that. I am not sure what the students actually meant by the comment. They may just have been talking about the way I teach - my mannerisms, etc. But I began to wonder - Is it perceived as corny, even among our Ricks College youth, to be optimistic and emphasize the positive? Can we never be given a glimpse of the positive without wondering whether or not it is a myth? Have we been fed such a diet of bad things that discussions of good things feel uncomfortable and seem corny? Have we come so far in devouring the negative that good things seem like falsehoods and the bad things are the only truths we will accept? Those questions do worry me a bit.

Now, another experience. A student, who came to my office recently, said her sister was at BYU and had been given an essay assignment on the Constitution. After hearing the question, I offered some suggestions about looking first at some of the basic principles contained in the Constitution. It seemed like the logical thing to do to answer the question that had been posed. But this student interrupted me and said that her sister did not want to hear any of this stuff about the Founding Fathers and their original principles. I have to admit that that experience caused me some concern, too. Have our church youth also accepted the idea that what our Founding Fathers did was of no great consequence and remains of little significance for our nation today?

There is no question about it — we are bombarded with all of the things that are wrong with our nation and its people. The news is full of it, our textbooks are full of it, our discussions focus on it. Sometimes we wonder if there is anything good left in our nation and in the world to talk about. I have even felt that way sometimes. It is interesting how our thoughts and our hearts are influenced to view things from a particular perspective. To be positive has been a particular challenge to me. I have felt at times in my life that to emphasize the positive was a bit naive and anti-intellectual. I think my own college education made me feel a little like that. And when I first started to teach high school, I also thought it the right thing to do to air the nation's dirty laundry in the name of truth and scholarship. And even today, it seems that if you talk about what is good, it is assumed that you do not understand or know those things about our history that are bad, or that you are too stupid or ignorant to see them. Or it is assumed that you distort history and perpetuate myths when you choose not to emphasize those problems or make them the focus of every discussion. Or it is assumed that you are callus and lack compassion because you do not to recognize the poverty and suffering of some of our own people.

I do not choose to emphasize the positive today because I am callus or uncaring. I know that we have serious problems and that our history is full of bigotries, inconsistencies, contradictions, injustices, and hypocrisies; and I can rattle them off just as fast as the next guy. But I also know that America cannot long keep its sense of perspective if we are fed a constant diet of the negative, if we are told nothing but the inconsistencies and faults of our history. They are, no doubt, very real things. They have existed and do exist today. *But our good side is just as real and every bit as true.* Those who choose to ignore the good side of our history and the strength of our heritage are just as guilty of distorting history as any who choose to talk about the good things. And, perhaps, the choice to emphasize the negative is far more dangerous and destructive in the long run. To emphasize only the dark side of our character and grovel in the misery of our mistakes and constantly remind ourselves of our injustices and wrongdoings can only result in driving wedges and creating divisions. A balanced diet of the good with the bad could help us improve by reminding us of the sound and true principles which are at the heart of our political and economic systems, as well as reminding us or our departures from them. But I am afraid that in today's educational climate, the "politically correct" thing to do is to emphasize the negative and ignore the positive.

Now, with those introductions said, let me proceed with my discussion of "What is Right with America." This summer, just after I returned from traveling across America with a group of Ricks College students, I woke up in the middle of the night and could not go back to sleep. I got up and wrote the following paragraph which I would like to share with you.

> This nation is a great and benevolent land. Despite the weaknesses and the raw ambitions of some of its leaders, despite its sometimes moral inconsistencies and pride, it has stood as an unparalleled example of benevolence, decency, and compassion in an unstable and war-weary world, a world filled with tyrants and despots of all varieties

and masses of people compelled to follow or too oppressed to care. Somehow, there is an undeniable and unmistakable goodness in this land. Its people have loved freedom and liberty and preached the same in the midst of their inconsistencies and prejudices. Our people and our institutions, our philosophies and our moral commitments have been a light unto the world. They have been part of a deep commitment to law and order, to constitutions and fundamental documents, to rule of law and natural law, to natural rights and human rights, to justice and fairness, and to equality and republican virtue unmatched in the history of the world. It is indeed the singular goodness of our constitutional principles and the collective goodness of this people that have made the nation good. If we dwell on the inconsistencies and contradictions of our history, if we dwell on our little tyrants and our individual departures from virtue, we will miss the grandness of that history.

I recognize that we should not close our eyes and refuse to understand our past and present problems, by I do believe that we should look often at the good we have done and are doing in our nation and in the world. And certainly, as members of this church, we must keep some perspective on the Lord's purposes for this nation. I don't think the mission of the church could proceed at its present pace without the strength and moral stature of this land and its people.

The greatest thing that is Right with America is simply this — *we are free! Yes, indeed we are free!* Perhaps we are the freest people on the face of the earth. The spirit of freedom and liberty permeates our hearts and our minds. It is indeed the source of our happiness and the well spring of much of our joy in this life. We can roam the length and breadth of this land without fear. We go without papers or passports. Our freedom consumes all that we do. Millions of individual citizens make millions of individual decisions about their lives each day. Perhaps we take it for granted. Perhaps it has become second nature to us. But that is the beauty of it. It is simply part of us. I'm grateful to live in a nation where we still accept the burden of our freedom; where we agonize over our faults and spend countless hours discussing solutions in our cafes and our doughnut shops and our beauty parlors. What a marvelous thing freedom does to people. It unlocks a certain genius and determination in the people. It raises and elevates, it lifts and edifies. It is extraordinarily good for the human soul.

The strength of our character is also something that is right with America. There is something different about the common American. There is a deep sense of fairness and justice is us. We want, with all of our hearts, an atmosphere of equality and opportunity. There is compassion and decency in us. There is a sense of mission and purpose in us. Despite all of the hype and the rhetoric of the popular media, there is much that is good in the American character — a sense of virtue, of fair play, of respect and dignity, of community and family. There are millions of families in America that are functioning with love and concern — father and mother and children doing their best to love and be loved, to lift each other and be successful in life. There is in America an abundance of church-going and worship. Thousands of churches dot this land. Millions of individual prayers are said and millions of thoughts are turned to God during the course of each day. There are still many public expressions of gratitude and thanksgiving to God. We are still, for the most part, a pious and a good people. There is still a significant spirit of charity and giving. Millions and millions of dollars and millions and millions of hours of service are given each year to charities and soup kitchens, to the Red Cross and to the March of Dimes, and to churches and non-profit institutions numbering in the thousands. Political scientists and historians still concede the existence of a certain civic religion in America — a devotion to community and the ideals of the Judeo-Christian tradition. There is in America a spirit of fun and happiness. Think of the thousands of ball games and outings, of people jogging through the woods and climbing to the tops of hills and mountains, the thousands of parties and celebrations and good times enjoyed by so many.

Last summer as Brother Thompson and Brother Woods and I traveled across America with a group of Ricks College Students, we saw Americans of all sizes and shapes, of all races and religions, of all backgrounds and educational levels walking the streets and driving the highways of America. We saw beautiful homes and apartments and well-kept yards, we saw babies and children, and mothers and fathers — young people and old people alike enjoying the beauties and the sights and sounds of America. This great plurality and diversity of America is part of our strength. We are a nation of immigrants blessed by a diversity of backgrounds, of heritage, of religion and race, and yet believing in the common ground of liberty and freedom which brought us all together. This is the true rainbow coalition of America. I believe the vast majority of American citizens are very good and want to be better. Many of the problems that America faces today are caused more by our benevolence than by our selfishness.

The strength of a heritage deeply imbedded in the principles of liberty and freedom is one thing that is still right with America. That heritage is strong and pervasive. The colonial and revolutionary period of American history is a miracle of political discovery unlike any other time in the history of the world. The colonist had 130 years before the revolution to practice the art of republican government and to seek out the truth about how men on this earth can establish institutions which allow them to govern themselves. Their greatest concern, of course, was how to control tyranny and power. Always they knew that power corrupts and absolute power corrupts absolutely. But it wasn't just the power and corruption of governors and magistrates that concerned them, they knew that the people can be consumed by their own passions and their own excesses. By the early 1700s they believed stronger than ever before that the power to govern ought to arise from the people. But the great riddle of government was this: in a government of men over men, how do you give sufficient power to the government to control the people — their passions and their excesses — but at the same time force those who govern to control themselves?

Their quest for "first principles" — those kernels of truth and obvious wisdom — which might solve this riddle and this predicament is truly the miracle of America's founding period. This quest intensified in the 1760s and 1770s as they sought to justify their resistance to British politics and their

eventual rebellion from England. Never before had a people written so much and made so public the debate over political theory and "first principles." Never before had the truths of government been sought for and gleaned with such diligence from the wisdom and experience of the world. Never before had the Lord God of Heaven blessed a people with sufficient fire for the deed that they could comb the world's history for its truth and then have that truth distill upon their hearts as the dews of heaven. John Adams was right. The revolution in the minds of Americans was astonishing. Here are some of the things that became part of the American consensus and the American mind:

- Free will is one of God's greatest gifts to the human soul. But it is not meant to lead us to licentiousness because God is also the author of the natural laws of human conduct which teach men to control and restrain their freewill.
- In that sense all men are born equal into those natural laws of liberty and free will which God himself ordained and established. The natural rights inherent in that liberty are truly incapable of being alienated from the people — they are inalienable, unalienable, and self-evident and include life and liberty, property and happiness.
- True liberty in this world is a balance of order and restraint, rights and responsibilities, opportunities and burdens. Men can govern themselves when they exercise self-restraint as well as submitting themselves to the constraints of the laws which have been made by their chosen representatives.
- There is sufficient virtue in the heart of the people to allow them to govern themselves. Man has the capacity to reason and is sufficiently motivated by that which is just and moral to sustain self-government.
- True religion is not the opiate of the people, but it is the thing which teaches them the delights of liberty and teaches them to suppress their selfish desires.
- Freedom of conscience is at one moment the well spring of liberty, the great protector of liberty, and the greatest of natural rights which the government must protect.
- Freedom of religion, which is part of that freedom of conscience, is necessary for political stability and social harmony because it allows the people to separate the specific sectarian doctrines of church from the policies of government and creates the kind of religious institutions which can teach morality and virtue independent of government constraints and corruption.
- Rule of law is more than just a commitment to be governed by law. It is a tradition of respect for the concepts of fairness, justice, decency, and human dignity.

I believe that these are some of the just and holy principles upon which the American system of government is based. I sincerely believe that they are still sufficiently rooted in the hearts and minds of most Americans to keep our liberties safe and secure. That leads us to another thing that is right with America. These principles formed the basis of and the foundation upon which the Constitution of the United states was written. The founding generations of Americans pretty much accepted these principles, but the creation of the form of government was still a very difficult task. They actually made some serious mistakes in the 1770s and 1780s in the forms of their state governments and the conception of their national government. But by 1787 they were ready to take the principles to a higher and more practical application. One of the great things that is right with America is our Constitution. It may be getting battered at the edges, but it is still alive and well. And it is amazing the reverence and devotion we still give to it. The Constitution as a whole is a marvelous conception of grand principle and form. I'm not even sure the founders understood what they had done. But most of them saw the events of that summer of 1787 as being quite extraordinary; some even called it miraculous. It was amazing to them that so many different opinions on form and detail could produce a document so little liable to criticism.

And the most fundamental thing for us to remember today is this — our government is still controlled by us. We must see that as part of what is right with America. Governments at all levels conduct their proceedings in the open view, they treat us with a sense of legal equality, and they try to respond to the wishes and desires of the people. Here in America, we set rights above the passion of the crowd while at the same time respecting a certain right of the people collectively to make law and set limits on our actions.

I think that the vast majority of the people who serve us in the government wish for the well-being of this nation. They make a great sacrifice in their lives. The very fact that men and women will run for office and subject themselves to the scrutiny and outright derision that comes with being a politician is an amazing thing. It certainly isn't all glitz and glamour; most of it is just plain hard work. Think of all the common Americans who serve on city councils and county commissions, school boards and planning and zoning commissions, as mayors in big cities and tiny towns, as city clerks and county assessors, as state legislators and as judges and magistrates and on juries. Think of those who serve on advisory committees, and Blue Ribbon commissions; think of the thousands of civil servants who work for government, often for less pay than they might receive in the private sector because they have a certain sense of mission and desire to serve the best interests of the public. And think of those thousands who work behind the scenes for their parties and their candidates and their causes. The great spirit of public participation and sacrifice for the common well-being of the nation is still there. Our founders called it the spirit of commonwealth. We still have a certain sense of respect and awe, of propriety and decency, and of reasoned self-restraint in all of this. We do often drag our politicians and civil servants across the broken glass of public opinion and scrutiny, but think of the greatness in the energy of self-government in this land. I don't know about you, but I thrill when I think of it.

Now let me tell you something else that is right with America. Many people hate our politics. The art of running for government is not held in very high esteem. It seems that getting the attention of the voters is becoming more competitive and dirty. If a person campaigns in a low-key way without the fanfare of deceit and innuendo, the voters say that he or she lacks charisma. Others who jump on the issues which are intended to arouse passion and interest get the votes. Some people say that our political party system is all messed up. I know that the negative is there. But there is something amazing about the two-party system in America. It has helped create a marvelous political stability,

Now one last thing about that is right with America. It remains the proper host nation for the Church of Jesus Christ of Latter-Day Saints. It was the proper place for the restoration of the gospel and the church and it remains the proper host for the headquarters of the church today. The brethren and sisters who stand in leadership positions can travel from this land to virtually any place in the world they wish to go. The freedom of access and travel, the international nature of the English language, the continued fascination of the world with things American and with the American people have been helpful to the church. And the strength of our economic system and the prosperity of the American saints is helpful, yes even necessary, for the mission of the church to be fulfilled in the world. Millions of dollars in tithes and offerings come to the church from the members here in America. Buildings are built, missionaries are sent, and temples are constructed, in large part, because of the prosperity and generosity of the American saints. All of this makes the mission of the church easier to fulfill and accomplish.

Now, in closing, perhaps a word of advice and caution to members of this church. We pride ourselves on being the saviors of this nation. We base that pride on a prophecy given by the Prophet Joseph Smith in 1844. He said that "even this nation will be on the very verge of crumbling to pieces and tumbling to the ground and when the Constitution is on the brink of ruin, this people will be the staff upon which the nation shall lean, and they shall bear the Constitution away from the very verge of destruction" (Quoted in the following: Ezra Taft Benson, The Constitution, A Heavenly Banner [Salt Lake: Deseret Book, 1986] 28. See also Ezra Taft Benson, "Our Divine Constitution," Ensign [November, 1987]. Joseph Smith's original prophesy was given on 19 July 1840 and was recorded by Martha Jane Knowlton Coray - the manuscript is in the Church Historian's Office, Salt Lake City, Utah.). In recent years, I have wondered if our view of this prophecy, our view of conspiracies as discussed in the Book of Mormon, and our view of the prophesied and much-looked-for moral decline of the world have become so much the political focus of the Saints of God that we feel untrue to our spiritual roots when we talk about the positive nature of our past, our present, and the potential for our future? We want to satisfy our own view of prophecy on a constant diet of the negative. That is, in my estimation, to be consumed by the world.

I believe the members of this church have a better mission. It is, of course, to be wise and understanding, recognizing and acknowledging our weaknesses and our national sins, and then working in whatever way is appropriate within the law to right the wrongs and change the directions. I think the nation can be much better served when we work to lift and build and sustain and edify and champion the goodness of God and His peculiar blessing on this nation. To be the staff upon which the nation leans may in fact mean that we become champions of it goodness and its benevolence and its heritage. The world can be better served if we support efforts at peace and encourage our national participation in them rather than withdraw from the world out of selfishness and unfounded fear. It may be time for the members of this church to quit hoping for calamities and conspiracies and wickedness to satisfy our thirst for scriptures to be fulfilled and the end to come. Maybe we should be wise, keep our spiritual lamps full, listen to the Brethren, leave the timetable of the world to the Lord's wisdom, and start hoping and working for peace and prosperity and compassion and love.

Now, may I add my testimony — a testimony concerning God's goodness and His compassion. My studies have convinced me that it is God who governs the affairs of man. It is He who sets the time-tables by which men are moved to act and by which the history of man has been allowed to unfold. His hand has been upon this nation, and, in the words of President Joseph F. Smith, "it has been his purpose and design to enlarge it, make it glorious above all others, and to give it dominion and power over the earth, to the end that those who are kept in bondage and serfdom may be brought to the enjoyment of the fullest freedom and liberty of conscience possible for men to exercise in the earth." (Gospel Doctrine, p. 408) There are purposes beyond our understanding in some worldly events and in the policies of our own nation. As some scientists have been brought to a deeper understanding of God through a study of His creations, so I have been led to a deeper understanding of God's compassion, love, and commitment to extend to us our agency through my study of history. God made us free and in America the law also "maketh us free." Behind all the secular knowledge we try to obtain, there is the possibility for deeper spiritual insight. May your lives be filled with the great quest for both. And may God bless you richly in that quest.

The Blessings of the Commandments

by
Gordon Timothy
Psychology Department

Commands differ from demands and reprimands and contramands. Each word has the implication of being MANDatory, each in its own way. Commands are blessings instead of cursings. They are given as promises with a way to receive them. The fruit of having Faith in Christ, Hope in His word, and Charity and love for one's fellow beings, is peace in knowing that because of the Atonement of Christ, it is finally possible to truely be able to keep His commandments: to fulfill the dream of living a good life. Note the effect of adding before each commandment the phrase: "When I am the Lord thy God", or "With Faith in Christ."

With Faith in Christ, **thou shalt have no other gods before the True and Living God.**Thou shalt become free of the false gods of gold, popularity, power, pride, etc. which do so much damage to those who worship them.

Thou shalt become free of the need to hide sin and thus be more corrupted.

Thou shalt become free of the need to compare thyself with other people.

Thou shalt become free of the need to follow the false commands of men.

With Faith in Christ, **thou shalt not make unto thee nor worship any graven image.** Thou shalt become free of the symbols of worship, and attend to living the way the Lord has said to live, to become loving and pure, blessing others without the need for show and notoriety.

Thou shalt become free of the worship of gods of thine own invention, or those invented by philosophers and other desperate people.

Thou shalt become free of the fads and styles of thy culture, able to follow the promptings of the Spirit of God.

Thou shalt become free of the need to reject others because of their culture and background, becoming able to love and bless even thy enemies.

With Faith in Christ, **thou shalt not take the name of the Lord thy God in vain.**

Thou shalt become free to testify of Christ with true knowledge.

Thou shalt become free of the anger and pride that demand curses and swearing to demean others or to complain about the vicissitudes of life.

Thou shalt become free to use the Lord's name to bless others, with authority and with His permission; to testify, pray, and teach in his name.

Thou shalt become free to claim Jesus Christ as thy Father, because thou hast faith in Him, hast repented, and hast covenanted with Him through baptism that ye will keep his commandments, and always remember Him, and take His name by so doing, and thou keepest thy covenant.

With Faith in Christ, **thou shalt remember the Sabbath Day to keep it Holy.**

Thou shalt become free to work more efficiently on the other six days of the week, doing more good, being more free of the trappings of the world.

Thou shalt become free to worship with full energy of heart, in unity with others who also desire to worship on the Sabbath.

Thou shalt become free of worries and cares as they are placed in lower priority than the things of the Lord.

With Faith in Christ, **thou shalt honor thy father and thy mother.**

Thou shalt become free to speak and to act toward and about thy parents as one who is respectful and grateful for them, and who loves them.

Thou shalt become free to bring honor to thy parents by thy dependence on the Lord, drawing on the True Vine, producing the fruits of righteousness.

Thou shalt become free to bring honor to thy parents by thy independence from the world, being able to keep the Lord's commandments.

Thou shalt become free to bring honor to thy parents by interdependence with others in the cause of bringing about a better world, creating Zion.

With Faith in Christ, **thou shall not kill, nor do anything like unto it.**

Thou shalt become free from bloodthirsty tendencies to seek for revenge, advantage over others by violent means, by using the tongue to destroy the reputation or success of others, or simply to see others suffer.

Thou shalt become free from desire to hurt others physically or emotionally.

Thou shalt become free from anger and bitterness.

Thou shalt become free to forgive and love even thy enemies.

With Faith in Christ, **thou shalt not commit adultery, nor do anything like it.**

Thou shalt become free from lust and its accompanying destructive forces.

Thou shalt become free from the world's music, movies, jokes, that mock the sanctity of the gift of sexuality, and teach its trivialization.

Thou shalt become free to love in purity, with clean hands and a pure heart, without guile, vanity, inappropriate jealousy, and other impure and unholy thoughts, acts, or feelings.

Thou shalt become free from the diseases and corruption that accompany sexual sin, and the social destruction that follows in its wake.

With Faith in Christ, **thou shalt not steal, nor do anything like it.**

Thou shalt become free from greed that can destroy thy ability to be satisfied with thy lot in life, and that with which thou hast been entrusted.

Thou shalt become free from shortsightedness and selfishness that makes dishonesty and the lack of character seem appropriate or necessary.

Thou shalt become free to desire success for thy neighbor as thou dost for thyself, and to be a help and encouragement to them.

Thou shalt become free to face the world in integrity: being trustworthy.

especially high fat foods, or about overeating is an extremely powerful motivator to either purge or to compensate by starving. Many young women describe feeling as if they have sinned when they eat and that the only way of relieving the guilt they feel is to rid themselves of the food in a sort of twisted repentance like process. The body image distortion has an extremely profound impact on the person as they not only focus on their less appealing physical characteristics but they distort their size or appearance. These distortions can persist despite compliments or more objective feedback such as comparison measurements of body areas that the patient is obsessed with. I have worked with patients in hospital settings that had starved themselves to near fatal nutritional levels and are grossly underweight who still believe that they are fat.

Many of the women suffering from eating disorders also have comorbid depression as well as anxiety. The thoughts and concerns about food and body image become such an obsession that other parts of their lives, such as relationships, school and work, become unimportant and suffer. I recently was on a panel with two recovering eating disordered young women who reported that the years when their eating disorders were most severe now seem lost and hazy to them because they had been so consumed with concerns about food and weight. One of the young women reported that she retook a class her senior year that she had taken and passed as a junior but didn't realize that she had already taken the class until almost half way through it. This is also an example of the poor cognitive functioning that results from the malnutrition these women can experience.

In addition to poor cognitive functioning there are other medical complications that can result from eating disorder practices. Mortality rates for eating disorders are relatively low, probably about 1% combined for Anorexia and Bulimia. Causes of death include starvation, heart attack, and rupture of the stomach. More common physical problems include electrolyte imbalance, dehydration, damage to the dental enamel, and irregular menstruation. (Hofland and Dardis, 1992)

The treatment of eating disorders can include individual, family and/or group psychotherapy, antidepressant medication, and in extreme cases hospitalization. The focus of therapy is to help the patient to expand their thinking to allow them to achieve more balance in their lives. We attempt to de-emphasize food and body concerns while setting moderate goals for nutrition and for limiting purging behavior. The desired modification in thoughts and behavior is to change the focus from being thin to being healthy. (Amer. J. Psychiatry, 1993) This is accomplished by working on interpersonal relationships, restructuring cognitive patterns, and improving spirituality. Therapy is usually arduous and progress is erratic but most people do improve in their overall functioning after several months. However, it is common for some of the mental and behavioral patterns to continue with decreased severity for years. The impact that an eating disorder can have on a person's life is extreme, in many cases it can rob them of their youth, but there is help available to assist these young people in returning to a meaningful, balanced life.

The Counseling Center offers therapy to students, both on an individual and group basis, who may be suffering from an eating disorder. The physicians at the Health Center are able to make the appropriate evaluations to determine if the use of medications may be indicated.

Works Cited:

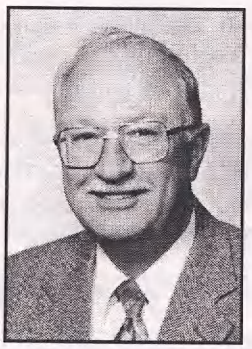
"Practice Guidelines for Eating Disorders." *American Journal of Psychiatry*. February 1993

Heatherton, Todd F., et al, " Body Weight, Dieting, and Eating Disorder Symptoms Among College Students." *American Journal of Psychiatry*. November 1995

Hofland, Sharon Leech, et al, "Bulimia Nervosa, Associated Physical Problems." *Journal of Psychosocial Nursing*. Vol. 30, No.2, 1992

Kinzl, Johann F., et al, "Family Background and Sexual Abuse Associated with Eating Disorders." *American Journal of Psychiatry*. August 1994

Diagnostic and Statistical Manual of Mental Disorders Fourth Edition. Washington, D.C.: American Psychiatric Association, 1994



"Steel Drivin' Man": Garry Kasparov vs. Deep Blue

by
John D. Nielson
Geography Department

On Friday, February 9, 1996 Garry Kasparov, World Chess Champion, began a six game chess match in Philadelphia with **Deep Blue**, a new, powerful, IBM computer specifically designed to play chess. It was widely seen as a classic struggle between man and machine: a modern, true life "John Henry, steel drivin' man," against a powerful steam drill. A shoot-out in Philadelphia, "High Noon" on the chessboard. Have I got enough metaphors here? Only this time the struggle was intellectual and mental--human brain against computer--rather than muscle against steam engine.

Don Jensen and I met in my office in the late afternoon on Saturday, February 17, the last day of the match, to watch the final game over the Internet. We set up a chessboard and pieces and as each move came over the intervening cyberspace we watched the game develop, predicted Kasparov's or Deep Blue's next move, and cheered as the human mind decisively defeated the machine. It was fun to be an eyewitness to this historical intellectual event. Other faculty also indicated an interest and awareness of the match. Brent Jones of the Music Department forwarded E-mail received from his son about the games to Don and I. Wes Smith of Chemistry asked if I was watching and E-mailed some Internet addresses.

IBM had spent millions of dollars and five years of effort, hiring the best computer programmers and chess advisers, Grandmaster Joel Benjamin among them, to see if they could overcome the problems of defeating the best chess brain in the world. In 1989, Kasparov had defeated Deep Thought, the predecessor of Deep Blue. The new computer(actually 32 computers linked together) was the world's most powerful chess machine. It was capable of analyzing 200,000,000 potential moves in one second! Why did they do it?

Here are some excerpts from their explanation:

> Overcoming the intricacies presented by a "clean" problem like chess will lead to knowledge that can help solve, or at least support a decision, in many other, more important endeavors. Deep Blue's basic nature as a decision support system could certainly be of great use to people if applied to finance, medicine, education, and many other areas. Imagine an evaluative capability like Deep Blue's which could help an investor manage a portfolio, a huge retailer manage inventory, or a government deploy resources. These type of applications justify the effort behind Deep Blue. The match with Kasparov is merely a way to benchmark progress.
>
> . . . Chess requires a combination of math and pattern recognition, along with some less tangible things like intuition. It is in the balance of tangibles and intangibles where the potential for breakthrough lies. To build a machine that can solve difficult problems would be a boon to mankind. We would be able to rely on machines to help us with crucial decisions, the same as we rely on machines to transport us, let us communicate over long distances, and quite literally move mountains.
>
> . . . Computers have been made to play many other games besides chess, but none of these is nearly as interesting from a research point of view. There's no scientific interest in pursuing games of chance. . . . With its 64 squares and limited patterns of movement, chess isn't terribly complicated from a mathematical perspective. A computer's ability to calculate makes it relatively easy to write a program that will play a decent game of chess. There are plenty of these, and most of them are adequate enough to beat a vast majority of the world's players, who are prone to oversights and blunders.
>
> Playing at the grandmaster level, things start getting interesting for the programmers. Grandmasters' ingenuity at confounding machines is a challenge. Today, only a tiny group of people remain who can pose serious problems for Deep Blue. Of these, Garry Kasparov is supreme (http://www.usatoday.com/sports/other/chess01.htm, 2/13/96).

The outcome of this epic struggle(each player had 3.5 hours on their time clocks for each game) was Kasparov 4, and Deep Blue 2. Deep Blue won the first game, Kasparov the second, games three and four were drawn, and Kasparov won games five and six. The human brain can still beat the world's best computer at chess. After the final game, Yasser Seirawan, an international grandmaster of chess, commented, "Garry has shown the brilliant creativity that made him world champion. His ability to learn, and adapt, and seize an advantage are marvelous" *(Post Register, 2/18/96, p. A4).*

The human brain is at a disadvantage when competing with a computer in terms of the amount of information it can process in a given time. While Deep Blue can analyze 200 million positions in a single second, the human brain can superficially consider only one or two positions in that time. C. J. Tan, Deep Blue team leader, assessing the entire man/computer chess match process, was pleased with the performance of the supercomputer. Deep Blue was really 32 computers working together at IBM's T.J. Watson Research Center in Yorktown Heights, New York. It was connected to Philadelphia with a modem hook-up. He feels that Deep Blue represents "a great leap forward in the study of parallel processes, that is how to manage many computers operating efficiently at once. One reason we lost is that we don't have the chess experience and knowledge that Mr. Kasparov has"*(Post Register, 2/18/96, p. A4).* His team of computer experts went back to their laboratory the following week to see where they had gone wrong. According to chessmaster Robert Byrne, the programmers have two choices: "Either they must increase its calculating speed to such a point that it can dispense with anything like human judgment or they must include an analogy to it"(http://www.nytimes.com, 2/19/96).

Despite its loss, Yasser Seirawan marvelled at the computer's chess skill. "I was stunned by its depth of analysis and how quickly it could move. It was unnerving--you want to say, 'Can't you even show a bead of sweat?'"*(Post Register, 2/18/96, p. A4).*

But a computer is at a disadvantage compared to the human brain in terms of **long-range strategic planning and intuition.** The computer really does none of this. It has no long-range plans and only considers the present position on the board and looks for the best move. For this reason, sometimes it can be enticed into weakening its position for the sake of a short-term advantage. Kasparov would create a closed position where there was not much scope for the computer to use its calculating power or move the pieces. With the computer somewhat immobilized, the World Champion would then formulate a long-range plan to win. This is how he beat it.

Frederick Friedel, Kasparov's advisor on computers, said after the match that Deep Blue had begun to emanate signs of artificial intelligence. "As it goes deeper and deeper, it displays elements of strategic understanding. Somewhere out there, mere tactics are translating into strategy. This is the closest thing I've seen to computer intelligence. It's a weird form of intelligence, the beginning of intelligence. But you can feel it. You can smell it"(Weber, http://www.nytimes.com, 2/19/96).

John R. Searle, philosophy professor at the University of California at Berkeley, scoffs at Friedel's sense that Deep Blue has the feel of an intelligent being. "I could say the same thing about my pocket calculator," he says. ". . . In order to get human intelligence, you've got to be conscious. Does the computer worry about its next move? Does it worry about whether its wife is bored by the length of the games?"(Weber, http://www.nytimes.com, 2/19/96).

Douglas Hofstadter, a professor of computer science at Indiana University dismisses Deep Blue as "just a hunk of junk that somebody's designed(Weber). The computer gains against chessmasters over the last decade have convinced him that chess is not as lofty an intellectual endeavor as music or writing. "I think chess is cerebral and intellectual but it doesn't have deep emotional qualities to it, mortality, resignation, joy, all the things that music deals with. I'd put poetry and literature up there, too. If music or literature were created at an artistic level by a computer, I would feel this is a terrible thing"(Weber).

Those who deny the beauty, artistry and creativity of the best games of chess are mostly non-players. It is true that the beauties and joys of chess, like mathematics, are appreciated

only by those who know it well. Music, on the other hand, can be enjoyed and can move even those who know little about it technically. This explains the popularity of music over either chess or mathematics. Of course the more one knows about music the more one appreciates it.

One of the questions put to IBM regarding why they selected chess to test their computer against was, "Why is chess, along with music and mathematics, one of the intellectual endeavors where children with little experience can excel?"

An excerpt from their answer:

> Chess is a discipline which does not require many fundamental building blocks. Like a young Mozart in music or a 9 year old who solves graduate school problems in trigonometry, a young chessplayer can often achieve truly remarkable abilities with little experience. There's still plenty of mystery about what makes a gifted child, but much work has been done in the types of pattern recognition that are behind a chess prodigy's ability. As chess people note, some kids just "see the board." A child with an acute ability to see patterns need only gain an understanding of the few simple rules of chess to become a formidable player. A gifted child can look moves ahead, and determine the best strategies with an effortlessness that is astounding. Still, [for most people] much in chess must be learned or come with experience (http://www.usatoday.com/sports/other/chess01.htm 2/13/96).

Besides its link with music and mathematics, chess also has some remarkable parallels with the spatial science of geography. Just as geography is about the location of various phenomena on the earth's surface and the movement and interaction of these things with each other, so chess is about the location, movement, and interaction of the pawns and pieces on the surface of the chessboard. As one stands above the chessboard watching the changing patterns of location of the pieces, their moves and interaction in chess space, one is reminded of a god's eye view of the surface of the earth. One thinks of the NATO troops moving down from western Europe into Bosnia, the illegal aliens moving north across the porous border from Mexico into the United States, the flow of oil from the Persian Gulf States in oil tankers bound for all parts of the world, the movement of Toyotas and Sony VCRs out of Japan, the movement of Mormon missionaries from the MTC in Provo to all continents, and countless other located and moving phenomena. Analyzing all of that requires the use of maps in geography and of chess diagrams in chess.

The game of chess has been a component of my G120(Geography and World Affairs) course at Ricks for years. I teach the students the moves of the pawns and pieces, how to play the game, and take them through a short but famous game. Along the way I point out the many striking parallels with specific events in world affairs. Many seem to enjoy and profit from the unusual analogy(Nielson, 1994, pp. 135-156).

Chess is not only a useful foil for the IBM computer wizards, and may lead to valuable insights in other areas, but there are those, myself among them, who believe the playing and study of chess can have helpful spin-offs into other aspects of our lives, including the academic. Some secondary schools offer chess classes and both students and parents notice that those involved often begin to do much better in their other classes. Chess seems to teach them planning, patience, thoroughness and resilience in defeat(Brokaw, NBC News, 4/15?/95).

Many prestigious universities, Harvard and M.I.T. included, sponsor chess teams and compete in collegiate tournaments. Increasingly, scholarships are being offered by universities to promising high school chess players. The Borough of Manhattan Community College, with 16,000 students, offers one or two full tuition and several part tuition chess scholarships. It offers a chess course in its continuing education program and its course on critical thinking has a chess component(Redman, 8).

The University of Maryland Baltimore County, located just outside of Baltimore, is an honors university with 9000 students. It actively recruits chess players for merit scholarships and offers one full four-year chess scholarship for in-state tuition. The chess club meets weekly, there are simultaneous exhibitions, an annual faculty-student match, matches with other universities, and numerous tournaments(Redman,8).

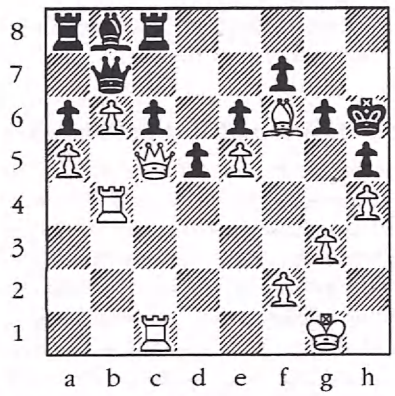
The University of Texas at Dallas has just announced that beginning in September, 1996, it will offer at least two chess scholarships annually. They will cover up to full tuition, room, and expenses. With 5000 undergraduates and 4000 graduate students, UTD has the most rigorous entrance standards of any public institution in Texas(Redman, 79).

Shimer College, located in Waukegan, Illinois, is a small, liberal arts college. It offers two chess scholarships. The Paul Morphy Scholarship is $2000 a year awarded on the basis of academic potential, achievement as a chess player, and financial need. The Master-in-Residence Scholarship is awarded to a chess master who takes primary responsibility for the instructional activities of the Shimer Chess Club. In 1991, Shimer finished first overall among schools with enrollments less than 2000 in the Pan-American Intercollegiate Chess Tournament. In 1994 it tied for first in the Midwest Amateur Team Championship(Redman, 79).

The Ricks College Chess Club, advised by Don Jensen of the Sociology Department, sponsored an Invitational Chess Tournament held on March 9, 1996. There were 52 participants from the college, regional secondary schools, and from area communities. One Jr. High sent 12 players. Winning the team competition was the Ricks College Chess Club. Myself and Blake Hillman from Hamer, Idaho, each winning all five of their games, were declared co-champions in the individual competition. Tied for second place were Justin Gardner, a Ricks student, and Robert Beasen of Pocatello.

Perhaps someday Ricks College will offer a chess scholarship, sponsor a chess team, and even offer an elective chess class. Why not, for a mental sport? We do it all for physical sports.

For those who are interested, the moves and ending position of Game Six of the Kasparov -Deep Blue match are presented below.



Notice that the black pieces are all tied up in the upper left hand corner of the board defending against the advance of the white pawns. Meanwhile, Kasparov, white, is ready to begin a devastating attack with his rooks, bishop, and pawns against the isolated black king on the right hand side. At this point, the computer resigned.

The Moves:

Kasparov	Deep Blue.		
1. Nf3	d5	23. Qd3	g6
2. d4	c6	24. Re2	Nf5
3. c4	e6	25. Bc3	h5
4. N(b)d2	Nf6	26. b5	N(c)e7
5. e3	c5	27. Bd2	Kg7
6. b3	Nc6	28. a4	Ra8
7. Bb2	cxd4	29. a5	a6
8. exd4	Be7	30. b6	Bb8
9. Rc1	0-0	31. Bc2	Nc6
10. Bd3	Bd7	32. Ba4	Re7
11. 0-0	Nh5	33. Bc3	Ne5
12. Re1	Nf4	34. dxe5	Qxa4
13. Bb1	Bd6	35. Nd4	Nxd4
14. g3	Ng6	36. Qxd4	Qd7
15. Ne5	Rc8	37. Bd2	Re8
16. Nxd7	Qxd7	38. Bg5	Rc8
17. Nf3	Bb4	39. Bf6+	Kh7
18. Re3	R(f)d8	40. c6	bxc6
19. h4	N(g)e7	41. Qc5	Kh6
20. a3	Ba5	42. Rb2	Qb7
21. b4	Bc7	43. Rb4	Resigns.
22. c5	Re8		

Works Cited

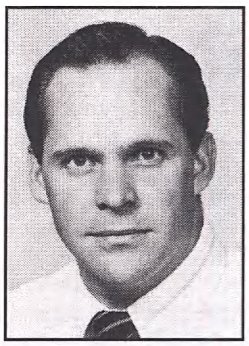
Byrne, Robert, "Chess: A Collision of Brains and Brawn," New York Times, Feb. 19, 1996 on the Internet at http://www.nytimes.com/library/cyber/week/0219chess-ibm-kasparov.html

"Man Triumphs over Machine in Chess Match," *Post Register*, Feb. 18, 1996, p. A4.

Nielson, John D. "Chess and Geography," *Geography and World Affairs*. Dubuque: Kendall/Hunt Publishing Co., 1994, pp. 135-156.

Redman, Tim. "College and University Chess Scholarships," *Chess Life*, March, 1996, pp. 8 and 79.

Weber, Bruce. "Mean Chess-Playing Computer Tears at Meaning of Thought," *New York Times*, Feb. 19, 1996 on the Internet at: http://www.nytimes.com/docsroot/ library/cyber/week/ 0219 weber.html



The Examined Life:

The Socratic Method as a Model for Critical Thinking and Critical Teaching

by
Brian L. Merrill
English Department

The critical thinking movement is slowly gathering momentum, and, although it is not as spectacular as the technological revolution that is sweeping through America's schools, it is bound to have a significant impact on education. I am usually wary of educational reform movements. The multi-billion dollar clamor toward technology, for example, gives me ulcers. But the critical thinking movement is, I think, a fundamentally sound and badly needed renovation in American education. I say "renovation," and not "innovation," because the principles of critical thinking are not new. They have been the basis of education since Socrates; educators have simply not applied them consciously, systematically, and consistently, as Socrates did.

Last summer I attended a week-long workshop on critical thinking instruction. Since then many of my colleagues have asked me to explain what critical thinking is. I have scarcely felt up to the task with my limited experience, but interest is great enough to justify an attempt. The discussion of critical thinking in this article is based almost entirely on the work of Richard Paul, a leader in the critical thinking mivement and director of the Foundation for Critical Thinking. I have read several books and articles by other critical thinking experts. Most of them are consistent with Paul's principles, though many lack the philosophical depth and completeness of Paul's work. A few disagree with Paul on fundamental philosophical issues. I shall not discuss these issues here but will only say that I do not believe their positions pose a serious challenge to Paul's vision of critical thinking.

In this paper, I shall attempt to explain what critical thinking is and what its implications are for teaching. This paper has three parts. In the first part I shall analyze, cursorily, the Socratic method as a model for critical thinking; in the second part I shall offer an analysis and definition of critical thinking based on the Socratic method; and in the third part I shall discuss the implications of this analysis for what and how we teach.

Critical thinking is not what most people think it is. It is not, for example, the kind of thinking that tears down arguments, points out fallacies, or destroys conviction. It is not formal logic, or the art of persuasion, or techniques for ideological self-defense. Nor is it the art of taking tests, or the mental gymnastics of increase-your-IQ self-help books. Although it has been touted and taught as any one or number of these, critical thinking within its long tradition is richer than any of these. It claims Socrates as its earliest practitioner, and for the rich and broad sense of critical thinking that is no idle boast.

THE UNIVERSAL INTELLECTUAL STANDARDS		
Clear	vs.	Obscure
Accurate	vs.	Inaccurate
Relevant	vs.	Irrelevant
Precise	v.s	Imprecise
Consistent	vs.	Inconsistent
Logical	vs.	Illogical
Deep	vs.	Shallow
Broad	vs.	Narrow
Complete	vs.	Incomplete
Significant	vs.	Trivial

Figure 1: The Universal Standards of Reasoning.
All purposeful thinking requires standards. Some standards, called universal standards, apply to all purposeful thinking. Other standards may also be relevant to the particular purpose at hand.

Thinking, it seems, can be critical or uncritical; we can use standards to test our thinking, or we can not use standards, or we can use the wrong standards. In any case, using proper standards to assess our own thinking seems to be a prominent, if not the defining, feature of critical thinking.

We noted earlier that Socrates also analyzes his thinking; that is, he breaks it down into its component parts to see what it's made of. He does this because it is impossible to evaluate thinking *en bloc*. A ship builder could not say "this is a strong ship" without first seeing if the ribs are solid, the hull water-tight, the masts well anchored, and so forth. The strength of a ship depends upon the quality of its parts. In the same way, evaluating thinking entails evaluating the parts or elements of thinking.

So what are the elements of thinking? Well, just as there are standards that apply to all thinking, it would seem that all thinking is made up of a particular set of elements as well: purpose, questions at issue, concepts, inferences or conclusions, assumptions, evidence, implications, and points of view (see fig. 2). These eight elements are the basic components of all thinking. If someone declared, "I have a thought, but it has no purpose, involves no concepts, makes no inferences, is based on no assumptions, is grounded on no evidence, has no implications, and is not from any point of view," we should conclude that he has no thought at all. Note that all thinking, critical or uncritical, involves these elements. A poor thinker makes assumptions, draws conclusions, and so forth just as a good thinker does, but the good thinker is aware of these elements that make up his reasoning and habitually assesses them. The good thinker, therefore, has taken charge of her thinking, while the poor thinker is controlled by his thinking. For either we run our thinking, or our thinking runs us.

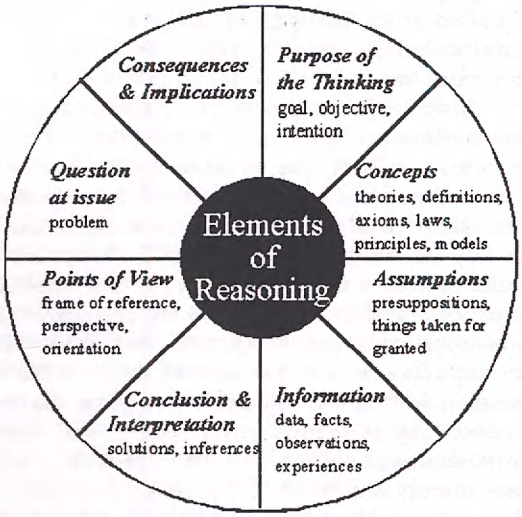


Figure 2: The Universal Elements of Reasoning.
All thinking involves these elements, and taking charge of our thinking requires that we be aware of and assess them.

Socrates assumes that understanding, and therefore learning, can be had only by thinking our way into and through questions. Merely acquiring facts and skills does not constitute education. Knowing how to resolve a quadratic equation, for example, may get a student an 'A' on the exam, but it does not mean that he has learned what a quadratic equation is for and why he would want to solve one. Students are adept at processing algorithms, in poetry as much as in mathematics, without actually understanding what they are doing and why they are doing it. In other words, students are regularly giving answers for which they have no questions.

What is it, then, that the poet or mathematician understands that the poetry or math student does not? Well, for one thing, she understands the question that the sonnet form or the quadratic equation is supposed to answer. It is obvious, but rarely considered, that every declarative sentence students come across in lectures and textbooks are answers to questions. Obviously the statement "The Emancipation Proclamation was signed on January 1, 1863" is the answer to the question "when was the Emancipation Proclamation signed?" This is merely a factual question; concepts like the second law of thermodynamics were invented to answer more interesting and more puzzling questions of judgment. The point is that in the discovery process, questions come first. In fact, the disciplines themselves were formed and differentiated by the many different types of questions they attempted to answer. Early Greek physicians, for example, looked out on a world of living systems and began to ask questions about them. These questions, they learned, were of quite a different kind from questions like "Should we attack Syracuse." For one thing, they had to be answered by very different methods. Hence arose biology. Each discipline, then, together with its subdisciplines and theories and principles, is an attempt to make sense of a particular domain of our experience. By asking questions about our experiences, we humans have devised complex systems – or logics – to make sense of those experiences. So there is a logic of biology – that is the system or set of principles that makes sense of our experiences of living systems – a logic of mathematics, a logic of religion, a

logic of gang behavior, and so on. There is even a logic of chaos, called chaos theory, that attempts to make sense of apparently random events. Now the logic of a thing is nothing more than a mode of thinking about it, and being a mode of thinking, it is made up of the elements of reasoning. So, the mathematician – or the physicist, or the artist – understands his discipline because he has worked out the logic of mathematics in his own head by answering basic questions like "What is the purpose of mathematics?" "What are the key concepts of mathematics?" "What assumptions do mathematicians make?" "What are the implications of mathematics?" and so forth. By asking and answering these kinds of questions, mathematicians, and students at some point, experience the elation of understanding, the empowering feeling that suddenly this thing makes sense – what one of my colleagues calls "the ah-ha! experience." Without the experience of understanding, education becomes merely academic. This is why students complain that their general education courses, especially, are just busy work, irrelevant to their lives. And this is why students often fail to transfer what they *memorize* in class to what they do outside of class. The result is more than regrettable, for a rich liberal education, properly cultivated, empowers students with multiple logics by which to solve complex problems and make sense of an intricate, rapidly changing, and fascinating world.

Critical teaching and learning, or in other words teaching and learning that relies upon the process of critical thinking, recognizes, then, that real learning happens only when we go back to the questions and work out for ourselves the systems that answer those questions. In effect students must remake the disciplines in their own minds. They need not begin from scratch, of course, but they must begin with questions and use class resources to answer those questions. The goal of critical teaching is to teach students to think like mathematicians, or engineers, or psychologists, or writers – that is, to work out the logic of the discipline for themselves and to use that logic to make sense of a part of their everyday experience. We must cease to teach, say, biology or history or literature as a set of facts to be memorized, or even as a set of skills to be mastered; we must teach "biological thinking" or "historical thinking" or "literary thinking." Our teaching, therefore, is successful to the extent that we (1) model for our students the thinking we want them to engage in, (2) engage our students in that thinking, and (3) hold them responsible for their thinking. In sum, the content of a course is nothing more nor less than a mode of thinking. It is not the mere acquisition and retention of information. It is not the mere possession and use of a set of skills. It is a way of thinking about our experiences that should, ultimately, affect how we act and how we live.

Socrates believed that how we think determines how we act and, consequently, how we live. Critical thinking is an essentially practical and worthwhile endeavor because it improves our lives. It is not merely academic. It is not something one does only in English class or biology lab. Critical thinking is a way of life, a fundamental philosophical commitment that will guide the way one acts and lives. To think critically is to work out the logic of things and to act accordingly. When we understand the logic of advertising we become better consumers. By understanding the logic of our profession, we become better employees. Understanding the logic of parenting makes us better parents. By grasping the logic of government, we become better citizens. By working out the logic of the atonement, we become better saints. In general, when we know the purpose of what we do, the concepts involved, the implications, and so on, and when we have the tools and standards for evaluating these, we have tremendous power to choose and correct our beliefs, our actions, and therefore our lives.

Critical Thinking in the Classroom

So far we have discussed only theory. We have seen that critical thinking requires a firm theoretical and philosophical foundation, without which it becomes diluted or, what Richard Paul calls, "pseudo-critical thinking." In that state, critical thinking itself becomes, at best, a subject for worksheets, memorization, and canned algorithms or, at worst, a vague and airy ghost dragged out occasionally for effect. But what does all of this mean for the classroom?

First, critical thinking cannot be tacked on to the syllabus as another unit. That much, I hope, is apparent from our discussion. If critical thinking is, indeed, the only path to learning, it must permeate everything we do in the class. We must ask of every activity, of every assignment, first, "Is this engaging my students in the kind of thinking this class is intended to teach?" second, "Am I modeling that thinking for them?" and third, "Am I holding them responsible for that thinking?" How we infuse critical thinking into our instruction should be guided by those three questions. Following are some of the more important implications our discussion has for teaching.

1. We must consistently use the language of analysis and evaluation, requiring students constantly to analyze and evaluate their own thinking, their classmates' thinking, the thinking of the text, and, for that matter, the teacher's thinking. Self-evaluation, in particular, must become a regular part of the course. This will require that we make explicit both the universal standards and the particular standards relevant to a given assignment. In discussion, on papers, in exams, we must ask questions like "What evidence does John need to support his position?" "What assumptions are you making?" "Are your assumptions reasonable?" "can you clarify that concept?" "What are the implications of this claim?" and so forth.

2. We must put a new emphasis on the logic of the discipline, allowing students to work out that logic for themselves. We must lay out what questions they should be able to answer as the course progresses, including the questions

   What is the purpose of _____(e. g. artistic) thinking, or thinking like a (n) _____(artist)?
   What questions do _____ thinkers try to answer?
   What key concepts do _____ thinkers use?
   What assumptions do _____ thinkers make?
   What kinds of evidence do _____ thinkers use?
   What conclusions or inferences do _____ thinkers come to?
   From what points of view do _____ thinkers think?
   What are the implications of _____ thinking?

   This also involves reducing reliance on memorization. When students work out the logic of something, they

respond to what another student has said, when students fail to listen to one another; or having students read aloud and summarize in groups passages in the text they are having particular trouble with. All the structures and tactics we adopt in our classes should, again, stand up to the scrutiny of our three questions: 1) Does this engage the students in the type of thinking I intend to teach? 2) Have I modeled the thinking for them? and 3) Am I holding them responsible for their thinking, using clear, explicit standards? The following list of tactical and structural recommendations is from Richard Paul's essay "The Art of Redesigning Instruction" *(Critical Thinking: How to Prepare . . ., 333-4)*. These are only a few, and most are quite general. They are intended to give a sense of what critical thinking implies for classroom practice. Of course the number of structures and tactics we might use to teach critically is indefinite.

1. *Design coverage so that students grasp more.* Plan instruction so students attain organizing concepts that enable them to retain more of what you teach. Cover less when more entails that they learn less.
2. *Speak less so that they think more.* Try not to lecture more than 20% of total class time.
3. *Don't be a mother robin* chewing up the text for the students and putting it into their beaks through lecture! Teach them instead how to read the text for themselves, actively and analytically. Focus, in other words, on how to read the text, not on "reading the text for them."
4. *Focus on fundamentals and powerful concepts with high generalizability.* Don't cover more than 50 basic concepts in any one course. Spend the time usually spent introducing more concepts applying and analyzing the basic ones while engaged in problem-solving and reasoned application.
5. Present concepts, as far as possible, *in the context of their use* as functional tools for the solution of real problems and the analysis of significant issues.
6. Develop specific strategies for *cultivating critical reading, writing, speaking, and listening.* Assume that your students enter your class as indeed they do with limited skills in these essential learning modes.
7. *Think aloud in front of your students.* Let them hear you thinking, better, puzzling your way slowly through problems in the subject. Try to think aloud at the level of a good student, not as a speedy professional. If your thinking is too advanced or proceeds too quickly, they will not be able to internalize it.
8. *Regularly question your students Socratically* probing various dimensions of their thinking: their purpose; their evidence, reasons, data; their claims, beliefs, interpretations, deductions, conclusions; the implications and consequences of their thought; their response to alternative thinking from contrasting points of view, and so on.
9. *Call frequently on students who don't have their hands up.* Then, when one student says something, call on other students to summarize in their own words what the first student said so that they actively listen to each other.
10. *Use concrete examples whenever you can* to illustrate abstract concepts and thinking. Cite experiences that you believe are more or less common in the lives of your students (relevant to what you are teaching).
11. *Require regular writing for class,* but grade using random sampling to make it possible for you to grade their writing without having to read it all (which you probably won't have time for). Or have the students themselves select their best work for you to assess.
12. *Spell out explicitly the intellectual standards you will be using in your grading,* and why. Teach the students, as well as you can, how to assess their own work using those standards.
13. *Break the class down frequently into small groups* (of two's, three's, four's, etc.). Give the groups specific tasks and specific time limits, and call on particular groups afterward to report back on what part of their task they completed, what problems occurred, how they tackled those problems, etc.
14. *In general, design all activities and assignments, including readings, so that students must think their way through them.* Lead discussions on the kind of thinking that is required.
15. *Keep the logic of the most basic concepts in the foreground,* continually re-weaving new concepts into the basic ones. Talk about the whole in revelation to the parts and parts in relation to the whole.
16. *Let them know what they're there in for.* On the first day of class, spell out as completely as possible what your philosophy of education is, how you are going to structure the class and why: why the students will be required to think their way through it, why standard methods of rote memorization will not work, what strategies you have in store for them to combat the strategies they use for passing classes without much thinking, etc.

All of the recommendations in this paper are themselves open to scrutiny. The test of any teaching idea is its utility in the classroom: Does it actually work? Do students in fact learn in this way? We are free to accept or reject any teaching ideas on that basis. But, once we have discovered the useful and the true, we are compelled, as Socrates would say, by our love of truth – and our intellectual integrity – to grasp it and live by it.

A Brief Bibliography of Works on Critical Thinking

Baron, Joan and Robert Sternberg. *Teaching Thinking Skills: Theory and Practice.* W.H. Freeman Co., 1987.

Costa, Arthur L. *Developing Minds:* A Resource Book for Teaching Thinking. Alexandria, VA: A.S.C.D., 1985.

D'Angelo, Edward. *The Teaching of Critical Thinking.* Amsterdam: B.R. Gruener, 1971.

McPeck, John E. *Critical Thinking and Education.* Oxford: Martin Robinson, 1981.

McPeck argues, against Paul, that critical thinking is subject-specific and, therefore, cannot be taught as a universally applicable set of skills and dispositions. An interesting book for those interested in the philosophical debate over critical thinking.

Meyers, Chet. *Teaching Students to Think Critically: A Guide for Faculty in all Disciplines.* San Francisco: Jossey-Bass, 1986.

Paul, Richard W. *Critical Thinking: How to Prepare Students for a Rapidly Changing World.* Santa Rosa, CA: Foundation for Critical Thinking, 1993.

LDS BAPTISMS IN ERIE COUNTY, PENNSYLVANIA 1832-1833

by
Cheryl Harmon Bean
Receptionist Student Health Center

A little-known segment of Church history came to our attention as my cousin and I were doing genealogical research in Erie County, Pennsylvania. Erie County is just across the Pennsylvania/Ohio border -60 miles from Kirtland, Ohio which served as headquarters of the newly organized Church of Jesus Christ of Latter-day Saints in the early 1830s.

By February 1831, the "Saints" were gathering to Ohio in large numbers. On 9 Feb 1831 at Kirtland, Ohio, Joseph Smith received the following revelation from God to those so gathered: *Hearken, O ye elders of my church, ... Ye shall go forth in the power of my Spirit, preaching my gospel, two by two, in my name, lifting up your voices, as with the sound of a trump, declaring my word like unto angels of God.* (D & C 42)

And so began a great missionary effort! As missionaries traveled east from Kirtland, they passed through Erie County. Some of the missionaries kept journals which we studied at great length. However, the journal I most desired to study had never been transcribed and was basically unreadable. I wrote the Church Historical Department and offered to transcribe the journal of Evan M. Greene for them--an offer they accepted! Little did I know what would then transpire in my life. As I attempted to transcribe the journal, there were many passages I could not read when I'd sit with my magnifying glass and study the transcript. However, I discovered one day--quite by accident--that if I sat at my computer with the transcript in front of me I could clearly read Greene's shorthand as fast as I could type. Not only that, it was as clear to me as anything I'd ever read before. I was so humbled. Tears would pour from my eyes as I typed. I KNOW beyond a doubt that Evan Greene wanted this journal to come forth. I felt his spirit, his help, and his testimony as I typed. How surprised I was to discover as I came to the end of this journal he was a young man--18 and 19 years old at the time he served this mission. I was again overcome. How could one so young--so new in the restored gospel--have such a powerful impact on so many people--including my own ancestors?

The summer of 1995,my cousin Pam Johnson and I went to Ohio, Pennsylvania, and New York -following closely in the footsteps of these missionaries and their converts. The Erie County Historical Society sponsored us as guest speakers to share our work with other local historians. They have also published some of our work in the Keystone Kuzzins.

It was awesome to go to where the "Faith of Our Fathers" took root and be able to bear fervant testimony that our ancestor's conversion to the Church of Jesus Christ of Latter Day Saints has borne much fruit. We were invited to speak at an LDS Fireside of the Erie Ward by Bishop Deon Nielson of Erie. The present day Erie County Saints did not know the early history of the Mormon Church in Erie County and were thrilled to learn of this heritage.

THE ERIE COUNTY MISSION

Unfortunately not all the converts' names were recorded. We know there were converts prior to 1832 because the missionaries refer to many as "Brother" or "Sister" in their journals. These terms indicate membership in the church. Non members are usually referred to as Mr. or Mrs. in the missionary journals.

Diantha Hanchett was converted to the gospel in Erie County. Her description of Erie County in 1831 follows: *The town of Erie, Erie County, Pennsylvania was a small town of a few hundred people in 1831. People got about on horseback and with ox teams and wagons and shanks mare (i.e., they walked). They had a newspaper coming out once a week. The use of candles was their only means of lighting at night, and all cooking was done in open fireplaces with wood. There were no sidewalks, and few roads were paved. Churches had no heat in them. There were no public schools and only one private school. Most of the houses were of logs and generally only one room with no plumbing.*

Jared Carter, one of the first missionaries to Erie County, joined the Church in New York when he heard about the Book of Mormon from an anti-Mormon. Jared sought out the church and was baptized by Hyrum Smith about 20 Feb 1831. He stated in his journal that he was *so warmed by the spirit of God that he didn't feel the cold of the water on him at that winter season during the half mile walk to shelter and a change of clothing.* On 22 Sep 1831, Jared, accompanied by **Ebenezer Page**, embarked on a mission from Kirtland to the East. Two days later, Elder Carter recorded in his journal that *we baptized one and ordained Brother Read an Elder where Brother Read lived.* In his journal, Jared Carter described experiences one after another of being called to heal the sick or cast out devils. In one incident he healed a boy named Charles Craton of deafness while riding in Craton's oxen-drawn wagon. He also told of an experience where the rain divided over a congregation as they were preaching, allowing them to remain dry and continue the open-air meeting.

Missionaries, **Orson Hyde** and **Samuel H. Smith**, labored for one month in Erie County beginning 16 Feb 1832. Elders Hyde and Smith recorded that they held a meeting the first day and almost every day afterward to *large and attentive congregations and many were melted to tears--the Lord was with us. Five or six came forward and were baptized in Springfield including one Christian Preacher with whom they had labored in private diligently after meeting.* The missionaries stayed with Mr. Reed, Mr. Hartshorn and Mr. Barrs. Before leaving Springfield, they *ordained Brother Simmons an elder and instructed him in the knowledge of the kingdom and church.* Elders Hyde and Smith preached in every township and most of the villages along the Ridge Road across Erie County, finding *prospects poor* east of Springfield. In Fairview, Elder Carter said their testimony was *as idle words to the people.* They found the people in Mill Creek *very hard--seemingly no salvation for them.* In Wesleyville, they likewise found no success, despite preaching from house to house. In Harbor Creek, one was *almost persuaded to become a Christian.*

In North East, five meetings were held without success. As the Elders traveled and preached, they said: *[we] lifted up our warning voice by the spirit, and shook off the dust of our feet against almost all, and sealed many over to the day when the wrath of God shall be poured out.* Orson Hyde and Samuel H. Smith continued east and *built up four churches--one in Maine, two in Massachusetts, and one in Pennsylvania--baptized sixty.*

In Springfield, Elders Hyde and Smith met fellow-Elders, Carter and Page, returning from their mission to New York. The four missionaries held two meetings from Apr 27-May 2, 1832. Brother Simmons and two other members had fallen away from the Church in the two months since their baptism. The missionaries were able to reclaim two of the three and baptized eight more: Randall Wheeler, Andrew McAdams, Abigail Spencer, Experience Wheeler, Cornelia Cattles, Fanny Mariah Rudd, Phebe Thompson, and Cloa Rudd. The missionaries mentioned staying at Brother Heart's home and they mention a Brother Rudd. These brethren may have been among the unnamed individuals baptized earlier.

The Evening and Morning Star reported that **Hyrum and William Smith** returned home in December 1832 after laboring three weeks in the Springfield, Pennsylvania area. We do not have the names of the twenty three persons they baptized.

From Jan to April 1833, Elders **John F. Boynton** and **Evan M. Greene** served a mission in Erie County. The Journal History of the Church reported the following:

*Tuesday, January 15, Elder John F. Boynton and Evan M. Greene left Kirtland, Ohio on a mission to north-western Pennsylvania. In the evening of the following day, January 16, they preached in Ashtabula, Ashtabula, Ohio. On the 17th, they arrived in Springfield, Erie, Pennsylvania, in which vicinity **there was already a branch of the Church**; here they commenced a successful missionary labor, visited among the people, and held a number of meetings. On the 20, John F. Boynton baptized Rhoda Winegar, and on the 21, eight more were baptized: namely, Samuel T. Winegar, Alvin Hartshorn, Levi Allen, John Quincy, Horace Martin, John Winegar, Alvira Winegar, and Fanny Hall.*

After preaching in Conneaut, Crawford, Pennsylvania, and in other places, they went to Lodi in Girard, Erie, Pennsylvania on the 26. Here they preached on the 27 in the house of Mr. Matthews in Elk Creek, Erie, PA and baptized five; namely, Stephen Winchester, Nancy Winchester, Benjamin Winchester, Polly Waldo, and Wm. H. Sagers. That same day, in the evening, they preached in a school house in Conneaut, Erie, PA; and the next day in an empty school house in the same township. On Saturday, Feb 2, they held a meeting at Brother Winchesters and confirmed those who had been baptized.

On Sunday, Feb 3, they preached to a large congregation in Elk Creek. The next day, Feb 4, they went to Springfield where they met Wm. Smith and on the 5th they held a glorious meeting, at which Wm. Smith spoke in tongues with much power. Jane Fuller was baptized. The next day, Feb 6, they visited some of the Saints in Springfield and held a meeting in the school house in the evening. Elder Wm. Smith again spoke in tongues, and an attempted disturbance was successfully quelled. On the 7, they returned to Conneaut where they preached the following day in the evening in the school house and the people paid good attention. On Sunday Feb 10, they preached in the Salisbury school house in Conneaut. Here again, Wm. Smith spoke in tongues. In the evening of the 12, the brethren again preached in Elk Creek. On Wednesday, Feb 13, they preached in the Taylor settlement in the same neighborhood, where they were opposed by a Presbyterian. On the 14, they visited some Baptists who were very friendly and on the 15, held another meeting. On the 16, they were visited by Wm. F. Cahoon and Amos Hodge.

On Sunday, Feb 17, they held two meetings at Mr. Matthews at Elk Creek and baptized two; namely, Benjamin Wells and Eunice Wells. The following Tuesday a confirmation meeting was held for the purpose of confirming those who had been baptized the previous Sunday. The brethren administered the sacrament to the little branch, preached in the evening, and baptized eight persons; namely, John Sagers, Sery Sagers, Mary Wilcox, Moses Martin, Joel Parsons, Dennis Wells, Daniel Winchester, and Pauline Winchester. They preached again in the evening. On Thursday, Feb 21, William Smith started for Kirtland after the brethren had held a friendly conference at Bro. Winchesters. On Friday, Feb 22, Elders Boynton and Greene preached in the southern part of Elk Creek, and on Saturday, they preached in the Taylor settlement.

On Monday, Feb 25, at a meeting held at Bro. Winchesters, those baptized the previous week were confirmed and the sacrament was administered. They also held a public meeting in the evening. On Tuesday, Feb 26, they preached at a place two miles north and baptized Olive A. Vaun and John Vaun. Just before the meeting in the evening, writes Elder Greene, "a sister was taken in distress in the stomach and requested us to lay hands on her. We went out and prayed in order to know whether it was right for that people to have a sign. We received a witness to the effect that the woman should be healed, and then we went into the house and laid hands on her. We commanded the disease in the name of Jesus to depart from her and when I prayed that the cloud of darkness might be broken and I exhorted and contended for the gifts of the Church. Then, for the first time in this place, the Lord poured out his spirit in mighty power and gave the gift of tongues unto the people, and we had a glorious time. Some were convinced of the power of God.

The next morning, Feb 27, two others were baptized; namely, Robert Dimsey and Susannah Dimsey. In the evening, a solemn meeting was held at the house of Brother Winchester. On Thursday, the 28, the brethren met at the house of Brother Stephen Winchester and made preparations to go to Kirtland. They said good-bye to the Saints, and had a very good ... attended meeting in the evening in the Jackson settlement. On Friday, March 1, they held a meeting at Sherman's Corners and the following day, Saturday, March 2, they baptized three; namely, Lovicy Campbell, Jedediah M. Grant, Derby DeWolf.

Sunday, Mar 3, they held meetings in a school house and on Monday, Mar 4, they also met at the house of Brother Grants to confirm those who had been baptized. They had a splendid meeting of which they administered the sacrament and Wm. H. H. Sagers was ordained to the Lesser Priesthood (Priest). On Tuesday, Mar 6, in the evening, a prayer meeting was held and the saints remained together till a late hour and after the meeting was dismissed, the people were loth to part with each other and in continuing their fraternal conversation, one brother broke out in the gift of tongues. He was soon followed by another in the same gift; and then the spirit of interpretation came upon Elder Greene who gave a powerful exhortation to those present. Two of the neighbors presented themselves for baptism which ordinance was attended to the next day by Brother Sagers. The names of the candidates were Henrietta Sanford and Emily Harmon. The following day, Mar 7, they held another public meeting. On the 8, they held still another meeting.

On Sunday, Mar 10, they held a meeting at Brother Sagers and also had a prayer meeting in the evening. Elizabeth P. Cole was to be baptized. On the 11th, Brothers Boynton and Greene

left for Springfield and continued their labors together, holding meetings and visiting the people from house to house.

On Mar 17, Elder Greene baptized three; namely, James Joles, Nancy Joles, and Desdimony Sagers. On Thursday, Mar 21, the Elders held a meeting with the newly baptized Saints in the Elk Creek settlement and organized them into a branch of the church. Brother Boynton ordained Brother Robert Dimsey a Priest; Stephen Winchester, a Teacher; Wm H. H. Sagers, a Deacon, and appointed these brethren to watch over the branch in the fear of the Lord. In the evening, Alonzo Winchester and Lovicy Clark were baptized. A spirited meeting was also held that same evening. The next day, Friday, Mar 22, the brethren visited the Saints and bid them farewell and started on their return to Kirtland.

A branch of Conneaut Creek in Erie County was called "Mormon Run" because of the numerous baptisms performed there the early 1830s. Mormon Run is described in missionary journals *as entering the East branch of Conneaut Creek about 1 miles northeast of Albion. This spot was measured from old Albion* and is located on the current (1995) Albion Fairgrounds. There is one place along this creek where one can walk right down into the creek and near that area are two little rock dams that make a perfect font area. Although we cannot be positive this is the right spot, we are relatively certain it is.

President **Joseph Smith** and his companions arrived at Springfield, Pennsylvania on a surprise visit 6 Oct 1833. The saints were in meeting when the visiting brethren arrived. Elder Rigdon spoke to the congregation. *A large and attentive congregation assembled at Brother Rudd's in the evening, writes the Prophet, to whom we bore our testimony. Had a great congregation--paid good attention. O God, seal our testimony to their hearts. We continued at Springfield until Tuesday, the 8th.*

Orson Pratt accompanied by **Lyman Johnson**, arrived in Springfield on December 1, 1833 to visit the churches. They preached in Springfield and Elk Creek several times in the next ten days. On December 5, Elders Pratt and Johnson cut off "Bro. Tiler." (Possibly Andrew Tyler) The Elders attended a conference at Elk Creek on Wednesday, December 11, 1833, where Johnson ordained Amasa M. Lyman a High Priest. Asa Jeffers was excommunicated for *unchristian-like conduct and refusing to give up his credentials.* After the conference, the two elders journeyed to Silver Creek, Erie County, where they labored from Dec 16-24 holding eight meetings in the area.

At one of the meetings in Springfield, some of the members refused to partake of the sacrament because the elder who administered it did not obey the Word of Wisdom. Elder Johnson sided with the members *because the Elder was in transgression.* However, Elder Pratt argued that as long as the elder retained his license, *the Church was bound to receive the Supper under [his] administration.* The High Council met in Erie County, February 20, 1834, to decide the question. The decision of the council was: *No official member in this Church is worthy to hold an office, after having the Word of Wisdom properly taught him, and he, the official member, neglecting to comply with or obey it.*

Converts

We found some interesting accounts of conversion to the gospel in personal journals and histories of some Erie County converts:

Anna Barnes Harmon was baptized in Erie County on 29 May 1833. Anna's family remained non-members until they moved to Kirtland in the fall of 1837. Appleton M. Harmon, son of Jesse and Anna, recorded the following memories of his family's conversion in Erie County:

"Twas in our humble cottage that a servant of God in his pilgrimage on his holy errand had called to refresh his weary limbs and get a cooling draught who in turn imparted to us the word of the eternal life that was like a well of living water springing up into everlasting life that never failed. It worked upon us. It would not let us linger here but Zionward it bent our way. We left our pleasant home, to gather with the Saints of the Most High God to build up Zion and live forever pilgrims in the cause of Zion. We were persecuted for the sake of peace. I am here on the old farm (in Erie County, PA) on my way to a foreign land to carry this same gospel that has wrought this wonderful change in our family. These reflections passed across my mind and brought a sensation to me that might have been visible to any bystander.

I lingered here--I was loath to leave the spot
For well do I remember that this was my father's lot.
Where in my boyish days I reveled on the green
Now in riper years I ponder on the scene.
Strange has been my pilgrimage since I was here before
Now the bearer of a message unto a distant shore.

Another convert grew up to become the father of a future Prophet. Jedediah Morgan Grant was born 21 Feb 1816 at Windsor, Broome, NY to Joshua Grant and Athalia Howard. The Grants settled near Naples in Ontario county, NY in 1816. Prior to 1833, when Jeddy was seventeen, the family moved to Erie County Pennsylvania. Jedediah's sister, Theda, wrote of the "Mormonites" in this area: *In the winter of 1833, when I was twelve years of age, two Mormon missionaries came to my father's farm near Erie, Pennsylvania. They were Amasa Lyman and Orson Hyde. My father was deeply interested in this new religion and invited these missionaries to hold cottage meetings in our home. My mother lay sick with rheumatism and could hardly stand to have anyone touch her. I remember how tall Elder Lyman looked as he stood by the side of Mother's bed telling us of the gifts and blessings of the restored Gospel and that these blessings follow the believer, in this day, as they did in the days of the Savior. My mother asked why she could not be blessed as she had perfect faith that God could heal her. The elders placed their hands on her head and prayed for her recovery. Later that evening, my mother got up, dressed herself, went out of doors and climbed the stairs, which were on the outside of the house, and with my help, prepared a bed in which the elders slept that night."* Lyman and Hyde, working in company with John F. Boynton and Evan M. Greene, taught and baptized the Grant family and many of their friends in and around Erie. That same year the family moved to Chagrin, Ohio, some five miles from Kirtland. Shortly after their arrival in Ohio, Jeddy's nineteen year old sister, Caroline, met and fell in love with the Prophet, Joseph Smith's brother, William. They married in Kirtland in the fall of 1833. William Smith preached much in Erie County, even speaking in tongues. When the Prophet put out a call for the organization of Zion's Camp, an army to march to western Missouri to deliver it from the hostile Missouri gentiles, Jedediah, barely 18, eagerly volunteered.

In February 1835, Jedediah was ordained a seventy and selected as one of the First Quorum of Seventy- with the responsibility to go forth and serve as a missionary, teaching the restored gospel. Elder Jedediah M. Grant, traveling alone, stopped in Erie County, at his brother's house in

"Jarard" (Girard). He stayed for three days from about April 13, 1836, and then continued into New York "rejoicing." Jedediah left by boat to Buffalo, NY on 6 Jun 1836 on his third mission. In 1837 until October 1838, Jedediah went south into North Carolina teaching the gospel. The first elders to labor in Philadelphia were brothers, Jedediah and Joshua Grant, and Benjamin Winchester--another Erie convert. In 1842, Jedediah was called to preside over Church in Philadelphia; set apart as one of the first seven presidents on Dec. 2, 1845, at age 29. Married 1. Carolyn Van Dyke 2. Rachel Ivans with whom he became father of Heber J. Grant who later became a Prophet in the Church of Jesus Christ of Latter-day Saints. Came to Utah in 1847. Became First Mayor of Salt Lake City in 1851. Sustained as 2nd Counselor to Brigham Young on Apr 7, 1854.

Yet another convert, Hulda Dimeras Vaughn, was born on 11 Feb 1808 at Elizabethtown, Leeds, Ontario, Canada to Charles Vaughn and Elizabeth Morgan. Huldah married Alpheus Harmon in 1823 in Erie County where the missionaries taught them the gospel. Family records say that Alpheus and Hulda were baptized in 1834 in Kirtland, Ohio. From there they went to Sangamon County, Illinois, then Nauvoo. From Nauvoo, Alpheus went on a mission leaving Hulda and their nine children at home. From the Journal of Henry Bigler, we read: *About this time John C. Bennett apostatized and left the Church or more properly speaking he was cut off from the Church for adultery. As soon as this was done he became one of our most bitterest enemies. He left Nauvoo and commenced publishing all kinds of falsehoods against Joseph Smith and the Twelve Apostles and the Church in general, filling the minds of public with hatred against the Saints. A special conference was called by the Prophet, I think it was in August, 1842. At this conference a good many were called to go on missions and rebut Bennett's lies and disabuse the public mind.*

Among the number sent out I was sent. I started in company with my cousin Jacob G. Bigler and Josias W. Fleming. We traveled together as far as Fulton County, Illinois, preached a few times. Here we parted and I was left alone. I traveled a few miles and stopped and tried to get a place to preach. I did preach once or twice and offered to preach but to no purpose.

While I was here trying to open up an elder came along from Nauvoo, his name was Alpheus Harmon. We continued our journey together through Illinois into the north part of Indiana also to the edge of Michigan. We then turned our course into Ohio. Not meeting with any opportunity to preach and growing pretty late in the fall season, he concluded to return home (perhaps felt discouraged) to Nauvoo. So we shook hands and parted, leaving our blessings on each other, he for Nauvoo and I to continue alone once more on my mission. Poor man, I heard afterwards that he froze to death just before he reached home while crossing a prairie.

A nephew, Orsey Harmon, was with Alpheus on the prairie when they died. In November, 1842, Alpheus and Orsey were crossing the prairie on their return home. They were caught in a severe snow storm somewhere between Carthage and Nauvoo, Illinois attempting to drive a number of oxen. The snow drifts were so high the animals could no longer flounder through. Alpheus wrapped Orson as warmly as possible, then cut the animals loose to fend for themselves while Alpheus went on foot seeking help for his companion. When the storm was over, the 2 men were found frozen to death within a short distance from a house.

Appleton Milo Harmon says in his journal: *"It appears that my cousin, Orsa, had fallen first, being of a tender constitution, the howling blast had over come him as the snow was falling fast and the wind blew. My Uncle [Alpheus] had left his nephew and traveled some 12 or 14 miles toward Carthage, when being without chart or compass and as the snow fell so thick and fast that no landscape or mark or roads was visible. Lost and bewildered, over come with fatigue, hunger and cold, he fell asleep laying on his face, where he was found some 5 or 6 days after, frozen stiff, leaving a widow and seven small children to mourn the loss. The news of this reached me about Christmas."*

Jesse Harmon, says in his journal, *"In the fall of 1842 my brother, Alpheus, was called on a mission to Wisconsin. During the winter, my brother started for home and perished in a severe storm between Carthage and Nauvoo. Hearing the news of his death, I returned to Nauvoo."*

After the tragic death of Alpheus, Hulda married Loren Elias Bassett in 1844. He was a widower with children. At age 12, Hulda's son, Henry Martin Harmon, witnessed the martyrdom of the Prophet Joseph Smith. He later signed an affidavit that is in the Church Historian's office. I quote: *I, Henry M. Harmon aged 25, do solemnly declare and affirm, that on the 27th day of June 1844, I lived in Carthage, and was on the cupola of the court house in Carthage when the anti-mormon mob made their appearance from the West. I came down from the cupola and arrived at the jail about the time the mob did. They were painted black and mostly wore the uniform of the Warsaw Company. I saw the mob rush onto the guards who were stationed at the jail, when the guard fired upon them and a scuffle ensued. Some of the mob then went into the jail and I heard the reports of the guns fired inside. Joseph Smith came to the window, and then went back, and in a few moments appeared again, and leaped from the window, when the mob fired upon him and he fell dead. The fifer of the Warsaw Company came running into the jail yard as Joseph fell dead, and brandishing his fife over Joseph triumphantly exclaimed, "You were the ruination of my father. I will have revenge, and struck him several times on the head with his pewter fife, and fled with the company toward Warsaw. I then went home and told my mother what had happened and returned in a few minutes and saw Joseph who was set up against the well curb, and was informed that Stigall the jailor had set him up there. Stigall appeared very much alarmed, his room in the lower part of the jail being fired into through the window, and his wife only just escaped being shot. I have examined many times where the ball lodged in the wall after being shot through the window. In company with my mother and step-father we moved that even 3 miles out of Carthage to our farm. My mother did not wish to go, but my step-father insisted. Next day with my brother, I returned to Carthage and found the town almost entirely vacated.*

In 1850, the Hulda and Loren Bassett were in Hancock, Illinois. They moved to Floyd County, Iowa; then went to Utah in 1863 in the Alvas H. Patterson Company. Loren became converted to the Mormon religion while traveling with a Mormon wagon train. The history of Providence, Utah, reads: *The early residents of Providence had no professional medical attention. Out of necessity, gentle, helpful, courageous women, without a lesson in nursing assumed the medical care of the community. They were women with families of their own, but with a natural talent for nursing and a sincere and tender devotion to the sick. These women were loved and trusted. The first of these nurses was "Grandma Bassett".* She was remembered as being "one with a real good hand with the sick". Hulda Bassett and Elizabeth Bullock were sustained as doctors on 27 April 1868." On 12 Oct 1886, Huldah died in Providence Utah and the following obituary was printed

in the Deseret News: *Deaths: Bassett--At Clarkston, Cache County, 12 Oct 1886 of paralysis: Huldah Bassett born Feb 11, 1808 at Quebec, Canada, baptized at Kirtland, Ohio in 1832, moved to Nauvoo in 1841 with her husband, Alpheus Harmon. He went on a mission and on his way home was froze to death, leaving her with nine small children. She was an eye witness to the martyrdom of Joseph and Hyrum, her home being then in Carthage. She afterwards married Lorin Bassett by whom she had four children. She arrived in Utah in 1863. She was the mother of 13 children, grandmother of 67 and great grandmother of 32. She was full of zeal for the Latter-day work.*

My cousin, Pamela Johnson, and I have compiled the history tidbits we have discovered into a book we call Rediscovering History; Mormons in Erie County, Pennsylvania 1832-33. Copies are available from the author. Following is a list of known converts. We would be interested in hearing from descendants of any of these people or of any additional converts from Erie County. (e-mail: BeanC@Ricks.com)

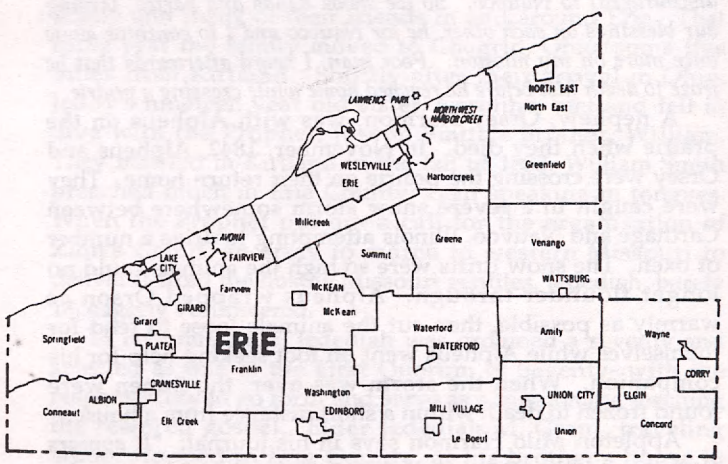
Cheryl Harmon Bean is the Receptionist at the Ricks College Student Health Center. She is a 1993 "Granny Graduate" of Ricks with a secretarial certificate. She does genealogical research on a personal and professional basis; writes family history books; teaches Genealogical Research Techniques in continuing education classes; and lectures at the Ricks College Homemaking Conference in June each year (Parenting the Prodigal and Anchors in Adversity) as well as at stake and ward Relief Societies around the Valley. Cheryl is a single parent and is the mother of eight children; three of whom are still at home. She also has foster children and ten grandchildren. She teaches the CTR-7s in the St. Anthony 3rd Ward Primary.

Erie County, Pennsylvania Mormon Converts 1832-33 as identified by Cheryl Harmon Bean and Pamela Call Johnson

Levi Allen
Phebe Northup Allen
Aseneth Baldwin
Blake Baldwin
Henry Baldwin
Lovicy Campbell
Gideon Canfield
Almira Harmon Carr
Cornelia Cattles
Lovicy Clark
Amy Sweet Clothier
Ira Clothier
Paylona Clothier
Elizabeth P. Cole
Phidelia Coltrin
Charles Craton
Theopoles Cross
Henry Deighton
Polly Derby
Brother J. DeWolf
Deborah DeWolf
Robert W. Dimsey
Susannah Dimsey
Jane Fuller
Athalia Grant
Jedediah M. Grant
Joshua Grant
Fanny Hall
Elam Martin Hanchett
Alpheus Harmon
Appleton Milo Harmon
Anna Barnes Harmon
Elizabeth Harmon
Emily Harmon
Huldah Vaughn Harmon
Jesse Perce Harmon
Lucinda Harmon
Nehemiah Harmon
Oliver Harmon
Orilla Harmon
Orsey Harmon
Sophronia Harmon
Lucy Haynes Harper
Joseph Hart
Alvin Hartshorn
Joseph Hartshorn
Amos Hodges
Hannah Holembeck
Sophia Houghton
Asa Jeffers
Clarissa Joles
James Joles
Nancy Joles
Louisa Lord
Lydia Low
Horace Martin
Moses Martin
Abigail Mathews
Marcus Matthews
Andrew McAdams
Elam Mecham
Joshua Mecham
Lucina Harmon Mecham
Justus Morse
Betsy Towne Morse
James Parshal
Margaret Parshal
Sally Parshal
William Parshal
Joel Parson
Mary Preston

Malinda Priest
John Quincy
John Reed
Uriah Roundy
Shadrack Roundy
Chloe Hills Rudd
Erastus Rudd
Fanny Mariah Rudd
Amanda Sagers
Desdimony Sagers
John Sagers
Mariah Sagers Fisk
Sarah Sagers
William H. H. Sagers
Henrietta Sanford
Jazrill Sanford
Patience Sawdey Sanford
William Sanford
Horace Simmons
John Sawdey
David Solsbery
John Solsbery
Abigail Wheeler Spencer
Phebe Hobart Thompson
William Thompson
Andrew Tyler
Daniel Tyler
Marshal Turner
Polly Turner
Andrews Tyler
Clarissa Tyler
Daniel Tyler
Nathaniel Tyler
Charles Vaun
Daniel Vaun
Joel Vaun
John Vaun
Nancy Vaun
Olive A. Vaun
Polly Waldo
Benjamin Wells
Dinnis Wells
Eunice Sawdey Wells
Experience Alden Wheeler
Randall Wheeler
Benjamin Wilcox
Mary Wilcox
Benjamin Winchester
Daniel Winchester
Nancy Winchester
Pauline Winchester
Stephen Winchester
Alonzo Winchester.
Alvira Winegar
John Winegar
Rhoda Cummins Winegar
Samuel T. Winegar
Lucien Woodworth
Phebe Woodworth
Eliza Wright

Pennsylvania Townships



Internet Research and Development

by
Daris Howard
Mathematics Department

Each year I try to write a paper indicating the things that have gone on in the way of Internet research and development. I would like once again to present some of the issues that we have tried to deal with this past year as well as try to give some idea of what we are trying to look forward to in the future.

Student E-mail:

During the summer of 1995 the main emphasis was to put together a server that would handle student E-mail. It had been proposed to allow all students to have E-mail by Fall of 1995 but the administration decided that it might be useful to have a test year first. It was determined the server costs to give every student e-mail, would be in the range of about $10,000 for more disk space plus $15,000 more if we wanted the E-mail to be on its own server. It was decided to allow students from Computer Science, Computer Information Systems, and Teachers Education to have E-mail access and also allow a group of general students that would apply for that privilege. My task was to put the software together on the server and get it working in correlation with a very simple program on the PC and the MAC. We wanted the system to match Internet protocols so it wouldn't matter whether a student used a PC or MAC or both, and it wouldn't matter where on campus they accessed it as long as it had the Internet protocols (TCP/IP). I also wrote a brief information sheet on how to use and configure the system.

Getting the server up and running was more of a problem than I had envisioned. The tools that were out on the Internet for building the server had to be changed a bit to match our machines. Also, the security didn't match our security scheme very well. This entailed many hours of programming and testing to get it up and running. We also wanted to make it so the students could easily change their passwords right from their E-mail. The E-mail package had it built in but there was nothing on the server to accept it. This had to be written from scratch. Next we had to have some programs that could generate hundreds of accounts automatically instead of entering them one at a time by hand. This was also a very time consuming job.

We analyzed some things that we wanted to be different from the faculty system. On the faculty system a person has the ability to have as much mail as they want for as long as they want. This tends to lend itself to a problem of running out of disk space. We made the determination to limit the students to 1 meg of disk space. We also made the decision that E-mail messages would only stay on the server for a certain amount of days (we chose 7). It required a lot of time to write a program that would go through every E-mail account each night and throw away any E-mail message that was past the 7 days allowed, leaving the others intact.

I can't say we had all the bugs worked out by fall when the students showed up but we were on our way. With student feedback it wasn't long before we did have it running quite smoothly. The number of general students was limited to 40 during fall semester. This semester, winter '96, E-mail has been given to all that applied.

An E-mail committee met this fall, chaired by Chuck Cartmill, to ponder some of the issues that had been raised by this test. It was generally agreed that students should have E-mail but how to give them access and maintain the system were the major questions. There were also many questions regarding legal and moral issues. Let me give an example. This last fall we had a student that mailed a dirty joke (not his own) to some friends. In this letter he typed at the bottom that the joke "Originated from Ricks College". He also made it a chain letter such that a person would want to send it to a certain amount of friends if he wanted to have good luck. We had responses back from people who knew of the church and were disappointed in this kind of story. I was also swamped with E-mail from administrators who complained about it going through their systems, taking up valuable resources. There were also what appeared to be students running businesses on the student E-mail system and other kinds of things that were questionable.

Probably the major hardware issues relate to the computers the students will use for access. The labs that had E-mail soon found many of their machines taken up with sending and getting E-mail instead of writing research papers, programming, or doing the main things that they were to be used for. This raised the question of having a separate lab just for E-mail, and possibly other Internet access. The problem that this issue raised was who and what budget would be responsible for repair, upkeep, and replacement. I don't want to sound totally negative because most of the feedback was very positive, but we did learn a lot.

So, what is the future of student E-mail? The E-mail Committee proposed that we must make E-mail available to all students even if it has to be phased in gradually. We need to create some policies governing use. We also feel we need at least 30 machines available for student use, separate from present labs. These machines could be surplus 386 machines. We could not address all legal ramifications nor who would be in charge of upkeep on these machines. We proposed an automated system where the students would be able to sit down and enter their ID. After verification, the machine would generate an E-mail account for the student. (I might note that a lot of this has been built as well. I am presently waiting for President's Staff approval so I can continue, as well as for some funding.) We proposed the possibility of a kind of "student help desk" to handle the students questions. At this point the approval has not been given but I feel at least part of it will be approved and students will have E-mail access next year if they want it.

Internet World Wide Web Access:

Many of you call this Netscape access. There are actually quite a few things that occurred here. **New World Wide Web Proxy:**

First, there were a lot of complaints, from those who have been using the World Wide Web, about entering their passwords over and over. This was caused by a difference in protocols between the servers and the client. As of January this year I got a new proxy server package and took

the time to get it up and running. It is the Netscape proxy and matches the protocols much better. One challenge it imposes is that most of the other browsers now do not work with it. It is, however, much faster and also requires you to enter your password only once. It is much more important that a person walking away from their machine shut down their Netscape browser. If they don't and they have gone off campus, their password has been recorded. Thus anyone else sitting down to that machine can go anywhere not blocked by the proxy, recording their time and usage as if they were the person who had originally signed on. All of the programs for things like changing passwords, etc. have got to be rewritten; I hope everyone will be patient as we make this changeover.

Analysis of Usage:

The second issue here is in relation to analysis of the Internet usage. I wrote some programs that go through the logs and can give a breakdown of usage by user. This gave us some idea as to student usage by class as well as by individual, and faculty usage by individual. This made it possible for the administration as well as myself to try and get a handle on how the system was being used and give us some idea of where we should take it in the future. We see some very interesting results. Faculty that used the World Wide Web would have usage that ranged from about 1-60 megabytes of transfer in a semester, the average being around 8. Students were in the range from about 3-60 megabytes with a high of 150 megabytes of transfer. To give you a feel for this, I had 40 megabytes of transfer, and very often I would get maybe 3 different sessions going and go to class letting the computer continue to work. This could give rise to a whole discussion about wasted time on or off of work hours which I don't want to address here.

Student Usage:

The third issue relates to a meeting that President Bennion called the day before Thanksgiving as well as an issue regarding a better understanding of usage. We discussed many Internet issues including whether students should have access to the World Wide Web. Scott Bergstrom brought up the issue of how much time students spent on the Internet and how much it took away from their other work. He said that it was found in most universities that many students spent a great deal of time their freshman and sophomore years to the detriment of their grades, but it tapered off in their junior and senior years. This made me wonder if the problem was just one of curiosity and would show itself during the junior and senior year if they never used the Internet until then. I myself have had two of my very brightest students flunk out of Ricks because of spending too much time on the Internet. Because of these problems, I proposed the possibility of students having an "Internet Budget" where they would be given a certain amount of download bytes for the semester. When the student had exceeded those bytes his/her account would be terminated. I programmed through much of Christmas break and well into this semester, getting it up and running about the second week of the semester. I was given the go ahead to put it on in a test phase. I made it so that each student could have a different amount. We gave the students in each class the average their class used the semester before. I can't tell you much about the feedback on this yet other than to say that there are students who are doing some special projects and exceeded their budget within the first week. I have increased these as needed. We will hopefully get some feedback from the teachers at the end of the semester. I have proposed that we might possibly give every student on campus a certain amount of time and force them to live within that budget which could be adjusted if they need more for a given class.

Department/Division and Other Home Pages:

Issue four is building and management of "home pages" on and off campus. This is a touchy subject on many sides. There are those who would like any student and any employee to be able to put up their own home page, put up software for down load, etc. The other extreme might be to have a single home page controlled and strongly monitored by Information Services and Public Relations. We have an HTML (Hyper Text Markup Language) Committee that is trying to get a campus policy in place so we can move ahead on this issue. Basically the proposal here is to make it possible to have a home page for departments, divisions, athletics, etc. There will be an employee representative that is responsible for the content for that set of documents. Before they would be put out for viewing off campus, they would have to get their document on the server and run through them, checking all links and matching a certain format that the college will set out. Once they have it finished they would notify Public Relations and Public Relations would check it. Once that passed, it would be connected where it belongs on the main campus home page. There will be two main servers plus a few personal ones in some of the departments. The personal ones and one of the main servers would only be for internal (Intranet) use. The other server would be for off campus (Internet) usage as well. The committee spent a lot of time looking at other sites and saw great abuse of many things. Just a simple thing like someone using a logo (yes, including the church logo used by many B.Y.U. students) is an illegal violation of copyright. There are also those who post pictures of friends, relatives, roommates, teammates, etc. without permission which violates the right to privacy act. There are also legal ramifications. If something inappropriate or offensive is put up for others to read it could bring about legal action against the college.

Increased Usage:

There was a great surge in usage of the Internet this year. This is probably due to many things. One, it was promoted more on campus. Two, there is a great deal more talk about it in the media. We are hoping to have the equipment in place very soon that will make it possible for us to support all faculty, staff, administration, and students on the Internet. Right now some of the things that hold us back is our Internet connection. It is a 56 Kilobyte per second line and we need to upgrade it to a T-1 which would be basically 27 times faster. We are hoping that will be done this summer. We also have some servers that need to be upgraded to handle the extra load.

Pornography And Other Standards Issues:

One ever present, and not fun to deal with issue, is that of pornography and standards. We can monitor everything that comes onto campus by way of the Internet. Right now the logs on the WWW traffic can tell us who is accessing the information, what machine he/she is using, the time spent in

download, the site the person accessed, the document, the number of bytes, the time, the date, and many other things. We are keeping these logs backed up to tape so we can even refer to previous years files if so desired. We do not necessarily go through each log minutely but if, for example, Jim Session calls and wants to check and see if there is a violation I can send the files and he can see if someone is getting inappropriate material. Another thing that we do is put blocks and redirects in the proxy. Thus if a person tries to go to "Playboy" it will block it. A lot of this was discussed in the article last year. One difference is that it is possible in the near future that we will see the ability to subscribe to a service that we could download monthly which would automatically block the types of things we didn't want. Right now we obviously have the problem of not knowing all the inappropriate sites. That responsibility would then be paid for to a subscription service.

I might mention that I have had many people say, "We should teach correct principles and let them govern themselves," and that we should not even have blocking or tracking. I think that is a bit naive. If we applied that to all realms, we really wouldn't need the Dean of Students Office. It is very often the fences that make it so there is a second thought before the line is crossed. Anyway, I must say this is an issue that is not always the most pleasant and one that I probably receive as much criticism as any from both off campus and on.

Some Other Smaller Issues:

Ricks will have two new home pages instead of one. One of these will be mostly for us on campus to connect to the outside world. This "On Campus Home Page" will give us information about things like Media Services, Help Desk Info, etc. that is specific to our needs here at Ricks. The other will be an "Off Campus Home Page" and will be designed to give the outside world a look at Ricks. The "On Campus Home Page" will have some links to information in the "Off Campus Home Page" since there will be information there that we will want and to make sure there is no duplication. The "On Campus Home Page" is the one most of you Internet users already see come up, and you will come onto it and begin to see some changes. The design was by Scott Franson in the Art Department, and the links behind it are by myself. Don't expect all links to work yet since not all the documents they link to are there. We would appreciate comments and suggestions. Again, we are hoping to move a lot of the design and creation of home pages to the department and division level.

Another item of interest involves some things that seem quite simple but take a tremendous amount of programming work. We are always asked for information about employees and students from off campus sources. I have been working hard for some time to provide that. I feel, however, that a person should be able to determine what is shown and what is not shown about himself/herself. Thus I have put together a tool that allows the users who have an Internet account to put information about themselves out into a database on the

Internet. You have the ability to mark what you want shown on campus and what you want shown off campus and only those things will show accordingly.

There are many other things that seem quite small and simple from the user's perspective that in fact take a tremendous amount of programming time.

Other Internet Items Ahead For Ricks:

Finally I would like to address some prospects for the future.

Steve Davis has done a lot of work to put Internet forms together to allow students to apply from off campus using the World Wide Web. This would make it possible to have the data entered into the AS400 without someone having to type it in. The student would type it into the form and transmit it, and computers would automatically download it directly to the machines. Unfortunately the hard work he has done is only the beginning. There has to be programs written to accept the data and transfer it.

There are other things I am working on, including serving more of the AS400 data both for faculty use and for student use. All of these things require a great deal of time because programs specific to our needs have to be written.

Also, I have created an Internet Discussion Group where people can send me questions, comments, suggestions, and helpful criticism. I try to send out information once or twice a week. At first I was just posting all messages to the list as they came but everyone's E-mail was ringing off the hook, including mine. Now I gather the comments and try to do a form of an editorial. Feel free to join our discussion group, learning from each others comments and questions. If you want to join just send me an e-mail message.

One Last Point Of Interest:

During the summer of 1995 we also tested connection to the college system from off campus. This is very limited due to a limit in equipment and lines, but we wanted to know what kind of problems we would face. Besides the problems with equipment, we found that basically anything that followed an Internet protocol would work for us. That means the student E-mail, the Netscape, etc. However, we ran into snags on parts of the GroupWise products. Basically GroupWise has their own protocols. If the transfer was from off campus into Novell networks, there is software that would make that transition; but into the Pathworks area there was no software to make the transition. We are looking to work toward a more standard Network platform, and as we have weighed all the odds, the scale seems to tip in the direction of NT. NT has many advantages when it comes to Internet. This will probably take care of a lot of problems for off campus connection. Still, don't plan to connect too soon because there are a lot of challenges to deal with upgrading equipment.

Bronko, The Mick, and Nolan Ryan:

The Rhetorical Construction of Sports Heroes for Three Generations

by
Dale Hillier
KRIC-FM

Ron Weekes
Department of Communication

A paper presented at the Western States Communication Association Annual Convention
Pasadena, California
February 20, 1996

Whether we read of Jason and his powerful quest for the golden fleece, watch in complete amazement at the acrobatics of Michael Jordan, or even study the life of a great military general, we are a society in constant need of a hero. In fact, many scholars have studied this cultural phenomenon and have formulated theories that attempt to describe the role of the hero in the modern world. For example, sociologist Orrin Klapp and historian Daniel Boorstin have suggested types and characteristics of heroes both ancient and modern. (Trujillo, 56-57) Further, Carl Jung has described the psychological need for humans to form and identify with heroes. Finally, classical scholar Joseph Campbell, in his landmark study The Hero with a Thousand Faces, constructs an archetypal model by which every literary or historical hero can be evaluated and viewed. The mass media has also understood this human need and has attempted to create and utilize the hero for their own commercial interests. Clearly, society has an insatiable need for heroes.

This essay will attempt to analyze the rhetorical dimensions of the creation of the societal hero through the case studies of sport icons for three different generations: Bronko Nagurski, the greatest football player of the 1920s and 1930s; Mickey Mantle, the most popular baseball player of the 1950s and 1960s; and Nolan Ryan, baseball's greatest record holder and cultural hero in the 1970s and 1980s. More specifically, we will evaluate how Nagurski, Mantle, and Ryan can be considered as heroic icons through both Barry Brummett's theories on cultural artifacts and Joseph Campbell's classical model of the hero.

Brummett's Theories on Cultural Artifacts

In describing the creation and transformation of an athlete into a rhetorical artifact of popular culture, it is necessary to determine how the sports star becomes charged with "meaning." This portion of the essay will evaluate rhetorical artifacts in general, and discuss whether Nagurski, Mantle, and Ryan can be considered as such.

In his book Rhetoric in Popular Culture (1994), Barry Brummett begins by describing the concept of a sign. He suggests that although "everything in your experience, every object, action, or event, is a sign," such a statement is so broad "that it does not go far enough to help us to understand how the things . . . in everyday life influence us." (Brummett, 11) Thus, we must concern ourselves with subsets of signs, or artifacts. Brummett defines an artifact as having one or more characteristics: 1) an action, event, or object perceived as a unified whole, 2) having widely shared meanings, and 3) manifesting group identifications to us.

An Action, Event, or Object Perceived as a Unified Whole

In evaluating the primary characteristic of an artifact, Brummett describes that "perceptions of a whole 'thing' or 'happening' that has some identity or character in itself make an artifact." (12) Although Nagurski, Mantle, and Ryan are complex figures, undoubtedly they each have their own distinct "identity," "character" and are concrete, physical beings that can be perceived as "a unified whole."

Having Widely Shared Meanings

Brummett suggests that an artifact is a sign that has become charged with meaning, "just like a battery that has been charged with energy." (13) Again, Nagurski, Mantle, and Ryan each provide valid examples of this characteristic. Although all individuals communicate various meanings to friends, family, and themselves, those meanings are not typically understood and/or experienced by the general population of a society. However, Bronko, the Mick, and Ryan have become cultural icons due to their popularity both on the field and off. For example, although these athletes became popular as they excelled in their respective sports, they became even more popular (and charged with even more meaning) as the media described their personal lives, families, and values. Most notably, Nolan Ryan has become popular among "non-sport" fans as he has taken an active stance in commercial ventures within the last several years. Although he originally became identified with the teams that he played with professionally, he has also become associated (and perhaps more well-known) with the products and lifestyles that he has endorsed. Thus, Ryan, Mantle, and Nagurski can be considered as rhetorical artifacts as they have become infused with widely shared meanings in popular culture.

Manifesting Group Identifications

Finally, Brummett identifies artifacts as signs that characterize particular groups of people. In other words, "there are objects, actions, and events that manifest those groups to us, that make the groups real, particular, and material." (Brummett, 15) Obviously, Nolan Ryan, Mickey Mantle and Bronko Nagurski each identify with the general group of professional athletes. However, it is interesting to note that they are also identified by and within other groups. Thus, they become "sites of struggle" as it were. For example, in an article on Bronko Nagurski, Kevin Britz not only describes Bronko's identity as a football player, but he also describes his life as a frontier man and farmer who chose to return to Minnesota at the end of each football season rather than residing in the city of Chicago. Indeed, "Minnesotans saw him as a reaffirmation of the characteristics that exemplified the state" as he "transcended the sport of football entirely because of his nature." (Britz 124)

Similarly, Nolan Ryan has become identified with multiple groups. Not only is Ryan identified as "the embodiment of male athleticism," (Trujillo, 98) he is also identified as a "family patriarch," (101) a Texas cowboy, and as a sex symbol. Consequently, the "meanings" that we attach to Nolan Ryan and Bronko Nagurski become even more elusive as these athletes attach themselves to multiple groups and thus become cultural artifacts. Thus, because Nagurski, Mantle, and Ryan embody the three primary characteristics of cultural artifacts, they can consequently be considered as such.

Joseph Campbell's Model of the Hero

Since Nagurski, Mantle and Ryan have thus been established as cultural artifacts, we will now evaluate these athletes in relation to their status as societal heroes. In his book The Meaning of Nolan Ryan, author Nick Trujillo devotes an entire chapter to the concept of the hero in contemporary society and Nolan Ryan's role as such. In his study, Trujillo identifies heroes by such characteristics as the accomplishment of great deeds, the embodiment of the cultural ideals of a given society, etc. Because Ryan symbolized these characteristics, Trujillo argues, he can accurately be considered as a societal hero. As well, it is by the same standards that Bronko Nagurski and Mickey Mantle can be considered as such.

However, classical scholar Joseph Campbell provides another method of identifying, observing, and evaluating heroes. Essentially, Campbell has constructed a model by which nearly all heroic beings (regardless of time or place) can be evaluated. The remainder of this essay will examine Ryan, Mantle and Nagurski through Campbell's model.

Campbell's model represents "the standard path of the mythological adventure of the hero." (Campbell, 30) In other words, Campbell's model depicts the archetypal pattern through which every hero can be observed. This pattern, which Campbell appropriately titles the monomythic hero quest, is given the following description.

> A hero ventures forth from the world of common day into a region of supernatural wonder: fabulous forces are there encountered and a decisive victory is won: the hero comes back from this mysterious adventure with the power to bestow boons on his fellow man. (30)

Campbell describes that nearly every heroic myth, regardless of culture or time, follows a distinct pattern. That is, every hero is born into the world with particular "gifts" and must follow the "formula represented in the rites of passage: separation--initiation--return." (30) For example, both Jason and Aeneas are classical heroes who, endowed with superhuman skills, venture into the world, encounter wicked enemies and wild beasts, accomplish great tasks, and thus become worthy to return home as a hero.

It is through such a model that the three athletes can also be viewed and deemed as archetypal heroes. For example, Trujillo describes the natural talents that the young Ryan exhibited as "early coverage . . . focused on the unique ability of this young Texan to throw the ball hard" (Trujillo 14). However, despite this "gift," Trujillo relates both the physical and emotional "separation" that Ryan encounters as he leaves his home in Alvin, Texas to become a New York Met (1966-71). Indeed, this alienation was emphasized by the media as Jack Lang of the "New York Daily News" suggested "that the trade that sent Nolan to California was motivated by the 'fact' that 'Ryan personally requested a trade because--says a Mets insider--he feared for the safety of his lovely wife in New York" (102).

It is also at this time (and as a California Angel), that Nolan undergoes his "initiation" in order to prove himself a hero. This initiation comes in the form of a lack of pitching control (wildness), "blisters on his fingers," "Army reserve duty," and "his father's illness and death" (13).

However, by overcoming his pitching inconsistencies and off-field personal problems, Ryan becomes worthy to make a triumphal "return" home to Texas as a Houston Astro (1980-88) and Texas Ranger (1989-93). Indeed, Ryan's journey home has Homeric allusions as Trujillo describes this return as an "Odyssey":

> As the media contrasted Ryan's raw ability to throw hard with his inability to overcome his wildness, they set the stage for his baseball odyssey and for the ultimate celebration of him as sports hero and celebrity. (Trujillo, 14)

Like Nolan Ryan, the football career and media coverage of Bronko Nagurski also provide an example of Campbell's monomythic heroic quest. According to legend, Bronko's "gifts" were first observed by University of Minnesota football coach Clarence "Doc" Spears as he "discovered" the young football player when "he came upon a young man (Nagurski) pushing a plow without the aid of a horse" (Britz, 104). Bronko was compared to the larger than life American folk hero Paul Bunyan (121), and was reported to have "tackled a Model T parked on the sidelines," as well as a police horse (115). Finally, a news story from the Minnesota-Wisconsin game depicts the mythological tone of reporting that would follow Nagurski throughout his career:

> Big Nagurski jumped over the line for touchdown, and he came down near St. Paul. Wisconsin will take it up with the rules committee so that he has to stay in the state he is playing in on his plunges. (106)

In addition to demonstrating his seemingly natural athletic gifts, Bronko also undergoes a "separation." Having been raised in a small, frontier community (International Falls, Minnesota), he, too makes a physical "departure" as he signs a contract to play for the Chicago Bears of the National Football League. This "separation" is particularly evident after the 1943 divisional championship game when Nagurski was proclaimed by the press as the hero of the game. Rather than proclaiming his intentions of going to the "Disney World of-the-day," Bronko shrugged off reporters and quietly "returned to his hometown in International Falls, Minnesota, to take care of his farm before the upcoming championship game" (102).

Although Nagurski never seems to be defeated on the gridiron, he does, however, undergo an emotional "initiation" due to his financial struggles off the field. These financial problems eventually force him to take up a second career in professional wrestling. Finally, having proved himself, Nagurski returns home to the backwoods of Minnesota as a mythical hero.

Similar to Ryan and Nagurski, Mickey Mantle also fits Campbell's heroic model of gifts, separation, initiation, and victory. Mantle's heroic gifts seemed evident at birth as his father raised Mickey to "be the greatest baseball player ever" (Rogers and Sherrington, ESPNet, 1995). The Mick's father furthered this foreordination by naming his son after Hall of Fame catcher, Mickey Cochrane. Power (ESPNet, 1995) writes that, as a youth, Mickey "learned how to switch hit by standing in front of the old tin shed near his house, his father

pitching to him right-handed and his grandfather pitching to him left-handed." In an effort to allow Mickey to hit as hard as he wanted, his batting practice consisted of using tennis balls so that he would not damage their house.

Although foreordained to greatness due to his athletic prowess, Mantle faces both physical and emotional separation throughout his career. His humble beginnings began when he was born in a two-room shack on a tenant farm in Spavinaw, Oklahoma. Shortly thereafter, his father moved the family to Commerce where he could find work in the zinc mines of northeastern Oklahoma.

When Mantle signed with the New York Yankees in 1951 at the age of nineteen, he bypassed playing Triple A ball and went straight to New York. During his rookie season, Mantle could not handle major league pitching and went into a batting slump. The Yankee organization sent him down to their farm team in Kansas City. To his disappointment, his batting slump continued. Discouraged, Mantle talked of quitting. However, his father convinced him to continue playing. Kindred (1995) writes that "six weeks later, in time for the pennant race and his first World Series, Mickey Mantle returned to the Yankees for good." (6) Thus, Mantle's physical move from the small town of Commerce, Oklahoma to New York City and the emotional struggles of his rookie season both suggest a "separation."

Mantle also undergoes an "initiation" through the many conflicts that plagued him throughout his baseball career. Had it not been for "injury and the effects of alcohol abuse late in his career" (Rogers and Sherrington, ESPNet), Mantle might have realized his father's dream of being the greatest baseball player ever. Mantle's struggles to overcome his conflicts began at birth. Conlin (ESPNet, 1995) writes:

> Genetically flawed by the tendency toward lymphatic cancer that killed his father and uncles around age 40, which killed a son, he was compensated with brute strength, amazing agility and breathtaking speed. Not to mention Huck Finn looks.

Although he seemed immune to the genetic deformities of his family, a football injury to Mickey's left shin triggered a degenerative bone disease called osteomyelitis, which would plague him his entire career.

Teammate Tony Kubek stated that "by 1961, there seldom was a day when something wasn't bothering Mickey. It wasn't unusual for him to need help getting out of a cab because his legs were bothering him" (Rogers and Sherrington). Kubek continues that "to fully appreciate Mickey, you would have to see him after a ball game with his legs wrapped from the thigh to the ankle" (Rogers and Sherrington). Another teammate, Bobby Richardson, echoes Kubek's remarks saying that "he was so great, and yet he was injured so much. He constantly played with pain, and he excelled despite it" (Derrick, ESPNet, 1995). One sportswriter shortly after Mantle's passing described his heroic conflicts best by saying that "Mickey Mantle's life was a Faustian bargain. He was granted great talent, but the price was the torment and the ruin of self-destruction" (Lyon, ESPNet, 1995).

However, like Nagurski and Ryan, Mantle was able to overcome his "initiation" in order to make a heroic return home. Each year, in his hometown of Commerce, Oklahoma, the Mickey Mantle Charity Classic at the Commerce golf course is held for Mickey's favorite charity, the Make-A-Wish Foundation. Mantle even had a new Little League diamond built for the youth of Commerce. Commerce Postmaster Bill Brumley says "he gave us the bragging rights. It's great when you have a hero in your own back yard. All you do is say you're from Commerce, and people will say 'Commerce? Oh, Mickey Mantle!'" (Power) Thus, Nolan Ryan, Bronko Nagurski, and Mickey Mantle, through Joseph Campbell's model, can accurately be elevated to heroic status.

By evaluating these sports heroes as cultural artifacts through Brummett's theories, and having observed them through the lens of Joseph Campbell's model, one can speculate on the impact of the present-day and future sport hero. More importantly, one can also evaluate the impact and methods of the national media in the construction of cultural icons.

It is our opinion that the media and American society at large will continue to construct cultural heroes. Just as Jung and Campbell observed, heroes have existed in every culture and historical period. However, in this modern era, it would appear that athletes have largely replaced the politicians, artists, and religious leaders that were once considered our primary cultural icons.

On an individual level, there appears to be a psychological need for heroes, as is evidenced by the fact that Bronko, the Mick, and Nolan Ryan together represent three generations of hero worship in American culture. Commercially, the construction of heroes is big business, as evidenced by the many products and services that modern athletes endorse.

It is important to note that if Campbell's theories are indeed correct, future gifted athletes will undoubtedly be elevated and depicted as heroes through the cycle of the monomythic heroic model. Thus, through the theories of Brummett and Campbell, Bronko Nagurski, Mickey Mantle, and Nolan Ryan can be considered genuine cultural artifacts that can be viewed as cultural heroes.

Works Cited

Britz, K. (1993). Of Football and Frontiers: The Meaning of Bronko Nagurski. *Journal of Sport History*, 20 (2), 101-126.

Brummett, B. (1994). *Rhetoric in Popular Culture.* New York: St. Martin's Press.

Campbell, J. (1949). *The Hero With a Thousand Faces.* Princeton, NJ: Princeton University Press.

Conlin, B. "Mantle Came To Us With The Presumption of Innocence." http://www.espnet.sportszone.com/features/mantle.html (25 Aug 1995).

Derrick, M. "Richardson to Offer Final Farewell at Funeral." http://www.espnet.sportszone.com/features/mantle.html (25 Aug 1995).

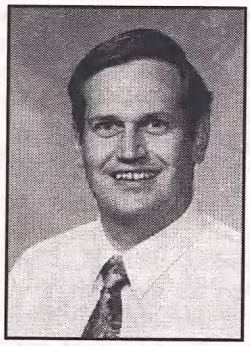
Kindred, D. (1995, August 21). Like a Damn Baseball Machine. *Sporting News*, p. 6.

Lyon, B. "We Should Recall What Mantle Was Able To Reclaim From the End." http://www.espnet.sportszone.com/features/mantle.html (25 Aug 1995).

Power, S. "Commerce, Okla., Mourns Passing of Its Quiet Hometown Hero." http://www.espnet.sportszone.com/features/mantle.html (25 Aug 1995).

Rogers, P., & Sherrington, K. "Baseball Hall of Famer Mantle Dies at 63." http://www.espnet.sportszone.com/features/mantle.html (25 Aug 1995).

Trujillo, N. (1994). *The Meaning of Nolan Ryan.* College Station, TX: Texas A & M University Press.



Orbital Change due to the Moon-forming Giant Impact

by
Dr. Brian Tonks,
Physics Department

I. Introduction: By the time of the Apollo missions to the Moon, scientists had suggested three hypotheses of the Moon's origin. All three hypotheses, coaccretion, fission, and intact capture, had vocal adherents at the time. Each hypothesis predicted that the Moon and its rocks would possess specific characteristics. Understanding the chemical composition of the Moon should provide the clues needed to tell which theory was correct. As a result, a major scientific goal of Apollo became the search for data that would allow scientists to decide which hypothesis was correct. However, when the Moon rocks were analyzed and coupled with geophysical investigations, scientists discovered that all three hypotheses were just plain wrong. Post-Apollo scientists realized that the Moon's unique chemical and physical characteristics cannot be explained by these hypotheses, but had no new hypothesis to suggest. The question of the Moon's origin was placed on the back burner.

In 1974, two independent scientific groups proposed a new hypothesis of the Moon's origin resulting from other scientific questions they were working on. The hypothesis is known as the "Giant Impact". It purports that a Mars-sized projectile (Mars contains about 11% of the Earth's mass and is half of Earth's diameter) collided with the Earth at an oblique angle near the end of Earth's formation. This collision threw debris into orbit around the Earth that then coalesced to form the Moon. The proposal was initially met with great skepticism. Over the past 20 years, it has become the favored hypothesis of lunar origin because it explains the Moon's unique properties.

Nearly every semester, students ask me "Wouldn't a collision of that magnitude have knocked the Earth out of its orbit?" To my knowledge, this simple question has never been addressed directly by scientists. I researched this question and report the results here.

This report is organized into 6 sections: Introduction, Pre-Apollo hypotheses of the Moon's origin, observational constraints on the Moon's origin, the giant impact hypothesis, orbital change due to the impact, and conclusions. Those readers interested in the entire issue of the Moon's origin may be interested to read all sections. Those interested in the specific question of orbital change due to the Giant Impact can skip to that section with a minimal loss of continuity.

II. Pre-Apollo Hypotheses of the Moon's Origin. Before the Apollo astronauts went to the Moon, scientists had suggested three plausible explanations for its origin (Wood 1986). All three had vocal adherents at the time of the lunar landings. These advocates were instrumental in helping to decide the landing sites for maximum scientific content (after Apollo 11 that is. The Apollo 11 landing site was based solely on engineering and safety concerns; Wilhelms 1993). The Pre-Apollo hypotheses are listed in historical order below.

The earliest attempt to explain the Moon's origin stemmed from Simon Laplace's theory of Solar System origin. He imagined that large tracts of dust and gas (in his day, scientists thought the Sun and Earth were made of the same material) began collapsing under the influence of gravity. As it does, it begins spinning faster because of conservation of angular momentum. Angular momentum measures the spin state of an object. The farther away an object is from the spin axis, the more angular momentum that object possesses. Gravity has a difficult time changing an object's angular momentum, so as the gas cloud collapses, it must spin faster to retain the same amount of angular momentum. This is the principle that explains why an ice skater spins increasingly faster as he/she pulls his/her arms towards the axis of rotation. As the cloud spins faster, chunks of gas decouple from the cloud and form the planets. The condensation in the center becomes the Sun.

The modern version of this theory recognizes that the Sun and Earth have different compositions. The Sun is almost entirely hydrogen and helium gas. It contains all the elements that the Earth does, but the heavy elements are relatively rare. Angular momentum considerations require that the planets were built from small objects rather than the collapsing gas cloud. The modern version, called "accretion", presumes that the cloud collapses by gravity as described by Laplace. However, the dust (the rocky component of the cloud) gravitates to the center, forming a disk. This disk would resemble the rings of Saturn. The dust was sticky and began to clump together. The small pebbles collided gently to form bigger clumps, the bigger clumps formed even larger clumps. These clumps are called "planetesimals". Eventually the clumps grew large enough that their gravities became important. The planets grew out of these building blocks. Based on the abundance of elements in the Sun and primitive meteorites, scientists think that these building blocks were intimate mixtures of iron (mostly as a metal) and rocky material (Lewis 1990).

Coaccretion is the concept that the same kind of disk that formed around the Sun also formed around the growing Earth. The Moon formed out of this disk. The hypothesis predicts that the composition of the Earth and Moon should be identical. The Moon should have the same amount of iron as the Earth. The surfaces could still be as different as we now observe because the Moon's gravity is too weak to hold an atmosphere. As a result, the Moon's surface is exposed to the harshness of space. Liquid water certainly cannot exist at its surface. However, if we construct the composition of the whole Moon from the Moon rocks, it should be identical to the Earth's. Coaccretion is an attractive idea to scientists. There appear to be other examples in the Solar System. The satellite systems of Jupiter, Saturn, and Uranus are most easily understood as having formed by coaccretion (Brush 1986).

The second hypothesis is fission. This idea was presented by George Darwin, Charles Darwin's son, in 1878. He was studying the evolution of the Moon's orbit. Tides between the Earth and the Moon cause an exchange of angular momentum between the two objects. The Earth's spin rate slows down and the Moon's orbital distance increases. Darwin decided to run the clock backwards. He

found that some 2 billion years ago, the Moon was located at a distance equal to the Earth's radius. In other words, the Moon was part of the Earth. Darwin proposed that the Earth was spinning very rapidly and became unstable. A chunk of the Earth was tossed off and formed the Moon. The Earth's core was already formed, so the Moon is almost all rock. The theory predicts that the Earth-Moon system has a high amount of angular momentum. This is required to produce a sufficiently high spin rate for the Earth to become unstable. The Moon's composition should be identical to the Earth's mantle. Again the surfaces can be very different because the Moon's low gravity (Brush 1986).

Intact capture was proposed by the eccentric American astronomer Thomas Jefferson Jackson See in 1909 (Brush 1986). He proposed the Moon formed somewhere else in the Solar System (he thought near the orbit of Neptune) and strayed too close to the Earth. The Earth's gravity then captured the Moon into its orbit. The Moon's orbit has changed since it was captured because of tidal effects. This theory's observational predictions are not real distinct. In principle, the Moon could have been formed anywhere in the Solar System. Thus, its chemistry is unconstrained. Maybe its more like Mercury, having been formed closer to the Sun. Maybe its more like Mars or one of the asteroids. Who knows? It turns out that if we couple two or more of the observational constraints together, we can say something about the likelihood of this mechanism. Another constraint in discussing it is to use computer simulations of the capture process. Is the Earth's gravity capable of capturing something as large as the Moon?

III. Observational Constraints. Most of the data gathered from the Moon rocks tell us information about how the Moon evolved after its formation and not about its origin. The few observations/constraints that give us information about the Moon's origin can be divided into chemical constraints and physical constraints. Some of the physical constraints were known before the Apollo missions, but ignored until the chemical constraints were discovered by analyzing the Moon rocks.

The most important physical constraint is the Moon's average density. Average density is the mass of an object divided by its volume. Because specific materials have well defined densities, the average density tells us something about the object's overall composition. For example, the Earth's average density is about 5.5 grams/cubic centimeter (g/cm^3). Because Earth rocks have densities between 2.7-3.3 g/cm^3, the Earth must have some denser material inside to boost its average density. Scientists think this material is iron (density = 7.86 g/cm^3 at the Earth's surface). This is because iron is the most abundant of the possible heavy materials in both the Sun and meteorite samples. Scientists estimate that about 30% of the Earth's mass is iron. Most of this is in the Earth's core.

The Moon, on the other hand, has an average density of only about 3.34 g/cm^3 (Wood 1986). This is nearly the same as the density of rock. Consequently, the Moon's iron content is low. Scientists estimate the Moon contains less than a 6% iron core (if it has one at all! Hood 1986). The critical question is why didn't the Moon get its fair share of iron?

Coaccretion predicts that the Moon should have received its normal 30% iron because the Moon and Earth formed together out of the same building blocks. Scientists have looked for various sorting mechanisms to separate iron from the rocky stuff, trying to keep the rocky stuff in orbit and let the iron fall to the Earth (Weidenshilling et al. 1986). These attempts do not really work because the evidence indicates that the building blocks were made of intimate mixture of iron and rock. The density constraint is the death knell for the coaccretion hypothesis.

Fission explains the density very well because the iron was already in Earth's core when fission occurred (its formation is blamed for increasing the spin of the Earth to the required speed).

The density constraint, by itself, cannot test the capture hypothesis. In principle, the Moon could have any density. However, if we compare the Moon to all other rocky objects in the Solar System (a job that is not yet complete), it seems apparent that large objects get 20-30% iron. Why does the Moon have less than 6%? Later we will couple this constraint with another.

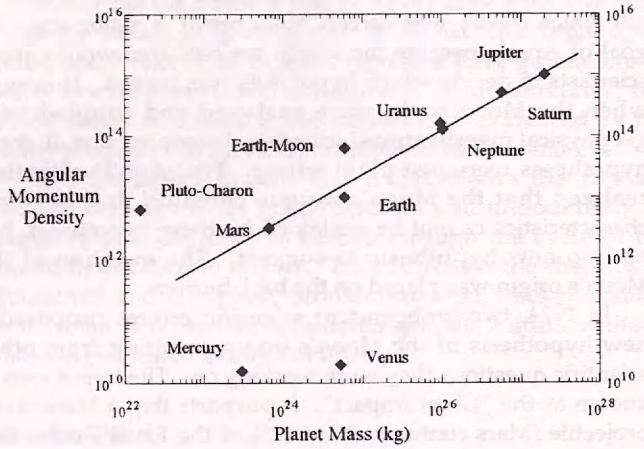


Fig. 1

The second physical constraint is angular momentum. Figure 1 shows the angular momentum of the planets in the Solar System divided by their mass (the angular momentum density as it is known) versus the mass of the planet (data from Taylor 1992, p. 266). Notice that Mars, Jupiter, Saturn, Uranus, and Neptune all lie along a line. This line is interpreted as the amount of angular momentum a planet should receive from the planet building process. Notice the Earth's angular momentum is slightly lower than this. However, when the Moon's angular momentum (due to its orbit around Earth) is added to the Earth's, the combination is well above what they should have received. Where did the extra angular momentum come from?

Coaccretion predicts that the Earth-Moon system should lie on the line, not so far above it. Although this is probably not a fatal constraint, it does not bode well for coaccretion.

For fission to work (based on modern calculations) the Earth would have to spin about once every 2 hours. This corresponds to an angular momentum about 4 times the angular momentum of the present Earth-Moon system. This raises two issues: How did the Earth ever get that much angular momentum in the first place (some 8-10 times the amount it should have received from accretion) and how did it get rid of 3/4 of it after the Moon was tossed off. As noted earlier, angular momentum is nearly conserved in the Sun's gravity. Tidal effects between the Sun and planets removes some angular momentum. This is why we think Mercury

and perhaps Venus have such slow spin rates. The Earth, however, is far enough away that the tides cannot remove 3/4 of the Earth-Moon angular momentum. Fission breaks the laws of physics as we understand them. Coupled with the other constraints, fission appears very unlikely (Wood 1986).

Capture fares much better as the extra angular momentum of the Earth-Moon system could have been brought in by the captured object.

The chemical constraints tell an interesting story. The first two constraints are based on the total composition of the Moon as estimated from the Moon rocks. There are uncertainties in these calculations, but the trends seem to be consistent no matter what assumptions are made. The Moon's gross composition is similar to the composition of the Earth's rocky layers (excluding its core). This means that the gross amount of magnesium, silicon, oxygen (part of the rocks, not the atmosphere), aluminum, etc. is close (but not identical) to the Earth's value. Both coaccretion and fission predict the Moon's composition should be identical to the rocky part of the Earth. The observed similar composition is consistent (although the differences are puzzling). Capture says nothing about the composition of the Moon (Taylor 1986).

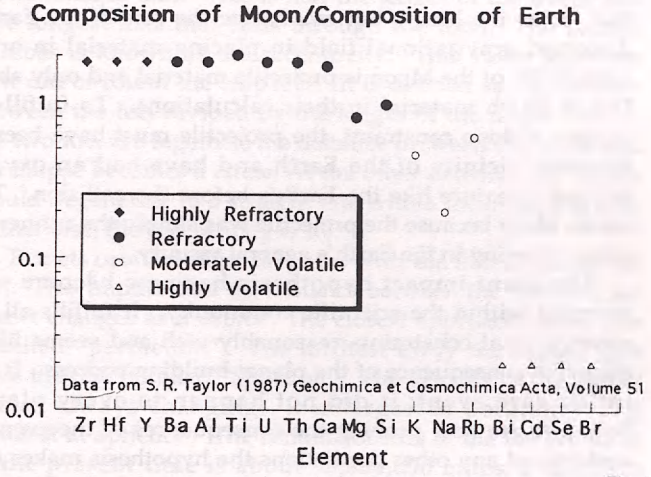


Fig. 2

The differences are interesting. Figure 2 shows the abundance of elements in the Moon divided by the Earth's abundance of the same element (data from Taylor 1992, p. 200, 268). A ratio of 1 means the Moon's abundance of the element is identical to Earth's. The elements are listed in order of their volatility. A "refractory" element (such as aluminum, uranium, etc) is an element that does not vaporize until heated to high temperatures (thousands of degrees). A volatile element is one that vaporizes at low temperatures. There is a continuous range of volatilities from highly refractory to highly volatile. The trend shown in Figure 2 demonstrates that the Moon is enriched in refractory elements and depleted in volatile elements compared to the Earth. It is highly depleted in highly volatile elements. The trend implies that the material making up the Moon has been processed through very high temperature events.

This pattern does not fit with either coaccretion or fission. In both cases, the Moon ought to have approximately the same abundance of elements as the rocky part of the Earth. It is difficult to understand how either coaccretion or fission could possibly reprocess the building materials in the way required by the refractory enrichment-volatile depletion pattern. Again capture does not predict anything about the chemistry, so the constraint could still be fulfilled in principle.

Closely coupled to the refractory enrichment-volatile depletion constraint is the observation that the crystal structure of Moon rocks contain no water. None. Zero. Nil. Even the very driest Earth rocks contain some water locked into their crystal structure, but not in Moon rocks. If the Earth and Moon were built from the same building blocks (coaccretion) or the Moon was once a part of Earth (fission), we would expect to find water locked into their rocks just like on the Earth. This constraint seems to be telling us that the Moon's material was processed through very high temperature events. Once again, capture could in principle fulfill this constraint (although it is getting bothersome that capture makes no testable predictions).

The final chemical constraint comes from an analysis of the oxygen isotopic signature. Natural oxygen comes in three varieties, or isotopes. The most common is oxygen-16, with a nucleus composed of 8 protons and 8 neutrons. Oxygen-17 has an extra neutron, and Oxygen-18 has two extra neutrons. Chemically, the three are identical. However, O-17 and O-18 are slightly heavier so they do not diffuse as fast when a rock melts. As a result, igneous activity separates the isotopes.

Robert Clayton of the University of Chicago began to analyze Earth rocks for these three isotopes in the late 1960's. He found that all Earth rocks fit on a very well-defined trend. Then he started to analyze meteorite samples. He found that different groups of meteorites also form well-defined trends that are parallel to the trend formed by Earth rocks, but displaced from it. One group of meteorites, called the SNC meteorites, are thought to have come from Mars based on their chemical properties and measurements of gas trapped inside them. The oxygen isotopes of this group also forms a trend parallel to the Earth trend but displaced from it. Scientists interpret this observation to mean that there were distinct chemical reservoirs as the planets formed. The building blocks that made the Earth are slightly different (at least in oxygen isotopes) than the building blocks that formed Mars. This is not particularly surprising. What is surprising is that when oxygen isotopes of Moon rocks are analyzed, they fall precisely on the trend formed by the Earth rocks. This implies that the Moon and the Earth were made from the same building blocks (Taylor 1986, 1992)!!!

This of course fits very well with both coaccretion and fission (although the other constraints don't). If the Moon formed elsewhere in the Solar System, this constraint tells us that it must have formed near the Earth's orbit. If it did, however, why is it so deficient in iron? In addition, why isn't it almost exactly like the Earth in composition? Taken together, the oxygen isotope and density constraints are inconsistent and argue against capture.

In addition, computer calculations of the capture process show that the Earth is simply not big enough to efficiently capture an object as large as the Moon. The only possible scenario where capture might work is one where the Moon is in an orbit nearly identical to the Earth's. Even in this scenario it is tough for the Earth to hold onto the Moon. But the density and refractory enrichment constraints argue that the Moon could not have been formed in the Earth's general vicinity. Taken together, capture doesn't survive the

observational constraints any better than coaccretion and fission (Boss and Peale 1986).

In summary, the observational constraints imposed by the Moon's physical and chemical properties show that the three pre-Apollo hypotheses of lunar origin simply do not work. These constraints were summarized by Dr. S. Ross Taylor, one of the geochemists who analyzed the Moon's composition, in two tongue-in-cheek laws. Taylor's theorem states: The best hypotheses of lunar origin are the testable ones. Then comes Taylor's corollary: All the testable hypotheses are wrong (front matter in *Origin of the Moon* 1986).

IV. The Giant Impact Hypothesis. After discovering that the pre-Apollo hypotheses were wrong, scientists left the question of lunar origin and concentrated on what the Moon rocks told us about later lunar evolution. In 1974, the team of William Hartmann and Don Davis were calculating the size of the largest planetesimal to hit the Earth during its growth. They concluded this object was probably about the size of the Moon and perhaps as large as Mars. This tremendous collision would toss material into orbit (so they thought) that could then form the Moon. When they reported this work at a conference, another prominent scientist, Alistair Cameron, stood up and said he and his colleague William Ward came to the same conclusion using a different approach. They wondered how large a projectile would have to be if it brought all of the Earth's angular momentum with one blow? They concluded the object would have to be about the size of Mars (Hartmann 1989).

Most members of the scientific community scoffed at the proposal. It seemed too bizarre to be possible. However, continued research about the accretion process lead to the almost inevitable conclusion that the Earth was hit by relatively large objects during its growth. Other scientists (including my dissertation advisor, Dr. Jay Melosh of the University of Arizona) felt that all the debris ejected off the Earth in the collision would crash back to the Earth. This idea was based on the fact that if you change the orbit of an object, it returns back to the place where you changed its orbit. As a result, all ejected material ought to hit the ground again. Dr. Melosh and Marlin Kipp of Sandia National Laboratories, modeled the collision on the Lab's supercomputers. These are the computers used to simulate nuclear bomb explosions. Melosh and Kipp discovered several interesting characteristics of the collision that allow it to place material into Earth orbit and give the Moon its peculiar characteristics (Kipp and Melosh 1986; Melosh and Kipp 1989; see Hartmann 1989).

The impact speed of the projectile is at least equal to the escape velocity of the Earth. The collision is off-center. The combination of speed, projectile size, and obliqueness gives the Earth Moon system a large fraction of its current angular momentum. At this speed, the shock wave produced by the collision deposits a large amount of energy in both the projectile and the Earth. This energy is enough to convert most of the projectile and about the same mass of Earth material into vapor. The vapor, originally under high pressure, rapidly expands into space. This expansion provides a boost that places some material into orbit. This material starts out as extremely hot gas. It rapidly cools and recondenses back into solid material. The first elements to solidify are the refractory elements. Volatile elements don't condense until later and are preferentially lost. As a result, they are not incorporated as abundantly into the Moon. This explains the observed refractory enrichment-volatile depletion. It also explains why there is no water. Any water in the rocks is broken into its component hydrogen and oxygen atoms. These atoms, being gases, easily escape from the Earth-Moon system. Thus, the giant impact naturally explains the chemical constraints.

Melosh and Kipp assumed that the projectile had already formed a mantle and core like the Earth. Because the core of the projectile was deeply buried inside, it winds up being buried deeply inside the Earth. Because iron is so much denser than rock, this core pushed its way through the Earth's mantle and merged with the core of the Earth. The material placed in orbit around the Earth (that eventually formed the Moon) is iron free. Thus, the density constraint is fulfilled.

The most difficult constraint is the oxygen isotope constraint. Melosh and Kipp estimated that the Moon is composed of about half Earth material and half projectile material. Al Cameron, Willy Benz and their coworkers also performed computer simulations of the giant impact, but used a different approach (Benz et al. 1986; Benz et al. 1987; Benz et al. 1989; Cameron and Benz 1991). Their calculations also showed that material is placed in orbit around the Earth that forms the Moon, but emphasize the role of the Earth's distorted gravitational field in placing material in orbit. About 90% of the Moon is projectile material and only about 10% is Earth material in their calculations. To fulfill the oxygen isotope constraint, the projectile must have been in the near vicinity of the Earth and have had an oxygen isotope signature like the Earth's before the collision. This seems likely because the projectile was simply the runner-up object growing in the Earth's general vicinity.

The giant impact hypothesis has now become well accepted within the scientific community. It fulfills all the observational constraints reasonably well and seems like a plausible consequence of the planet-building process. It is a rather rare event; it did not happen to every planet. Scientists are now probing the consequences of the event to understand any other predictions the hypothesis makes that can be tested by observation.

V. Orbital Change due to the Giant Impact. Most student's reaction to the giant impact hypothesis is one of disbelief. Indeed, it is hard to imagine an event of such violence. Students ask, "Wouldn't this collision have knocked the Earth out of its orbit?" It is a legitimate question that deserves a straightforward answer. It could, potentially, provide a constraint on the plausibility of the giant impact hypothesis.

It is not a trivial question to answer. We do not know the orbital elements of either the Earth or the projectile. We don't know precisely how the Earth's orbit has changed over time. Current scientific calculations suggest the Earth's orbit changes periodically with time because of the gravitation attraction of the other planets (Berger 1988). The best we can do is assume an initial orbit for both the Earth and projectile and calculate how much the Earth's orbit changes due to their collision. This suggests performing a "Monte Carlo" calculation. "Monte Carlo" techniques are used to determine the probability of a

certain outcome given random changes in calculational conditions. I describe how this is done and what the results mean below.

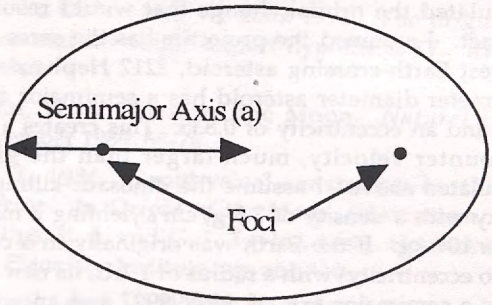


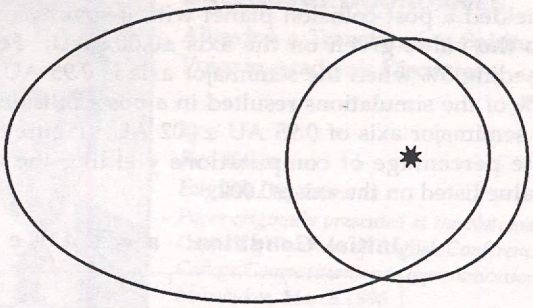
Fig. 3

The Earth, the planets, and the giant projectile all orbit the Sun in elliptical orbits. An ellipse is a well understood mathematical figure shown in Figure 3. It can be drawn by nailing down the ends of a string with two thumbtack and while keeping the string taut, drawing a figure all the way around. The thumbtacks are at points known as the foci (singular focus).

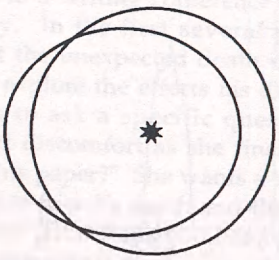
An ellipse is characterized by two numbers. The first is the semimajor axis. This is half the length of the major axis (the longest axis that runs through the foci). The second number is known as the eccentricity. This value measures how out of round the ellipse is. It is defined as the distance between the foci divided by the length of the major axis. If the two foci are together, the distance between them is 0 and the ellipse becomes a circle. At the other extreme, the ellipse would degenerate to a straight line with a focus at each end. In this case, the eccentricity is 1.0.

Planets orbit in elliptical paths with the Sun at one of the foci. This implies that the distance between the Sun and the planet changes as it orbits. The closest approach to the Sun is called "perihelion". The farthest away the planet gets from the Sun is called "aphelion". The velocity of the planet is also always changing. It is largest at perihelion and smallest at aphelion. The semimajor axis of the Earth's orbit at the present time is about 93,000,000 miles, a distance known as an "Astronomical Unit". Its eccentricity is currently 0.016.

To collide, the projectile and Earth must have crossing orbits as shown in Figure 4. Their orbits cross in two places. The combination of semimajor axis and orbital eccentricity determines if they cross. Then, of course, the planet and projectile must both be at the crossing point at the same time. I assumed the Earth was originally in a circular orbit at a distance of 1 AU from the Sun. The projectile's semimajor axis was allowed to vary between 0.7 (the orbit of Venus) and 1.3. The eccentricity was allowed to vary between 0 and 0.3. The calculation randomly selected a value for the projectile's semimajor axis and eccentricity then tested to see if the orbits cross. If not, new values of the projectile's orbital parameters were chosen. If the orbits cross, I assume they will eventually collide and randomly select one of the two points where the orbits cross for the collision to occur.



Possibility 1: Projectile Orbit larger than Earth's



Possibility 2: Projectile Orbit smaller than Earth's

Fig. 4

The velocity of the collision depends on the Earth's escape velocity (when they get close, the Earth's gravity is going to pull the projectile in) and the relative velocity resulting from being in different orbits. The direction of collision was determined by the angle between the orbits at the point of crossing. The relative speed of the two objects was then computed using principles of orbital mechanics (Bate et al. 1971). The collision speed was then computed using the law of energy conservation.

The law of linear momentum conservation governs the collision. The total linear momentum before the collision equals the total linear momentum after the collision. It does not matter whether the collision is head on or oblique. It doesn't matter if material is placed in orbit around the Earth. Linear momentum is lost only if material completely escapes from the Earth's gravity. Undoubtedly some material does escape in the giant impact, but the simulations of both Melosh and Kipp and Cameron and coworkers indicate that only a small amount of material is lost, so neglecting it will not severely affect the results. Orbital changes that actually occur are somewhat smaller than those calculated here.

The law of linear momentum conservation is used to calculate the velocity of the post-collision planet. Knowing the distance from the Sun at collision time and the velocity after the collision allows calculation of the new orbit. The new orbit depends on the projectile's orbit that the computer selects. Because the projectile's original orbit was unknown, we must choose lots of different possible projectile orbits, determine the resulting Earth orbit, and calculate the percentage of cases that yield a particular result.

Figures 5 and 6 show the results of such a series of computations. The Earth is assumed to be in a circular orbit at 1 AU. This choice allows easy comparison of the results. Figure 5 represents the results of 1000 different projectile orbits chosen as described above. "Percent" on the vertical

axis represents the percentage of colliding worlds that yielded a post-collision planet with a semimajor axis equal to the value given on the axis ±0.002 AU. For example, reading 5% when the semimajor axis is 0.95 AU means that 5% of the simulations resulted in a post-collision Earth with a semimajor axis of 0.95 AU ±.002 AU. Figure 6 represents the percentage of computations yielding the eccentricity value listed on the axis ±0.002.

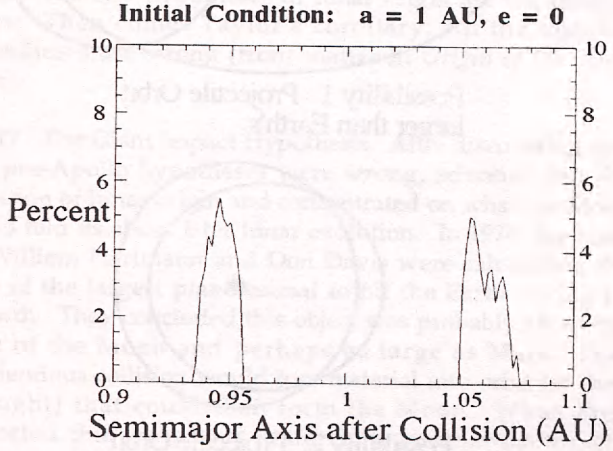


Fig. 5

Figure 5 shows that the Earth's semimajor axis changes by about 5%. These results show that there is about equal chance that the new orbit will be 5% larger or 5% smaller than the Earth's original orbit. If the Earth's original orbit were 5% larger or smaller than at present, the giant impact could have readily changed the orbit to Earth's present value.

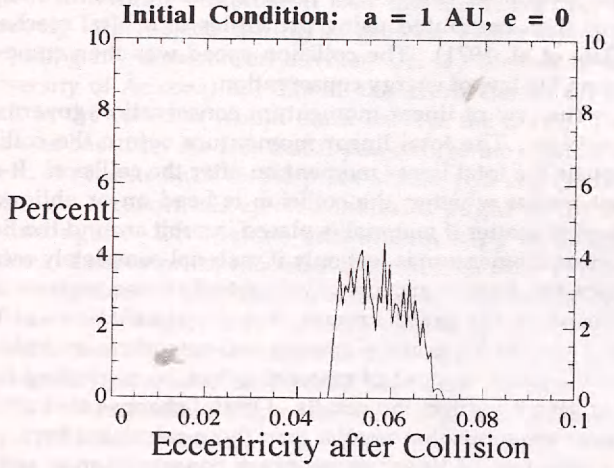


Fig. 6

Figure 6 shows that the Earth's eccentricity changed from 0.0 to between 0.04-0.07. This is higher than the Earth's present eccentricity (0.016). However, it is not an especially high value. Mars' current eccentricity, for example, is 0.0934. The eccentricities of Jupiter, Saturn, and Neptune are in the 0.04-0.06 range. In addition, the Earth's eccentricity changes periodically due to the gravitational effects of the other planets (primarily Venus and Jupiter). Computations show that the Earth's eccentricity has been as high as 0.06 within the past billion years (Berger 1988). This implies that the eccentricity created by the giant impact of 0.04-0.07 (which presumably happened nearly 4.5 billion years ago) would be washed out by the present time.

There is good evidence that the dinosaurs (and 50% of Earth's other species) were destroyed as the result of a 10 km (6 mile) diameter meteorite hitting the Earth about 65 million years ago. As a comparison to the giant impact, I calculated the orbital change that would result from this impact. I assumed the projectile has the same orbit as the largest Earth-crossing asteroid, 2212 Hephaistos. This 4.4 kilometer diameter asteroid has a semimajor axis of 2.165 AU and an eccentricity of 0.835. This creates a rather high encounter velocity, much larger than the giant impact calculated above. I assume the dinosaur-killing asteroid is rocky with a density of 3.5 g/cm^3, yielding a mass of about 1.5×10^{16} kg. If the Earth was originally in a circular orbit (zero eccentricity) with a radius of 1 AU, its new orbit would have a semimajor axis of .999999997 and an eccentricity of .00000013. These changes are minuscule compared to both the natural fluctuation of the Earth's eccentricity and the change created by the giant impact.

VI. Conclusions. Geophysical and chemical observations of the Moon's unique characteristics distinctly show that the three pre-Apollo theories of the Moon's origin, coaccretion, fission, and capture, cannot be correct. Each hypothesis makes predictions in conflict with the observations. The giant impact theory explains each observation in a natural way (with the possible exception of the oxygen isotopes). For this reason, the giant impact hypothesis has become the most widely accepted explanation of how the Moon was formed.

The hypothetical Moon-forming giant impact would change the size of the Earth's orbit by about 5%. Its eccentricity would also change by about 0.04-0.07. The eccentricity change is within the range of the Earth's long term natural fluctuation due to the gravitational effects of the other planets. These calculations demonstrate that the Earth could have sustained an impact of the magnitude required by the giant impact hypothesis without drastically disturbing its orbit. The Earth's present orbit is not inconsistent with the orbital effects of the giant impact. In addition, these calculations show that it is difficult to change a planet's orbit by collisions (or encounters) with other planets.

References:

Bate, R. R., Muller, D. D., and J. E. White 1971. *Fundamentals of Astrodynamics*, New York: Dover, 455 pp.

Berger A. 1988. Milankovitch theory and climate. *Reviews of Geophysics*, 26: 624-657.

Benz, W., Slattery, W. L., and A. G. W. Cameron 1986. The origin of the Moon and the single impact hypothesis I. *Icarus*, 66, 515-535.

Benz, W., Slattery, W. L., and A. G. W. Cameron 1987. The origin of the Moon and the single impact hypothesis II. *Icarus*, 71, 516-528

Benz, W., Cameron, A. G. W., and H. J. Melosh 1989. The origin of the Moon and the single impact hypothesis III. *Icarus*, 81, 113-131.

Boss, A. P. and S. J. Peale 1986. Dynamical constraints on the origin of the Moon. In *Origin of the Moon*, (Hartmann, W. K., Phillips, R. J. and G. J. Taylor, eds.), Houston: Lunar and Planetary Institute, pp. 59-102.

Brush, S. G. 1986. Early history of selenogony. In *Origin of the Moon*, (Hartmann, W. K., Phillips, R. J. and G. J. Taylor, eds.), Houston: Lunar and Planetary Institute, pp. 3-15.

Cameron, A. G. W., and W. Benz 1991. The origin of the Moon and the single impact hypothesis IV. *Icarus*, 92, 204-216

Hartmann, W. K. Birth of the Moon. *Natural History*, November 1989, 68-78.

Hood, L. L. 1986. Geophysical constraints on the lunar interior. In *Origin of the Moon*, (Hartmann, W. K., Phillips, R. J. and G. J. Taylor, eds.), Houston: Lunar and Planetary Institute, pp. 361-410.

Kipp, M. E. and H. J. Melosh 1986. Short Note: A preliminary numerical study of colliding planets, in *Origin of the Moon*, (Hartmann, W. K., Phillips, R. J. and G. J. Taylor, eds.), Houston: Lunar and Planetary Institute, pp. 643-647

Lewis, J. S. 1990. Putting it all together, in *The New Solar System*, (Beatty, J. K. and A. Chaikin, Eds.), Cambridge: Sky Publishing Co., pp. 281-288.

Melosh, H. J. and M. E. Kipp 1989. Giant impact theory of the Moon's origin: First 3-D hydrocode results, in *Lunar and Planetary Science XX* (abst.), Houston: Lunar and Planetary Institute, pp. 685-686.

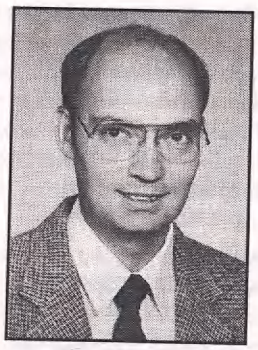
Taylor, S. R. 1986. The origin of the Moon: Geochemical constraints, in *Origin of the Moon*, (Hartmann, W. K., Phillips, R. J. and G. J. Taylor, eds.), Houston: Lunar and Planetary Institute, pp. 125-144.

Taylor, S. R. 1992. *Solar System Evolution: A New Perspective*, Cambridge: Cambridge University Press, 307 pp.

Weidenshilling, S. J., Greenberg, R., Chapman, C. R., Herbert, F., Davis, D. R., Drake, M. J., Jones, J., and W. K. Hartmann 1986. *Origin of the Moon* from a Circumterrestrial Disk, in Origin of the Moon, (Hartmann, W. K., Phillips, R. J. and G. J. Taylor, eds.), Houston: Lunar and Planetary Institute, pp. 731-762.

Wilhelms, D. A., 1993. *To a Rocky Moon*. Tucson: University of Arizona Press, 477 pp.

Wood, J. A. 1986. Moon over Mauna Loa: A review of hypotheses of formation of Earth's Moon, in *Origin of the Moon*, (Hartmann, W. K., Phillips, R. J. and G. J. Taylor, eds.), Houston: Lunar and Planetary Institute, pp. 17-55.



Extending Boundaries

Allowing a Transforming Spiritual Voice in Academic Discourse

by
Rod Keller
English Department
Paper originally presented at the National Council of Teachers of English Conference on College Composition and Communication, Milwaukee, March 1996

Amy[1] has come to a writing conference with a draft for her reflective essay. In the first several paragraphs she writes briefly about the unexpected death of her boyfriend before she starts to explore the effects his death has had on her. She hesitates to ask a specific question about her writing. I sense her discomfort as she finally asks, "Can I bring religion into this paper?" She wants a stronger, clearer transition between her friend's death and the lasting impact it has had on her life. That transition has been her faith in Jesus Christ, and she wants to discuss that faith in her college paper. We both feel uneasy discussing the use of religion in an academic paper; although we are each members of the Church of Jesus Christ of Latter-Day Saints, and we're at the church's private junior college.

Professional Encouragement

Over the last five years, the past chairs of the Conference on College Composition and Communication in their chair addresses have strongly encouraged the use of a personal, authentic writing voice and the importance of writing outside the university. Donald McQuade (1992, "Living In-- and On--the Margins") sets the standard by presenting the deeply personal and even sacred, although not necessarily religious, account of being with his dying mother. William A. Cook (1993, "Writing in the Spaces Left") explores the "multi-voiced" records of African Americans and of "talking books," texts which "extend the power of the writer to the reader" (p. 11). Anne Ruggles Gere (1994, "Kitchen Tables and Rented Rooms: The Extracurriculum of Composition") acknowledges the unidentified powerful, significant writing of everyday people that exists outside the academic classroom. Lillian Bridwell-Bowles (1995, "Freedom, Form, Function: Varieties of Academic Discourse") claims that classrooms should be "vital places where students learn not only the various conventions of academic writing, but also the power of communication to change things, to transform" (p. 47). And Jacqueline Jones Royster (1996, "When the First Voice You Hear is Not Your Own) stresses "cross-boundary discourse" and of "keeping our boundaries fluid, our discourse invigorated with multiple perspectives, and our polices and practices well-tuned toward a clearer respect for human potential and achievement from whatever their source" (p. 40).

Therefore, our profession actively encourages and listens to multiple voices in the classroom. We readily accept diverse voices based on ethnic, gender, cultural, age, sexual, class, psychological, political, and geographical orientation in academic discourse, yet we hesitate to consider the religious voice. As a profession we applaud a statement of principles presented by U.S. Secretary of Education Richard

W. Riley in which "religious liberty is an inalienable right of every person" and "public schools may not inculcate nor inhibit religion. They must be places where religion and religious conviction are treated with fairness and respect" (1995, p. 9). The September 1995 issue of *English Journal* focuses four articles on "English, Religion, and the Religious Right." Christa Welker's thoughtful article "Truth: The Elusive Search" argues:

> When a great truth in literature relates to philosophy or even to religion, we must be ready and willing not only to address it but also to teach it. In the end, we must be willing to uphold the truth at all costs. Teachers must believe in the search for truth. Teachers must stand up for what they believe in, must know why they believe it, and must certainly believe that education not only of the mind but also of the soul and of the spirit is the basis for truth. (p. 101)

Yet in the same issue, three other articles[2] openly discuss strategies for combating the beliefs of the Religious Right.

Faculty and Student Reluctance

Even the writing faculty at my institution, Ricks College, owned and operated by the Church of Jesus Christ of Latter-day Saints often feel uncomfortable having students write on religious topics. A recent survey (see Table 1) asks our faculty what their stance is regarding students writing on religious topics. Forty-seven percent indicate that they take a neutral stance, 35% say they strongly or moderately discourage writing on religious topics, and 24% claim to moderately or strongly encourage religious topics for student papers. Therefore, only one-fourth of our English faculty feel somewhat comfortable having students write on religious topics.

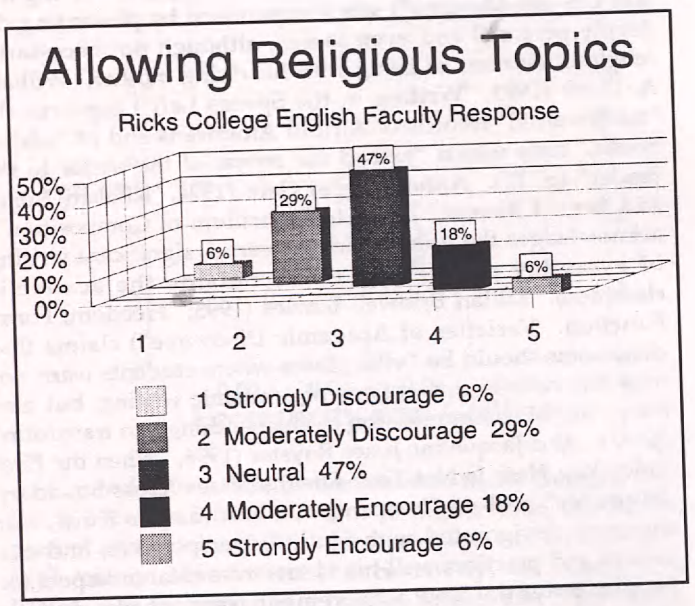


Table 1

When stating their reasons for not encouraging religious topics, the faculty repeatedly include the following:

- Students rely on emotion and sentiment and not on reason.
- Students state generalizations without providing concrete support.
- Students should focus objectively on academic topics.
- Students superficially treat complex religious and sacred issues.
- Students sermonize without considering other points of view.

However, the most mentioned concern faculty have with students writing on religious topics is that evaluating those papers becomes difficult--teachers can't divorce the academic writing from the student testimony. The faculty's concerns are not calloused. On the contrary, it's because of teachers' over-sensitivity to students' feelings that they can't respond objectively to the writing itself. One student even blatantly has acknowledged the difficulty teachers have in evaluating papers on religious themes. He, consequently, writes on religious topics frequently because he knows teachers have a hard time grading them, and he believes that is why his religious papers receive higher grades.

The students themselves have been choosing not to write on religious topics. Twenty-one percent claim never to have written on a religious topic for their college writing class while 19% indicate that they seldom choose religious topics. Forty-five percent say they have sometimes written on religious topics while 16% frequently choose to write on religious topics. (See Table 2.) When giving their own reasons for not writing on religious topics, students claim the following:

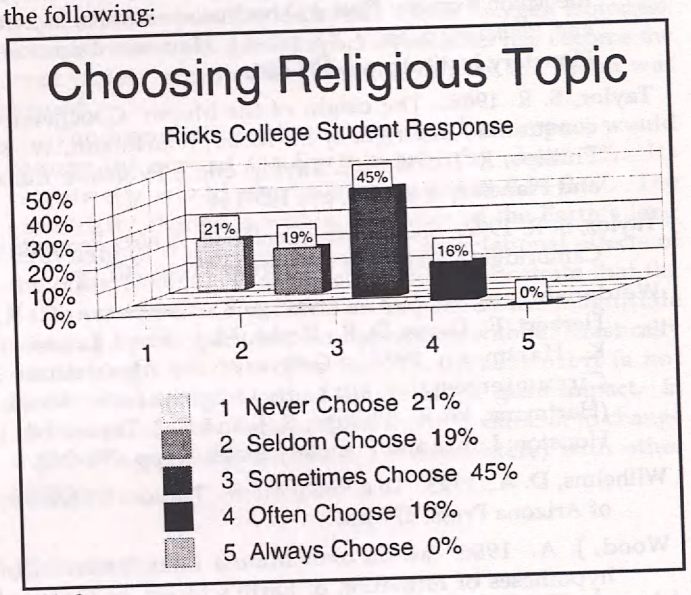


Table 2

- Religion is too personal to write about.
- Religion is too controversial.
- Religion is not an appropriate topic for college.
- Religion is not a major.
- Religious feelings are difficult to describe.

Private Belief and Public Life

Students, on the other hand, also provide valid reasons for choosing religious topics. Some of their major reasons include:

- Religion is easy to write about.
- Religion is something they know a lot about.
- Religion is a significant part of their lives.
- They have strong, genuine feelings for religion.
- Religious sources are readily available.
- Religion is their way of life.

Perhaps the single most important reason for allowing students to write on religious topics is that religion is

important to them. Statistically, religion is important to most people in the United States. Bellah (1991) states that "well over 90 percent of Americans continue to answer 'yes' when they are asked in a poll if they believe in God" (p. 182). Caplow maintains that U.S. religious membership is one of the highest in the modern world with 60% of Americans claiming religious membership, and 40% admitting to regular church attendance (1983, pp. 20-30). And a Gallup poll indicates that 71% of Americans contribute financially to churches and religious organizations (1982).

Religion, however, for most of us and for most of our students is not just a Sunday activity, but religion "functions as a model or pattern for the whole of life" (Bellah, 1985, p. 227). Unfortunately, as a society we work hard to divorce our religious life from our public life. Stephen Carter (1993) focuses this separation of private religious belief and public life in his book *The Culture of Disbelief: How American Law and Politics Trivialize Religious Devotion.* He opens his book by explaining: "In our sensible zeal to keep religion from dominating our politics, we have created a political and legal culture that presses the religiously faithful to be other than themselves, to act publicly, and sometimes privately as well, as though their faith does not matter to them" (p. 3). In addition to politicians affecting how the religious feel about themselves publicly, the university often has contributed to forcing the religious to act as though their faith doesn't matter.

Religion and the Classroom

Does the university have a role in allowing students to recognize their religious beliefs as a part of their public life? How can the university address the "conflict between withdrawal into purely private spirituality and the biblical impetus to see religion as involved with the whole of life" (Bellah, 1985, p. 248)? President Derek Bok acknowledges to the Harvard Board of Overseers that professors do not feel responsible in helping shape students' ethical beliefs.[3] "Professors are trained to transmit knowledge and skills within their chosen discipline, not to help students become more mature, morally perceptive human beings" (1988, p. B4). Yet Bok personally believes and insists "that universities are obliged to help students learn how to lead ethical, fulfilling lives" (Schwehn, 1993, Exiles, p. 3). Mark Schwehn in "The Once and Future University" suggests "the purposes of the university have become so estranged from human flourishing, many students and faculty have grown alienated even from themselves" (1993/94, p. 458). Yet Schwehn continues to believe that "thousands of students and faculty. . . go about their business of teaching and learning for the sake of human flourishing and in a sober, careful, and altogether high spirited way" (p. 461).

Many in the university are now recognizing that our classrooms extend well beyond our campus boundaries--that our classroom extend into students' personal lives. Min-Zhan Lu admits this extension of our classrooms when she discusses multiculturalism which applies directly to religious beliefs:

> When composition classes encourage students to ignore those voices that seem irrelevant to the purified world of the classroom, most students are often able to do so without much struggle. . . . However, beyond the classroom and beyond the limited range of these students' immediate lives lies a much more complex and dynamic social and historical scene. . . We might encourage students to explore ways of practicing the conventions of the discourse they are learning by negotiating through these conflicting voices. We could also encourage them to see themselves as responsible for forming or transforming as well as preserving the discourse they are learning. (1987, p. 447)

Lu, then, strongly advocates that the discourse of the classroom should encourage students to utilize their multiple voices and to write discourse outside the classroom.

One of the roles of the composition teacher is to encourage students to discover meaning in their lives through writing. James Berlin (1984) claims: "When we teach students to write we are teaching more than an instrumental skill. We are teaching a mode of conduct, a way of responding to experience. . . . The way we teach writing behavior, whether we will it or not, causes reverberations in all features of a student's private and social behavior" (pp. 86, 92).

Richard Ohmann also asserts that one of the characteristics of modern rhetoric is that it "regards the discipline as 'the pursuit'--and not simply the transmission--of truth and right. . . ." (1987, qtd. in Berlin, *Rhetoric*, p. 169. And Bellah (1991) claims that "we must recover an enlarged paradigm of knowledge, which recognizes the value of science but acknowledges that other ways of knowing have equal dignity" (p. 177). Bellah insists that religious communities "help us grapple with the ultimate problem of meaning. . . The more deeply we study, the closer we come to the fundamental questions of the meaning of life. While such questions are raised at many points in our schools and universities, in our kind of society it is in religious institutions that they are apt to receive the most sustained attention" (1991, pp. 219, 178).

Therefore, as composition teachers we need to allow the opportunity for our student to explore "truth," to arrive at their own individual meanings, and the student's religion helps provide that meaning. Paul J. Contino last year at CCCC presented a paper entitled "Engagements, Illuminations, and Connections: Writing out of Religious Experience and Tradition" quotes a student who insists on the importance of religion as a topic: "[I]gnoring religion [in the classroom] loses the significance of the student because it relegates the student's most pressing concerns to the periphery. . . This attitude convinces the student, as well, that perhaps the difficult questions facing her should be sacrificed for the higher good of 'serious study.' Nothing could be more detrimental to the purpose of education" (1995, p. 7).

Religious Topics and Poor Writing

So, in theory, we teachers should encourage students to write on religious topics, yet there are still the concerns that for most students religious topics do not generate good papers.[4] The students responding to the survey repeatedly comment that they choose religious topics because they are easy to write on: easy because they assume that their feelings and opinions can stand alone without concrete, logical support. They assume that because they believe, that others must believe also and make the same connections they have made. Chris Anderson addresses this issue in "The Description of an Embarrassment: When Students

Write about Religion" (1989). Anderson maintains that students tend to rely on cliches to express their often felt but inarticulated feelings about sacred and religious subjects. He explains: "Faith is a matter of intuiting the inexplicable and of making a leap that cannot be justified to anyone who hasn't made that leap. And as if the pressure of wordlessness were not enough, the Christian rhetorician must operate in the midst of two thousand years of cliche, so that at the mere mention of Christian catchwords doors slam shut all over the place" (p. 13). Teachers may accept that "academic language is not the only language" (Anderson, 1989, p. 13), but most teachers and certainly novice freshman writers do not comprehend the complexities of spiritual abstract language nor understand how to articulate that language to someone unfamiliar with it; therefore, writers rely on cliches.

In addition to not having a precise language to write about religious topics, teachers often become frustrated with students who do not explore deeply their subjects and who present their positions as being either right or wrong. They often fail to see other perspectives; they see only their own point of view. Admittedly much of this sharp divisiveness is associated with the age of our students. William H. Perry's (1981) landmark study of college students' ethical development reveals that most college freshmen have a dualistic view of the world. Perry characterizes the first stage as "dualism." He defines *dualism* as the

> division of meaning into two realms--Good versus Bad, Right versus Wrong, We versus They, All that is not Success is Failure, and the like. Right Answers exist somewhere for every problem, and authorities know them. Right Answers are to be memorized by hard work. Knowledge is quantitative. Agency is experienced as "out there" in Authority, test scores, the Right job." (p. 79).

This type of thinking frustrates Elaine Hawker who challenges students who use "God says so" as their only support for their religious assertions. She and most of us want students to validate their deeply held beliefs with outside sources.

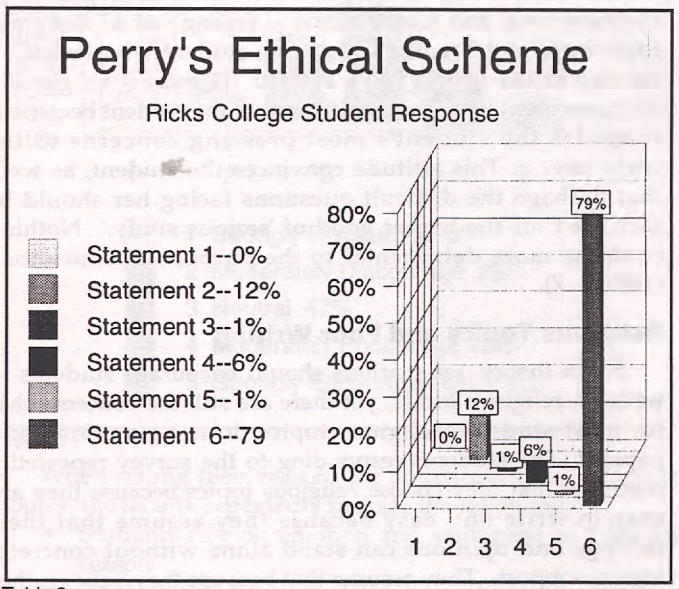


Table 3

Your age _____ Your gender ____

Please circle the **one** statement you most strongly believe.

❶ Authorities have all the answers. If we work hard, read every word, and learn right answers, all will be well.

❷ Some uncertainties and different opinions are possible, even for authorities.

❸ When authorities don't know the right answer, everyone has a right to a personal opinion; therefore, no one is wrong.

❹ Some authorities are not asking for the right answer; they want individuals to think about things in a certain way, supporting opinion with data.

❺ Individuals make their own decisions in an uncertain world with no one telling them they're right or wrong.

❻ Individuals must believe in and fight for their beliefs and values but learn about and respect the values and beliefs of others.

Based on W. Perry's statements, 1981

Student Survey 1– Ethical Devdlopment

Part of the problem is that students don't see their own dualistic nature; they believe that they view the world at the most mature stage of Perry's ethical development. This is supported by a recent survey at Ricks College. The survey lists six reworded sentences from Perry's scheme that correspond to different stages of ethical development. Seventy-nine percent of the students selected the sentence that represents the most mature level as the one statement they most strongly believe. That statement reads: "Individuals must believe in and fight for their beliefs and values but learn about and respect the values and beliefs of others." Not a single student selected the most elementary stage of dualism represented by the statement: "Authorities have all the answers. If we work hard, read every word, and learn right answers, all will be well." But 12% did choose the next statement that also represents a dualistic view point: "Some uncertainties and different opinions are possible, even for authorities." (See Stude nt Survey 1 and Table 3.)

But as Stephen Carter recently writes in "The Insufficiency of Honesty," "I may be honest about what I believe, but if I have never tested my beliefs, I may be wrong" (1996, p. 75). Students may honestly believe they are opened minded, but when surveyed concerning the issue of abortion, for example, the results are much different. (See Student Survey 2 and Table 4.) Fifty-three percent of the students chose the single statement "Abortion is wrong" as the statement they most strongly believe. And an additional 25% selected the statement "Abortion is wrong, but some uncertainties and different opinions are possible." These two statements represent the basic dualistic level of Perry's scheme or the dualistic opinions of 78% of the student respondents. On the other hand, only 17% of the students indicate the highest level of allowing others to have differing beliefs about abortion as opposed to the 79% who claim to be

open minded. (Before teachers get too frustrated with students, Chris Anson [1989] asserts that teachers most frequently revert back to dualism when they read student papers--the writing is right or wrong.)

Perhaps another problem with weak writing associated with religious topics is that the actual writing assignments are not appropriate for a testimony-based response. Students are familiar and comfortable with the testimony genre. However, Kris Hansen has suggested last year in her CCCC presentation ("The Cultures of Belief and Disbelief: Teaching Language Arts in the Contact Zone") that as teachers we could create new genres of religious writing, new genres different than the testimony. She briefly indicates:

> [I]magine with me a course in which students write at least some of the time about their own and others' religious beliefs. . . .In an autoethnography they represent their identity and experience in the terms of a dominant other, with the purpose of engaging the other. In a transculturation, they select and improvise on materials from the dominant culture to make it function in their own. Imagine students of different religious persuasions--or one who is religious and one who is not--collaborating to create a "bilingual" text--one that says in the language of each something that relates to a shared value or goal. Imagine them translating this text into the vernacular. Imagine students inventing a dialogue about some major issue between a leader in their own religion and a leader in another, say between Pope John Paul II and Louis Farrakhan or Pat Robertson and the Reverend Moon--just to come up with two unusual pairings. (1995, p. 9)

These genres, then could encourage students to write more objectively about their religious beliefs while supporting their opinions with more concrete evidence.

Now back to my student Amy's paper. Amy does decide to include religion in her paper. She intends her testimony to be the transition between her boy friend's death and her newly gained insights. Unfortunatley the three simple sentences she inserts in her final draft are merely cliches that do not represent her deeply held convictions nor reveal the powerful relationship her faith has had in sustaining her and in providing meaning and purpose to her life. Her sincere testimony has fallen flat--how sad.

Obviously, there are no easy answers. As teachers we know that allowing students to write on the religious topics they feel strongly about is important, and that through writing students can arrive at meaning in their lives. Yet students often lack the maturity and the experience to critically interpret their spiritual experiences much less explain those experiences to an outside audience. As teachers, we need to develop concrete strategies that allow opportunities for students to discuss religious topics, to temporarily remove themselves from their own deeply felt convictions to objectively view their and others' seemingly conflicting beliefs and to look beyond to commonalities before addressing differences. And then, perhaps, students may be able to successfully incorporate their religious beliefs into their academic writing.

Your age _____ Your gender ____

Please circle the **one** statement you most strongly believe.

❶ Abortion is wrong.

❷ Abortion is wrong, but some uncertainties and different opinions are possible.

❸ Everyone has a right to a personal opinion about abortion; therefore, no one is wrong.

❹ There is no right or wrong stance on abortion. Individuals may think in a certain way, supporting their opinions with data.

❺ Individuals make their own decisions about abortion with no one telling them they're right or wrong.

❻ Individuals must believe in and fight for their beliefs and values concerning abortion but learn about and respect the values and beliefs of others.

Based on W. Perry's statements, 1981

Student Survey 1– Ethical Devdlopment

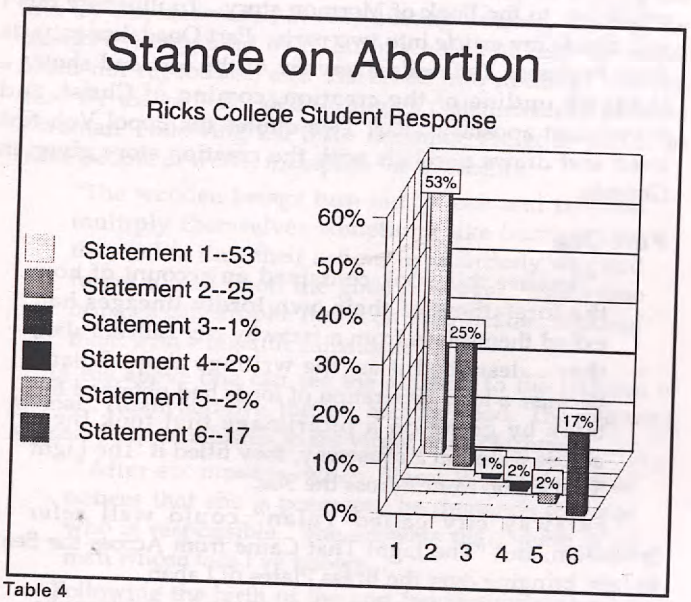


Table 4

Footnotes

1 Amy has authorized the use of both her name and paper for this presentation.

2 These articles include: Robert W. Holderer's "The Religious Right: Who Are They and Why Are We the Enemy?"; and Ellen H. Brinkley's "Examining Religious Right Attitudes about Texts."

3 I admit that ethical beliefs are not necessarily the same as religious beliefs. However, they are so closely related to moral behavior that I have chosen not to make a distinction within this paper.

4 Randall Miller makes the valid point that poor writing we may associate with a religious topic (emotional, oversimplified, cliched, for example) is not because of the topic but simply because of poor writing.

References

Anderson, C. (1989, Winter). The description of an embarrassment: When students write about religion. *ADE Bulletin*, 12-15.

Anson, C. (1989). Response styles and ways of knowing. In C. Anson (Ed.), *Writing and response: Theory, practice, and research* (pp. 332-363). Urbana, IL: National Council of Teachers of English.

Bellah, J., Madsen, R., Sullivan, W., Swidler, A., & Tipton, S. (1991) *The good society*. New York: Alfred A. Knopf.

Bellah, R., Madsen, R., Sullivan, W., Swidler, A., & Tipton, S. (1985). *Habits of the heart: Individualism and commitment in American life*. Berkeley: University of California Press.

Berlin, J. (1984). *Writing instruction in nineteenth-century colleges*. Carbondale and Edwardsville, IL: Southern Illinois University Press.

Berlin. J., (1987). *Rhetoric and reality: Writing instruction in American colleges, 1900-1985*. Carbondale and Edwardsville, IL: Southern Illinois Univesity Press.

Bok, D. (1988, April 27). Universities have an obligation to help students learn how to lead ethical, fulfilling lives. *Chronicle of Higher Education*, 34, p. B4.

Bridwell-Bowles, L. (1995, February). Freedom, form, function: Varieties of academic discourse. *College Composition and Communication*, 46(1), 46-61.

Caplow, T., & others. (1983). *All faithful people: Change and continuity in Middletown's religion*. Minneapolis: University of Minnesota Press.

Carter, S. (1993). *The culture of disbelief: How American law and politics trivialize religious devotion*. New York: BasicBooks.

Carter, S. (1996, February). The insufficiency of honesty. *The Atlantic Monthly*, 277(2), 75-76.

Cook, W. (1993, February). Writing in the spaces left. *College Composition and Communication*, 44(1), 9-25.

Contino, P. (1995, March). Engagements, illuminations, and connections: Writing out of religious experience and tradition. Paper presented at the meeting of the Conference on *College Composition and Communication*, Washington, D.C.

Gere, A. (1994, February). Kitchen tables and rented rooms: The extracurriculum of composition. College Composition and Communication, 45(1), 75-92.

Hansen, K. (1995, March). *The cultures of belief and disbelief: Teaching language arts in the contact zone*. Paper presented at the meeting of the Conference on College Composition and Communication, Washington, D.C.

Lu, M. (1987, April). From silence to words: Writing as struggle. *College English*, 49, 437-447.

McQuade, D. (1992, February). Living in--and on--the margins. *College Composition and Communication*, 43(1), 11-22.

Palmer, P. (1983). To know as we are known: A spirituality of education. San Franscisco: Harper.

Palmer, P. J. (1981). *Company of strangers: Christians and the renewal of America's public life*. New York: Crossroad.

Patterns of charitable giving by individuals: A research report. (1982). Washington, D.C.: Independent Sector.

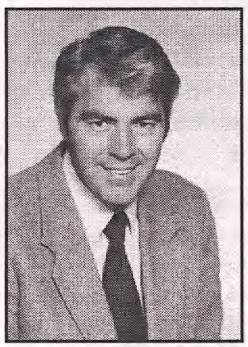
Perry, W.G., Jr. (1981). Cognitive and ethical growth: The making of meaning. In Chickering, A. (Ed.), *The modern American college: Responding to the new realities of diverse students and a changing society* (pp. 76-116). San Francisco: Jossey-Bass Publishers.

Riley, R. (1995, June). Eighteen groups issue common statement. *The Council Chronicle*, p. 9.

Schwehn, M. (1993). *Exiles from Eden: Religion and the academic vocation in America*. (New York: Oxford University Press.

Schwehn, M. (1993/94, Winter). The once and future university. *Cross Currents*, 43 (4), 453-462.

Welker, C. (1995, September). Truth: The elusive search. *English Journal*, 84(5), 99-101.



"Popol Vuh, The Mayan Book of the Dawn of Life,"

and the Book of Mormon

by
Ron Messer

An ancient text produced by the Quiche Maya is called "Popol Vuh, The Mayan book of the Dawn of Life." Popol Vuh means "Council Book." The edition I have was translated by Dennis Tedlock from the alphabetic edition which was first translated from the (now lost) hieroglyphic edition by a friar, Francisco Zimenez, between 1701 and 1703.

The Popol Vuh, though corrupted by a religious superstition that deteriorated into human sacrifice, adds credibility to the Book of Mormon story. To illustrate this I will divide my article into two parts. Part One takes extracts from Professor Tedlock's overview of the text and shows a shadowy outline of the creation, coming of Christ, and subsequent apostasy. Part Two quotes the Popol Vuh text itself and draws parallels with the creation story given in Genesis.

Part One

> "Because this book contained an account of how the forefathers of their own lordly lineages had exiled themselves from a faraway city called Tulan, they ...described it as 'the writings about Tulan.' Because a later generation of lords had obtained the book by going on a pilgrimage that took them across water on a causeway, they titled it 'The Light That Came from Across the Sea.'"

"Faraway city called Tulan" could well refer to Jerusalem, and "The Light That Came from Across the Sea" to Lehi bringing over the Brass Plates of Laban.

> "Tulan ...means "Place of Reeds" or ...'metropolis' ...it is prefixed to the names of many different

towns during Toltecan times....This ultimate Tulan was at the site now known as Teotihuacan, northeast of Mexico City...the greatest city in Mesoamerica..."

On an A&E documentary, archaeologists described Teotihuacan as a Utopia having no king, the people as having all things common, the government a democratic council. The dates of Teotihuacan coincide with the coming of Christ. Puzzled over why the ideal society came to an abrupt end, archaeological experts surmised that even though the inhabitants were masters at shipping, building cities, building canals, constructing highways, extending trade routes, building temples, understanding nature, and draining swamps, they were stupid at farming and so ran out of food (May the colleges continue to attract such experts. Perhaps they will stay out of government where they could do real harm). The Popol Vuh tells us that "all the tribes were sown and came to light in unity." They worshiped a strange God Quetzalcoatl, Plumed Serpent, a white, bearded God prophesied to come again, the fatal prophesy that caused Montezuma to fall in the hand of the blood thirsty Spaniards. But if archaeologists cannot come to terms with the abrupt end of a civilization, how could they ever explain accurately the following allusion:

"Nevertheless, the lords who once ruled a kingdom from a place called Quiche, in the highlands of Guatemala, once had in their possession the means for overcoming this nearsightedness, an ilbal, a "seeing instrument" or a "place to see"; with this they could know distant or future events. The instrument was not a telescope, not a crystal for gazing, but a book."

One immediately thinks not of a book but of the Urim and Thummim. "...those two stones which were fastened into the two rims of a bow...prepared from the beginning...handed down from generation to generation, for the purpose of interpreting languages...And whosoever has these things is called seer, after the manner of old times" (Mosiah 28:13-16).

According to the Popol Vuh the earth was created for man, but the gods failed the first three attempts. During the first try they succeeded in only making animals. During the second try, they used mud, but it would not keep its shape, could not reproduce, and dissolved into nothing. On the third try the gods decided through a matchmaker to provide a woman. Following the three attempts, the gods decide to make people of wood, metaphor for instability:

"The wooden beings turn out to look and talk and multiply themselves something like humans, but they fail to time their actions in an orderly way and forget to call upon the gods in prayer. Hurricane brings a catastrophe down on their heads...flooding them with a gigantic rainstorm..."

In the above one can see the allusion to the creation of animals, Adam and Eve, the fall, and the flood. The following appears to be an allusion to the virgin birth of Christ:

"After six months, when Blood Woman's father notices that she is pregnant, he demands to know who is responsible. She answers that "there is no man whose face I've known..."

Following the birth of the god figure animal sacrifice is abolished:

"...armed with the White Dagger, the instrument of sacrifice, they take her away. But she persuades them to spare her, devising a substitute for her heart in the form of a congealed nodule of sap from a croton tree. The lords heat the nodule over a fire and are entranced by the aroma ...As a result of this episode it is destined that the lords of Zibalba will receive offerings of incense made from croton sap rather than human blood and hearts."

Compare with 3 Nephi 9:19-21 "And ye shall offer up unto me no more the shedding of blood; yea, your sacrifices and your burnt offerings shall be done away.... And ye shall offer for a sacrifice unto me a broken heart and a contrite spirit..." Symbolized below is the possible birth, death and resurrection of Christ:

"Venus rose as the morning star on a day named Hunahpu...Venus reappeared as the evening star on a day named death, corresponding to the defeat of her sons by One and Seven Death and the placement of One Hunahpu's head in a tree in the west. The event that is due to come next in the story is the rebirth of Venus as the morning star, which should fall, as she already knows, on a day named Net. When she sees the imprint of the net in the field, she takes it as a sign that this event is coming near, and that the faces of the sons born of Blood Woman will be reincarnations of the face of One Hunahpu."

Suggestions of Christ's second coming find expression in the Popol Vuh imagery:

"And all the different peoples wander about and grow weary as they go on watching and waiting for the rising of the morning star and the sun."

"...they sing a song called "The Blame is Ours," lamenting the fact that they will not be in Tulan when the time comes for the first dawn...."

"At this point we reach the moment in the account of human affairs that corresponds to the final event in the account of the lives of the gods: the Sun himself rises. On just this one occasion he appears as an entire person, so hot that he dries out the face of the earth."

The reuniting of the Lamanites and Nephites as suggested by the Book of Mormon "...God will be merciful unto many; and our children shall be restored, that they may come to that which will give them the true knowledge of their Redeemer." (2 Nephi 10:2) could be alluded to in the following:

"At first the Quiches rejoice when they see the first sunrise, but then they remember their "brothers," the tribe who were with them at Tulan, and they sing the song called "The Blame Is Ours" once again. In the words of this song they wonder where their brothers might be at this very moment. In effect, the coming of the first sunrise reunites the tribes, despite the fact that they remain widely separated in space; as the Popol Vuh has it, "there were countless peoples, but there was just one dawn for all tribes.'"

In the Book of Mormon the "Keeper of the Gate is the Holy One of Israel." (2 Nephi 9:41); in the Popol Vuh "the Keeper of the Mat bears the divine name Plumed Serpent."

The following suggests the appearance of Jesus versus the later apostasy:

"Where Plumed Serpent gained power through spectacular displays: of shamanic skill, Quicab now gains it by military force."

This next quote perhaps refers to the division into tribes as told in the Book of Mormon.

"...after their pilgrimage a new conferring of titles took place, only now it was not Quiches but the heads of the leading "lookout" lineages who were ennobled, and it happened not under the authority of Nacxit (Plumed Serpent), lord of a domain in the mythic "east," but under Quicab, who ruled from Quiche."

The following reminds us of the fall of Satan as described by Isaiah:

"His face fell at once, he no longer looked like a lord. The last of his teeth came out, the jewels that had stood out blue from his mouth.... when his eyes were trimmed back the last of his metal came out. Still he felt no pain; he just looked on while the last of his greatness left him. It was just as Hunahpu an Xbalanque had intended...Such was the loss of the riches of Seven Macaw: only the doctors got the jewels and gems that had made him arrogant, here on the face of the earth...They had seen evil in his self-magnification."

"How art thou fallen from heaven, O Lucifer, son of the morning! How art thou cut down to the ground, which didst weaken the nations! For thou has said in thine heart, I will ascend into heaven, I will exalt my throne above the stars of God: I will sit also upon the mount of the congregation, in the sides of the north: I will ascend above the heights of the clouds; I will be like the most High. Yet thou shalt be brought down to hell, to the sides of the pit. They that see thee shall narrowly look upon thee..." Isaiah 14: 12-16

Part Two

Popol Vuh

This is the beginning of the Ancient Word, here in this place called Quiche. ...

And here we shall take up the ...account of how things were put in shadow and brought to light by the Maker, Modeler, named Bearer, Begetter...Sovereign Plumed Serpent...They accounted for everything--and did it, too--as enlightened beings, in enlightened words...the fourfold siding, fourfold cornering, measuring, fourfold staking, halving the cord, stretching the cord in the sky, on the earth, the four sides, the four corners as it is said, by the Maker, Modeler, mother-father of life, of humankind, giver of breath, giver of heart, bearer, upbringer in the light that lasts of those born in the light, begotten in the light; worrier, knower of everything.... (Note Chiasmas)

Genesis

1:1 In the beginning God created the heaven and the earth.

(John 1:1-3 In the beginning was the Word, and the Word was with God, and the Word was God. The same was in the beginning with God. All things were made by him; and without him was not any thing made that was made.)

(Job 38:3-6 "Where wast thou when I laid the foundations of the earth? Declare, if thou hast understanding. Who hath laid the measures thereof, I thou knowest? Or who hath stretched the line upon it? Whereupon are the foundations thereof fastened? Or who laid the corner stone thereof.")

"And then came his word, he came here to the Sovereign Plumed Serpent, here in the blackness, in the early dawn. He spoke with the Sovereign Plumed Serpent..."

1:2 And the earth was without form, and void; and darkness was upon the face of the deep.

"They agreed with each other, they joined their words, their thoughts. Then it was clear, then they reached accord in the light, and then humanity was clear, when they conceived the growth, the generation of trees, of bushes, and the growth of life, of humankind, in the blackness, in the early dawn, all because of the Heart of sky, named Hurricane. ...

"There is not yet one person, one animal, bird, fish, crab, tree, rock, hollow, canyon meadow, forest...

Moses 2:5 And every plant of the field before it was in the earth, and every herb of the field before it grew. For I, the Lord god, created al things, of which I have spoken, spiritually, before they were naturally upon the face of the earth. For I, the Lord God, had not caused it to rain upon the face of the earth. And I, the Lord god, had created all the children of men; and not yet a man to till the ground; for in heaven created I them; and there was not yet flesh upon the earth, neither in the water, neither in the air.

"Only the sky alone is there; the face of the earth is not clear. Only the sea alone is pooled under all the sky; there is nothing whatever gathered together. It is at rest; not a single thing stirs. It is held back, kept at rest under the sky.

"Whatever there is that might be is simply not there: only the pooled water, only the calm sea, only it alone is pooled."

1:6 And God said, Let there be a firmament in the midst of the waters, and let it divide the waters from the waters.
1:7 And God made the firmament, and divided the waters which were under the firmament from the waters which were above the firmament: and it was so.
1:9 And God said, Let the waters under the heaven be gathered together unto one place, and let the dry land appear: and it was so.

"... this water should be removed, emptied out for the formation of the earth's own plate and platform...

1:9 And God said, Let the waters under the heaven be gathered together unto one place, and let the dry land appear:

"Such was the formation of the earth when it was brought forth by the Heart of Sky, Heart of Earth, as they are called, since they were the first to think of it. The sky was set apart, and the earth was set apart in the midst of the waters."

"Now they planned the animals of the mountains, all the guardians of the forests, creatures of the mountains: the deer, birds, pumas, jaguars, serpents, rattlesnakes, yellowbites, guardians of the Bushes.

"But there will be no high days and no bright praise for our work, our design, until the rise of the human work, the human design," they said.

"And the Plumed Serpent was pleased with this: "It was good that you came, Heart of Sky, Hurricane, and Newborn Thunderbolt, Raw Thunderbolt. Our work, our design will turn out well," they said.... Who is to be the provider, nurturer?... A Bearer, Begetter speaks: "Why this pointless humming? Why should there merely be rustling beneath the trees and bushes?"

"Indeed--they had better have guardians," the others replied. As soon as they thought it and said it, deer and birds came forth.

And then they gave out homes to the deer and birds. So be it," they replied. The moment they spoke it was done...

"...the manikins, woodcarvings, human in looks and human in speech. This was the peopling of the face of the earth. They came into being, they multiplied, they had daughters, they had sons, these manikins, woodcarvings....

"But there was nothing in their hearts and nothing in their minds, no memory of their mason and builder. They just went and walked wherever they wanted. Now they did not remember the Heart of Sky.

And so they fell, just an experiment and just a cutout for humankind. ...And so they accomplished nothing before the Maker, Modeler who gave them birth, gave them heart. They became the first numerous people here on the face of the earth.

"Again there comes a humiliation, destruction, and demolition. The manikins, woodcarvings were killed with the Heart of Sky devised a flood for them. A great flood was made; it came down on the heads of the manikins, woodcarvings.

The man's body was carved from the wood of the coral tree by the Maker, Modeler. And as for the woman, the Maker, Modeler needed the pith of reeds for the woman's body. They were not competent, nor did they speak before the builder and sculptor who made them and brought them forth, and so they were killed, done in by a flood;

There came a rain of resin from the sky.... The earth was blackened because of this; the black rainstorm began, rain all day and rain all night. Into their houses came the animals, small and great. Their faces were crushed by things of wood and stone. ...

"The sky-earth was already there, but the face of the sun-moon was clouded over. Even so, it is said that his light provide a sign for the people who were flooded. He was like a person of genius in his being.

and it was so
1:10 And God called the dry land Earth; and the gathering together of the waters called he seas: and God saw that it was good.

1:21 And God created great whales, and every living creature that moveth, which the waters brought forth abundantly, after their kind, and every winged fowl after his kind: and God saw that it was good.

1:26 And God said, Let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth.
1:27 So God created man in his own image, in the image of God created he him; male and female created he them.

1:28 And God blessed them, and god said unto them, Be fruitful, and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth.

6:5 And God saw that the wickedness of man was great in the earth, and that every imagination of the thoughts of his heart was only evil continually.

6:5 And it repented the Lord that he had made man on the earth, and it grieved him at his heart.
6:7 And the Lord said, I will destroy man whom I have created from the face of the earth; both man, and beast, and the creeping thing, and the fowls of the air; for it repenteth me that I have made them.
6:17 And, behold, I, even I, do bring a flood of waters upon the earth, to destroy all flesh, wherein is the breath of life, from under heaven; and every thing that is in the earth shall die.
7:11 ...the same day were all the fountains of the great deep broken up, and the windows of heaven were opened.
7:21 An all flesh died that moved upon the earth both of fowl, and of cattle, and of beast, and of every creeping thing that creepeth upon the earth, and every man.
7:23 And every living substance was destroyed which was upon the face of the ground, both man, and cattle, and the creeping things, and the fowl of the heaven...

9:16 And the bow shall be in the cloud; and I will look upon it, that I may remember the everlasting covenant between God and every living creature of all flesh that is upon the earth.

Perhaps it is no accident that Mayan poetry is written in the same chiastic format as the Book of Mormon and other ancient Hebrew poetry. Note the typical example taken from the introduction to the Popol Vuh:

Make my guilt vanish,
Heart of Sky, Heart of Earth...
Give me strength, give me courage
in my heart, in my head...
And may this reading of the Popol Vuh...
Be complete in my heart, in my head
and make my guilt vanish...
You who speak with the Heart of Sky and Earth,
may all of you together give strength
to the reading I have undertaken.

Unlike the Bible or Book of Mormon the Popol Vuh is not divided into books attributed to prophets; therefore, it is unlikely that it is a direct mistranslation of the Brass Plates of Laban which contained the story of the creation. It is perhaps rather a poet's version like "Paradise Lost" romanticizing the story of the creation from memory, enhancing it with legends and folktales, using his poetic licence. Translating the Popol Vuh and ascribing it as ancient scripture would be comparable to some future civilization, unaided by Bible stories or Greek mythology, finding Milton's Paradise Lost with its Christian symbols enhanced by Greek and Latin epic literature and, calling it scripture, trying to understand modern day Christian religion. How could an outsider discern which was revelation, which mythology, which poetic fancy. Perhaps the Popol Vuh was simply an epic based on oral tradition meant to be enjoyed as literature originally compiled by an ancient epic poet with no higher purpose than the authors of Beowulf, Sir Gawain and the Green Knight, The Iliad, Faerie Queen, or Paradise Lost.

Nonetheless evidence piled on evidence will strengthen those who arrived at a testimony of the Book of Mormon through faith and force sceptics to build an ever more complex argument to explain it away. The many parallels are strong evidence that the oral tradition from which the poet of the Popol Vuh drew his imagery had a basis in the same traditions from which came our own Bible (via the Brass Plates of Laban) and The Book of Mormon.

Paradisiacal Glory: Mormonism and the Environment

by
Phil Murdock
English

In the Fall 1994 issue of *New Perspectives*, Ed Williams reviews the forum lecture of Dr. Sherwood Idso, a Mormon scientist. Under the title "The Sky is Falling! The Sky is Falling! Or Is It?" Ed recalls the story of Chicken Little to suggest that concern over global warming is nothing more than the ravings of "doom and gloom" environmentalists (30). These environmentalists, Ed suggests, are heirs to "the wide-eyed radicals of 40 years ago [who] were also preaching doom of our planet and its human inhabitants, but it did not happen" (30). Ed finds Idso's Mormon science a refreshing balance to contemporary doomsday predictions and agrees that global warming "may just be part of a [divine] plan" (32). He concludes by wondering aloud if "driving our automobile[s] may be preparing our earth for a more productive time ahead" (32).

I attended Idso's lecture (since reprinted in the Spring 1995 issue of *New Perspectives*) as well as the question and answer session that followed, but came away less heartened than Ed. Dr. Idso has long been interested in rising levels of atmospheric CO_2. Unlike most scientists, Idso believes that increasing CO_2 levels are salutary, a kind of "aerial fertilization" courtesy of industrialized society (8) . Speaking to a Mormon audience, Idso braids a weave of scripture, science, and Church history to suggest that the "dramatic increase in the carbon dioxide or CO_2 content of the atmosphere may be the means employed by the Lord to reinvigorate earth's biosphere" preparatory to the Second Coming (7). Referring to *Doctrine and Covenants* 84:119, Idso equates the Savior's words, "I, the Lord, have put forth my hand to exert the powers of heaven," with the Industrial Revolution (9), and argues that increased CO_2 levels are the engine for the "improvement in vegetative economy" that will green the planet and return it to paradisiacal glory in preparation for the coming of the Lord (8).

Idso carefully maintains a scientific demeanor in the forum presentation, sprinkling his lecture with academic caveats. In the less formal question and answer session the objectivity ceased, and Idso showed himself the true believer. He deflected questions about scientific consensus concerning global warming, and glibly dismissed studies contradictory to his own. When asked pointblank if he could envision any negative effect stemming from global warming, his answer was an unequivocal "No."

My concern does not focus on CO_2 levels or global warming. Idso, like any debater, articulates only his position--a position which is currently a minority scientific view. Sensing the need for the larger picture, Joseph Romney, one of the editors of this journal, asked Van Christman to review the issue of atmospheric CO_2. That review is printed in the Spring 1995 issue of *New Perspectives.*

My concern instead focuses on dangerous confusions between religious and secular ways of knowing. Secular knowledge is never complete, is never beyond revision, is never ultimately "knowable" in the way that religious knowledge is. And Dr. Idso, in my opinion, has failed to distinguish between these two ways of knowing. When Idso preaches "the *good news* about atmospheric CO_2 enrichment" (8, italics mine) he inadvertently displays the difficulty: his view of science is couched in the vocabulary of gospel. Secular knowledge has been transmuted into religious knowledge.

As Mormon listeners, we have difficulty resisting the intellectual temptation. Idso tells us what we want to hear--our most serious environmental problems are nothing more than disguised blessings for which we should give thanks rather than assume responsibility. This he says with the authority of testimony. Idso exploits one of the oldest

fallacies--the *ad populum*--the "appeal to the prejudices of the people." The power of the appeal is twofold. First, it releases a century of latent anger against expert science. The joke is on the lab-coated professionals. The difficult issues, the Darwinian metaphors, the Malthusian projections, will be solved by the very mechanism which fuels them. And the timing is exquisite: the exhaustion of the last fossil fuel reserves will coincide with the flowering of the planet. It will feel good to say this in the pages of *Nature*.

Second, Idso appeals to a more personal prejudice: he validates our bad habits, offering license to believe that ecological economy and stewardship are unimportant. At best, such license makes us sloppy; at worst, it validates a cause-effect sequence which runs counter to all God has taught about stewardship. We will not, as Ed muses, hasten the wonderful day of the Second Coming by squandering the resources of the earth. I find the implications of Idso's lecture frightening. In an era of politicized and polarized debate about environmental issues, it is dangerous to suggest that God has endorsed any particular platform. As I will discuss below, Mormon theology clearly affirms environmental stewardship, but does so in less radical terms than most forms of contemporary environmentalism.

Traditional Christianity and the Environment

Traditional Christianity has long been considered unsympathetic to environmental concerns. Scholars point to Genesis and suggest that the Garden of Eden was the antithesis of a balanced natural system (Nash 15-20; Oelschlaeger 51-53; White 1205). The garden was watered, filled with edible plants, free of predators. This collection of life was put at Adam's disposal, with the instruction "to dress it and to keep it" (Genesis 2:15). Adam did so, symbolically giving animals identity by naming them. Clearly, this garden environment favored man, God's most perfect creation, who was commanded to "be fruitful" and to "subdue" the earth (Genesis 1:28). Man was instructed to "have dominion" (Genesis 1:28) over the earth and all nonhuman forms of life.

Man was ejected from this paradise by the fall. According to traditional Christianity, the sin of Adam and Eve was sin. That is, God's children made a foolish, perhaps even sexual, decision which destroyed a life of plenty. But the decision itself was prompted by nature via the serpent, the most primal of nature's creatures. The serpent tempted, but it was man who suffered exile--with the punishment being proximity to raw nature. Beyond the pale of the Garden, earth did not easily yield her bounties. The ground was "cursed," inhabited by "thorns" and "thistles" (Genesis 3:17-18). Adam and Eve were forced to protect themselves from nature and make "coats of skins" (Genesis 3:21), themselves becoming predators. Thus, in traditional Christianity, the age-old enmity, not only between man and serpent, but between man and all of nature.

LDS Theology and the Environment

Mormonism has recently been singled out for criticism as well. John Wright, a professor of geology at New Mexico State University, argues that LDS influences are responsible for anti-environmental attitudes in Utah. After eight chapters spanning a hundred pages, Wright concludes:

> In accepting that laissez-faire development serves God, Utahans have traded a rich legacy for an illusory affluence. They are not alone in choosing this fool's bargain. What makes it so unfortunate is that a fine, environmentally based vision of life was once the centerpiece of the LDS Church. Mormons were to be enlightened stewards obliged to a divine landlord. There was a chance things would be different here. Instead, Mormon theology has made Utah the most arduous cultural terrain in the Rocky Mountain West for land conservationists. (247-8)

The accusation seems to have taken Mormon scholars by surprise. LDS spokesman Don LeFevre responded to reporters' questions about the book by asserting that Wright is "too willing to put responsibility on the church," and BYU history professor Thomas Alexander told reporters he had not read Wright ("Author" B-1). The responses are unfortunate, because even a brief examination of LDS theology shows that the Restored Church has continually valued stewardship, environmental and otherwise.

Scriptural Evidence

Without doubt, Mormons part company from extreme environmental factions. In the parlance of the field, Mormon theology espouses "shallow" rather than "deep ecology." The distinction is significant. Deep ecology accepts "biocentric equality"--the belief that all species are equally privileged (Devall and Sessions 67). Mormons believe otherwise, accepting the earth as created expressly for man. However, Mormons temper their human centrism with the realization that man will be held accountable for his use of the earth and its resources. The strength of these obligations is demonstrated in peculiarly Mormon readings of the scriptures. Genesis, for example, makes clear that the earth will provide for man. The *King James* version reads, "The dread of you shall be upon every beast of the earth" and "every moving thing that liveth shall be meat for you" (9:2-3). Yet Joseph Smith's *Inspired Translation* goes on to read: "And surely, blood shall not be shed, only for meat, to save your lives; and the blood of every beast will I require at your hands" (Genesis 9:11). In Moses, from *The Pearl of Great Price*, the creation account again goes beyond that of the *King James* Genesis. The beasts and fowls are imbued with trust towards Adam and agency native to human souls: "[I] commanded that they should come unto Adam, to see what he would call them; and they were also living souls" (2:19).

The proffering of the bounty of the earth, along with restrictions on use, occurs in our dispensation as well. Section 59, of *The Doctrine and Covenants* reminds us that "the fulness of the earth" is ours; that "all things which come of the earth . . . are made for the benefit and the use of man, both to please the eye and to gladden the heart" (vs 16, 18). But the gift is made with reservation: "for unto this end were they made to be used, with judgment, not to excess, neither by extortion (vs 20). The warning is given again in Section 49: "Wo be unto man that sheddeth blood or that wasteth flesh and hath no need" (vs 21).

The concept of stewardship teaches that we are surrogate owners, and will one day return that which has been loaned to us. Like the servants in the parable of the talents, we cannot return less than we take. "It is expedient," says the Lord, that I "should make every man accountable, as a steward over earthly blessings, which I have made and prepared for my creatures. . . . For the earth is full, and there is enough and to spare; yea, I prepared all things, and have

given unto the children of men to be agents unto themselves (*Doctrine and Covenants* 104:13, 17).

Historical Evidence

That environmental stewardship has been considered obligatory is evidenced by the behavior and teachings of early Church leaders.[1] Recall Zion's Camp, when brethren found rattlesnakes infesting their camp sites. Joseph asked the men to refrain from killing the snakes, arguing that enmity between man and nature must cease, with man making the overture: "Men must become harmless before the brute creation, and when men lose their viscious [sic] dispositions and cease to destroy the animal race, the lion and the lamb can dwell together, and the sucking child can play with the serpent in safety" (71). Joseph taught the brethren a principle that would become a refrain through years of pioneering in the West: "I exhorted the brethren not to kill a serpent, bird, or animal of any kind during our journey unless it became necessary in order to preserve ourselves from hunger" (71).

Brigham Young learned the lesson well, and understood both the economics and effects of environmental stewardship. He taught:

> There are the elements that belong to this globe, and no more. We do not go to the moon to borrow; neither send to the sun or any of the planets; all our commercial transactions must be confined to this little earth and its wealth cannot be increased or diminished; and though the improvements in the arts of life which have taken place within the memory of many now living are very wonderful, there is no question that extravagance has more than kept pace with them. (*Journal of Discourses* 13:304)

This teaching is amply illustrated in Brigham Young's behavior. As Hugh Nibley reports, Brigham resisted the impulse to waste the seemingly endless bounty the West offered settlers. In 1846, early in the first crossing of the plains, Brigham writes in his diary: "Traveled 19 miles. The prairie appeared black being covered with immense herds of buffalo. May 7th. I preached in camp and advised the brethren not to kill any more buffalo or other game until the meat was needed" (Nibley "Brigham Young" 18). Nibley goes on to point out that in the span of one day Brigham's contemporary, Buffalo Bill Cody, slaughtered 285 buffalo and left their carcasses to rot in the summer sun.

Brigham's awareness of economy is legendary. "I never suffered a peach pit," he says, "to be thrown away, nor ate an apple without saving the seeds to plant" (*Journal of Discourses* 10:335). When the foundations of the Salt Lake Temple were barely above ground, Brigham commissioned the building of the Salt Lake Playhouse and treated visiting dignitaries to the only theater between the Mississippi and San Francisco. He took pride in pointing out that the playhouse's gleaming chandelier was built out of a recycled wagon wheel and suspended by a pair of ox chains he had gilded himself (Arrington 288). Brigham's family also felt the effects of his economy. Responding to the influx of luxury goods made available by the newly completed transcontinental railroad, Brigham gathered his family to make a request: "I desire to organize my own family first into a society for the promotion of habits of order, thrift, industry and charity; and, above all things, I desire them to retrench from their extravagance in dress, in eating, and even in speech (Arrington 352). Thus, while some Saints wore dresses made in New York, Brigham's daughters became the first conscripts to The Young Ladies' Retrenchment Association, which resolved that "we shall adopt the wearing of home-made articles, and exercise our united influence in rendering them fashionable" (Arrington 353).

The Indivisibility of the Temporal and Spiritual

But Brigham's respect for the resources of the earth runs deeper than fashion or economics. He understood the indivisibility of the temporal and the spiritual. He sensed the moral obligation to respect the creatures of the earth, and taught that the earth, when no longer treated as enemy, will respond. "The more kind we are to our animals," he says in an 1852 sermon, "the more will peace increase, and the savage nature of brute creation vanish away (*Journal of Discourses* 1:203). This is so because of a Christian belief unique to Mormonism. LDS theology teaches that the earth, like man, progresses through three estates. It pre-existed, having been created spiritually prior to its physical creation (Moses 3:4-5). Like man, the earth is tested during this temporal existence and "groans under the weight of its iniquity" (*Doctrine and Covenants* 123:7). It undergoes a baptism of water and fire (Joseph Fielding Smith 320-322), and, like man, "shall die" but "shall be quickened again" (*Doctrine and Covenants* 88:26). Unlike man, however, the earth is absolutely faithful: "the earth abideth the law of a celestial kingdom, for it filleth the measure of its creation, and transgresseth not the law" (*Doctrine and Covenants* 88:25). Appropriately, the earth becomes a fit environment for "the righteous [who] shall inherit it" (*Doctrine and Covenants* 88:26). So faithful are the earth and its creatures that Brigham viewed them as models for mankind:

> Are these great weaknesses to be found in the birds of the air, in the fishes of the sea, or in the beasts of the field? No. The animal, vegetable, and mineral kingdoms abide the law of their Creator; the whole earth and all things pertaining to it, except man, abide the law of their creation. (*Journal of Discourses* 9:246)

This spiritual kinship man shares with the earth should engender respect. Unlike religions which despise the physical and aspire to ethereal heavens, Brigham's religion advises us to love this earth and emulate its example: "The earth is very good in and of itself, and has abided a celestial law, consequently we should not despise it, nor desire to leave it, but rather desire and strive to obey the same law that the earth abides, and abide it as honorably as does the earth" (*Journal of Discourses* 2:302-3). Love for this earth is easy to come by, as I am reminded in the temple film when I see Adam and Eve exiled to an aspen-clad world of haunting beauty. Brigham Young saw this beauty and taught respect for the earth's immense variety long before E. O. Wilson made biodiversity a catchword:

> Endless variety is stamped upon the works of God's hands. There are no two productions of nature, whether animal, vegetable, or mineral, that are exactly alike, and all are crowned with a degree of polish and perfection that cannot be obtained by ignorant man in his most exquisite mechanical

> productions. Man's machinery makes things alike; God's machinery gives to things which appear alike a pleasing difference. (*Journal of Discourses* 9:369-70)

But man is placed in a difficult position. We recognize that even the most innocent of our actions affects the earth, often to the negative. Yet we must act. We are back to the old decisions, the most difficult of commandments: the choosing between shades of gray. Part of our test here is to balance our needs from the earth with respect for beauty and diversity which seem of no economic benefit. The test, Brigham says, is to "subdue" the earth at the same time that we "multiply" its diversity:

> The very object of our existence here is to handle the temporal elements of this world and subdue the earth, multiplying those organisms of plants and animals God has designed shall dwell upon it. When we have learned to live according to the full value of the life we now possess, we are prepared for further advancement in the scale of eternal progression. (*Journal of Discourses* 9:168)

This earth shares a history with us which stretches beyond geological era. The earth will follow us through death and become our celestial residence. We are allied with the earth in ways which scientific ecology grossly underestimates. Members of the Restored Church, more than any group on earth, have reason to resist short-term perceptions of the earth. It is Brigham, once again, who sees so clearly:

> We are for the kingdom of God, and are not going to the moon, nor to any other planet pertaining to this solar system; but we are determined to have a heaven here, and are going to make it ourselves, by the help of God and his angels. We have been traditionated [sic] that when we were prepared to be saved, we ought then to pass from this stage of existence, and that then we never would have anything more to do with this earth. . . . This is not according to the design, as we believe, of God and his providences and works. It is not the work of the Lord to organize an earth and destroy it. (*Journal of Discourses* 8:293-4)

Our relationship to the earth, Hugh Nibley suggests, is best characterized by the metaphor of marriage:

> We are being tested to demonstrate to the heavens, to ourselves, and to our fellows just how we would treat the things of a glorious and beautiful world if they were given to us as our own. . . . We are placed in the position of a lover who is engaged to be married; if he cannot wait until he is properly wed, or if he displays an arrogant and brutal nature toward his promised bride, then the wedding had best be called off--he is not worthy of the prize. ("Brigham Young" 12)

Recent Prophetic Teachings

In more recent years, as science has articulated elements of ecology, Latter-day Church leaders have taught environmental stewardship in more explicit terms. But those terms have always wedded science to morality. President Ezra Taft Benson, speaking in 1957 from a career grounded in agriculture:

> Stewardship in the Church is a very important matter. The Lord has mentioned it in the revelations. (See D&C 59; 104). We are stewards over these earthly blessings which the Lord has provided, those of us who have this soil and this water. We have no moral latitude, it seems to me. In fact, we are morally obligated to turn this land over to those who succeed us, not drained of its fertility. . . . (645)

President Benson revisits the subject in 1975, pointing out that environmental ethics are no passing fashion:

> Whatever mortal reasons there are to be concerned about environment, there are eternal reasons, too, for us to be thoughtful stewards. President Brigham Young said: "Not one particle of all that comprises this vast creation of God is our own. Everything we have has been bestowed upon us for our action, to see what we would do with it--whether we would use it for eternal life and exaltation, or for eternal death and degradation." (644)

Elder Neal A. Maxwell is even more explicit:

> Man is acquiring a new respect--almost too late--for the wondrous order and ecology of nature, in which the relationships of organism and their environments reflect natural cycles and rhythm. The pollution of our atmosphere and streams, the denigration of nature's mountain wonders, and the general loss of man's direct interface with nature (which may be greater a spiritual need than we of the asphalt age realize) have suddenly shown us, more clearly than many of us have ever known before, that the order of nature is violated at our peril, and that man may not walk the earth with interruptional impunity. Man's task of establishing dominion over the earth is not to be achieved by arbitrarily imposing his will on his environment, but by acting in harmony with law. (9)

New Concerns

I have briefly reviewed evidence that Mormon theology obligates its believers to environmental stewardship. Why, then, does Wright argue that Mormons have lost the stewardship ethic, and why does Idso seem delighted to think that pollution is Godly? The answers are undoubtedly complex. Thomas Alexander believes that Church membership has simply ceased to respond to prophetic utterance on what are perceived to be secular issues (362). Hugh Nibley attributes environmental callousness to the "Mahan principle," the belief that all resources exist for economic benefit and all living things are merely cash on the hoof ("Gifts" 93; "How Firm a Foundation" 165-167). Personally, I worry that polarizing rhetoric of radical groups--from Earth First! on the "green" end of the spectrum, to "Catron County" Wise Use groups on the "brown" end--obscures a middle ground of respectful resource use .[2]

Idso's argument, however, articulates a new line of reasoning--one which resides in popular Mormon views about the end of the world. Over the last few years I have heard, on a number of occasions, Church leaders address youth about the Second Coming. Unlike the Second Coming counsel of my youth, this counsel goes beyond preparation. It warns youth to continue living while they prepare. It

urges youth to pursue educations, to seek mates in marriage, to buy homes, to raise families. The counsel shocks me, because I had not realized that some members of the Church so precisely interpret the signs of the Second Coming that long-term planning becomes questionable. It had never occurred to me to live as if I had no temporal future. Perhaps it is the spread of AIDS. Perhaps the evening news which proclaims a tightening spiral of murder and mayhem. Perhaps even the very roundness of the number 2000. Whatever the cause, there is sentiment among some Church members that the end of the earth is more than imminent.

This imminence has great explanatory power. It accounts for apparent increases in wickedness and, more importantly, posits an end to them. Like all ends, this end changes the quality of waiting. Holding on until the new century is a different matter than holding on indefinitely. This view also accounts for pollutions, both physical and spiritual. Isn't it reasonable to assume that physical pollutions will increase just as moral pollutions do? If the earth is about to end, shouldn't it show signs of wear? If the journey of the earth is nearly finished, shouldn't the earth's fuel gauge read empty?

Perhaps. Idso may be right. The point, however, is that we simply cannot afford to live as if he were. We cannot live as if we have no temporal future. I cannot cease preparing my class lectures, or patching the roof on my house, simply because I believe I know when the Savior is coming. This is paralysis of the worst kind--the antithesis of the oil-prepared virgins.

The Brethren admit that times are difficult, but I never hear counsel to succumb. As the wave of moral pollution increases, I hear counsel to resist, even though I may believe from my reading of the scriptures that global wickedness will increase despite my best personal effort. This stance is healthy. If the Second Coming does relieve me of mortgage payments, I will have behaved honorably. If the Second Coming does not arrive when I expect it, I will reside in a world where I am satisfied with the consequences of my personal decisions.

I believe this same behavior must apply to our views on physical pollution. I may feel that my best personal efforts will not reduce air quality warnings in Los Angeles or even eliminate drinking water boil orders in Ammon, St. Anthony, Ririe, and Island Park. But I cannot take license for my apathy from the Second Coming. I cannot agree that physical pollution is the cost of doing business any more than I believe that moral pollution is the cost of doing business. I certainly do not hear the Brethren suggesting that God is the Great Polluter.

We cannot agree to the exhaustion of our resources in the belief that God's timetable will save us from ourselves. We must live our lives as if our children will have lives. We must use our resources as if our children will need those resources. We must live as if the world will continue when we are somewhere else. To do otherwise is simply selfishness, whether or not it is buttressed with scientific evidence. President Benson states it clearly:

> Pollution of one's environment and moral impurity both rest on a life-style which partakes of a philosophy of "eat, drink, and be merry"--gouge and grab now, without regard to the consequences. Both violate the spirit of stewardship for which we will stand accountable. (644)

Conclusion

The ancient Greeks devised a theater contraption which has since redeemed many a playwright. When, at the end of a play, an unfortunate character faced destruction, wheels began to creak overhead and one of the gods was lowered from a stage crane. The *deus ex machina*--the god from the machine--rescued the hapless human and offered the audience a neat ending. It is a cheap trick for second-rate playwrights. Our God does not lower himself by ropes. He teaches us correct principles and asks that we govern ourselves. When He does intervene, it is after we have exerted ourselves beyond exhaustion and have done "all we can do" (2 Nephi 25:23). The intervention is grace, not rescue, and is invoked by the seed money of our efforts.

I began this essay in reaction to Ed and Dr. Idso's ideas about global warming. I didn't intend to quibble with the science offered, although I believe there is plenty of quibbling to be done. I intended, rather, to point out that whatever the current scientific paradigm, we are obligated by the principles of economy and stewardship which have been preached through all dispensations of the gospel. We have moral obligations to the earth we live on, the resources it offers, and the diversity of life it supports. We do a grave injustice if we cite scripture to suggest otherwise.

Footnotes

1. I would like to thank Jerry Scrivner for his assistance in locating some of the references in this section.
2. The Upper Snake River Valley nurtures one of the first organizational attempts to solve natural resource conflict by consensus. The Henry's Fork Watershed Council is sponsored by the Fremont-Madison Irrigation District and the Henry's Fork Foundation.

Works Cited

Alexander, Thomas. "Stewardship and Enterprise: The LDS Church and the Wasatch Oasis Environment, 1847-1930." *Western Historical Quarterly.* Autumn, 1994. 341-365.

Arrington, Leonard. Brigham Young: *American Moses.* Chicago: University of Illinois Press, 1985.

"Author Pins Poor Utah Ecology on LDS Theology." *Idaho Falls Post-Register* April 5 1994, sec. B:1.

Benson, Ezra Taft. *The Teachings of Ezra Taft Benson.* Salt Lake City: Bookcraft, 1988.

Devall, Bill and George Sessions. *Deep Ecology.* Salt Lake City: Peregrine Smith Books, 1985.

Idso, Sherwood. "The Impending Renewal of the Earth." Forum speech given November, 1995. Reprinted in *New Perspectives* 12.1 (1995): 7-13.

Christman, Van. "Issues Surrounding Increasing Atmospheric CO2." *New Perspectives,* 12.1 (1995): 14-15.

Journal of Discourses. London: F.D. Richards, 1855. Lithographic reprint. Salt Lake City, 1966.

Maxwell, Neal A. *For the Power Is in Them.* Salt Lake City: Deseret Book, 1970.

Nash, Roderick. *Wilderness and the American Mind.* New Haven: Yale University Press, 1982.

Nibley, Hugh. "Brigham Young on the Environment." *To the Glory of God: Mormon Essays on Great Issues.* Eds.

Truman G. Madsen and Charles D. Tate, Jr. Salt Lake City: Deseret Book, 1972. 3-29.

---. "Gifts." *Approaching Zion.* Salt Lake City: Deseret Book Company, 1989. 85-117.

---. "How Firm a Foundation." *Approaching Zion.* Salt Lake City: Deseret Book Company, 1989. 149-177.

Oelschlaeger, Max. *The Idea of Wilderness: From Prehistory to the Age of Ecology.* New Haven: Yale University Press, 1991.

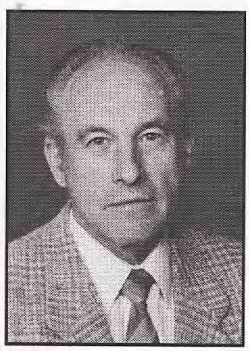
Smith, Joseph. *The Teachings of the Prophet Joseph Smith.* Ed. Joseph Fielding Smith. Salt Lake City: Deseret Book, 1972.

Smith, Joseph Fielding. *Doctrines of Salvation.* Vol. 2. Salt Lake City: Bookcraft, 1956. 3 vols.

White, Lynn, Jr. "The Historical Roots of Our Ecologic Crisis," *Science,* March, 1967, 1203-7.

Williams, Edmund J. "The Sky is Falling! The Sky is Falling! Or is It? *New Perspectives,* 11.2 (1994): 30-32.

Wright, John. *Rocky Mountain Divide: Selling and Saving the West.* Austin: University of Texas Press, 1993.



Lest We Forget about the Mormons Crossing Iowa in 1846

by
Lawrence Coates
History Department

Several groups of Mormons migrated west in 1846. Many threads of this story weave in and out of the larger fabric of American heritage. Part of this saga included a Mormon widow, named Laviana Murphy, and her family. During the winter of 1845, this widow moved to Warsaw, Illinois, to provide income for her family. In the spring of 1846, the Donner party offered her free passage, providing she would cook and wash clothes for them. Thinking the Mormons would soon be going to California, she accepted employment, migrated across the great plains, and helped pioneer a pathway into the Salt Lake Valley, which the Saints followed in 1847. After getting trapped by the early winter snows of the Sierra Nevada Mountains, she died along with several members of her family and many others in the Donner party. Meanwhile, others Mormons joined Samuel Brannan in sailing around South Africa to San Francisco. Earlier the same year, Mormons in Nauvoo crossed the Mississippi and headed west. While the vanguard company of these Saints was crossing Iowa, the United States declared war on Mexico, and subsequently the government asked for five hundred volunteers. This Mormon Battalion followed the Santa Fe Trail across the continent, and later some of these men discovered gold at Sutter's mill, which triggered a mass migration of millions of wealth seekers to the newest state in the Union.[1] Before meeting the Saints in the Salt Lake Valley, several members of the Battalion also helped rescue the survivors of Donner party.

One hundred and forty nine years later, the Thomas E. Ricks Associates and the Faculty Research Committee gave me funds to retrace the steps of the pioneers and video some of the sites on the Mormon trail across Iowa and the great plains to the Salt Lake Valley. To find these places, I read the journals of Wilford Woodruff, Orson Pratt, William Clayton, John D. Lee, and Heber C. Kimball and made an index of the dates and locations for the sites. These pioneers, before making the exodus, read John C. Fremont's report of his explorations all the way to California and studied his maps, which included the latitude and longitude of many locations. Fremont's information made it possible for Orson Pratt to used a sextant, a barometer, an artificial horizon, a circle of reflection, and a telescope to compare his readings with Fremont's calculations, when Mormons crossed the plains. To help locate these sites, the Division of the Behavioral and Social Sciences purchased a global position system, which collects data from the satellites and shows the latitude and longitude on earth. This information made it possible for me to pinpoint many places the Mormon pioneers actually camped and use a video camera from the Ricks College Media Department to video two tapes at seventy different locations.

Following the Mormon trail, reading the journals, and looking at the landscape grew to be a deep spiritual experience for me. It became even more clear that the hegira across Iowa was a deeply moving religious occasion for the pioneers, as well as an intensely human struggle against sub-zero temperatures, snow, sleet, wind, rain, treacherous rivers, and mud. This dramatic story reveals a people, who desperately tried lifting themselves to levels worthy of the highest ideals of being Latter-day Saints.

Shivering on Sugar Creek

Let me share just a few pages of a much longer study about this story, which I have written about some of the experiences of the pioneers crossing Iowa in 1846. Mormons began boating across the Mississippi on February 4, and on the evening of the seventeenth of February, the weather turned extremely cold and filled the river with floating ice. Two days later, the wind began blowing, which made crossing the river extremely dangerous. William Clayton noted, "The weather [was] very cold and windy. Impossible to cross the river." Finally, on the 27th, the Mississippi froze solid enough for Clayton, Orson Pratt, and others to drive their teams across the one mile wide river on the ice. On this evening, the temperature dropped to 21 degrees below zero.[2] Cold north winds, frequent snowstorms, and sub-zero temperatures made living in tents, wagons, and other makeshift shelters very miserable.

These primitive conditions changed life dramatically for the Saints, so they adopted various rules. "Remember the Law of Moses," Hosea Stout told his police officers, for "the Lord would turn away from them and abandon them to their enemies if they did not [observe] the proper prescribed rules of clanliness." Do "not defile the camp [with human waste]," he declared, dig trenches for the "Gents to the right and Ladies to the Left."[3] The same rule applied, while traveling across the plains.

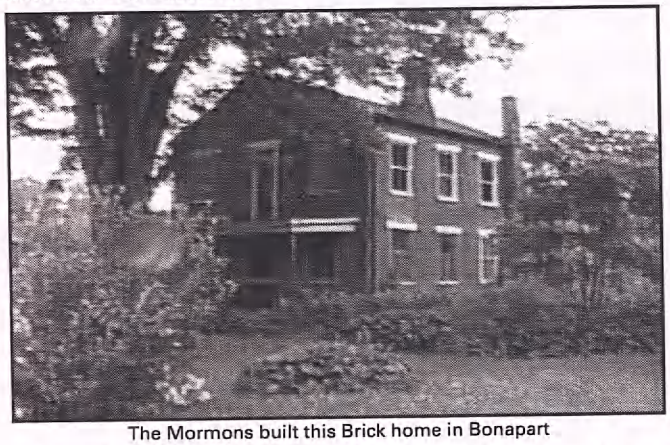
Crossing into Iowa in 1846 brought back many painful memories to the Saints of fleeing from Missouri nearly seven years earlier. Just four days after camping on Sugar Creek, Hosea Stout looked for the grave of his first wife, Surmantha, who had died during this exodus. He found the picket fence still around it, lamented her untimely death, and recalled many lonely hours of standing by her grave mourning the loss of his

"bosom friend," in whom he had "implicit confidence." He remembered feeling deep despair, heartache, and depression when he moved to Nauvoo, but he felt a ray of hope come into his heart, when he heard about "the plan of redemption" from "the now martyred prophet Joseph [Smith]." Then, Stout recalled rejoicing, when his wife Louisa Taylor stood as her proxy in sealing Surmantha to him for the eternities in the Nauvoo Temple. Feeling helpless, Hosea exclaimed, "O Lord keep me" and ensure my exaltation with my lost "bosom friend." Now, he penned, he faced yet another crisis of being driven into the wilderness because of "the gentile world of oppression & tyrranny." Three days before migrating farther west, Stout again relived in his mind life with Surmantha, when he spent the afternoon with his second wife Louisa visiting Surmantha's grave.[4]

On Sunday March 1, five hundred Mormons began leaving Sugar Creek. They expected to cross the Missouri near Council Bluffs about April 15th, plant some crops, organize a way station, and send a company across the mountains to establish an outpost and sow crops. They set departure for twelve noon, but getting all these people and animals to meet this time schedule proved futile. Hosea Stout recorded, that "we waited... [for the Twelve] untill four o'clock and [because] the families became... very impatient in waiting I permitted all the teams... [in this company to] go on & encamp while we taried." Finally, just before sundown, President Young started to move, even though he had to leave Elder John Taylor behind, because "he was not yet ready to start[5]." The delays in leaving Sugar Creek proved to be typical in crossing Iowa, for the vanguard company did not reach the Missouri until June 15, two months behind schedule.

Passing through Farmington

It took the Mormons two days to reach Farmington, where they had some good and bad experiences with outsiders. When they came into this town, they had a confrontation with a few local residents. Hosea Stout went in a store and met some men, who looked as though they wanted "to pick a fuss with us, but [he said] I was armed with 2 Six shooters & a large Bowie knife all in sight." Then, one Mormon boy drove his wagon over a pig on the street, the owner simply viewed it as an accident and began to slaughter it, but some bystanders "swore" the boy ought to pay for it. Some Mormons agreed, but others concurred with Jesse D. Hunter, who reportedly said, they were "well off to get the hog." When the hecklers persisted, Hunter pointed to his weapons and said, "they could be very easily used if he was molested."[6]



The Mormons built this Brick home in Bonapart

At the same time, the local resident near Farmington benefitted from the Saints crossing Iowa. For example, the Mormons paid some cash, split rails to buy two ton of timothy hay, and built houses (see the Photos). John Scott used his Mormon artillery troops to remove dirt from a coal bed for 12 1/2 cents per yard and split two thousand rails. The residents paid them in flour at $2.00 and pork at $6.00 per hundred respectively, with the balance being paid in cash. On Friday the 6th, the Mormons purchased one hundred bushels of corn at $14.00 per hundred to feed their animals.

While camped near Farmington, church leaders adopted the policy of having the policemen work for the local residents to "relieve the Church from the expense" of supporting them but this caused some hard feelings. When chief Hosea Stout announced this policy, one of his captains gave "an inflammatory speech" saying "he would not work" nor take any more orders from Stout. Instead, he declared, he would bypass him and go directly to President Young. According to Stout, "Some drank into his spirit." He even gained some support by taking a vote. Two days later, this captain and his men refused to take their regular turn at guard duty, saying they were "too tired."

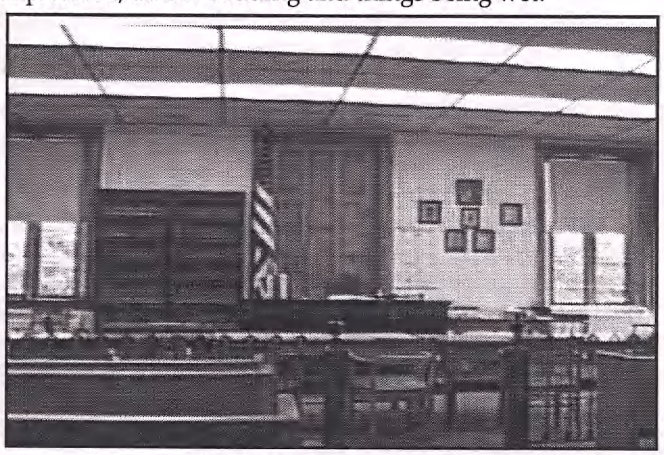
Meanwhile, the Saints established friendly relations with some of the residents, after the pioneers moved three miles northwest to Farmington. Bishop George Miller and his crew had moved ahead of the main camp and split fencing rails for a Dr. Jewett. Miller arranged for a campsite with him, but he requested they stay within a specific area.[7] Miller's company had cleared and fenced the campsite, and prepared corn for horses and oxen. When Hosea Stout arrived, it seemed as though all the good camping place were taken, so he had the police force pitch their tents in a beautiful thick grove of sugar maple. When the owner arrived, he generously let these men camp in the woods. He told them they could use any of the dry timber, except the large logs and the green timber. Stout promised that his guards would protect his property.[8] Since the Saints stayed at this camp an extra day, a few of the leading local people came to the camp and asked the Mormons play for them. Pitt's band returned to the village and played, while John Kay sang several songs for a large crowd at the hotel and the school house. As a gesture of goodwill, they gave the performers supper, five dollars, and three cheers, when they left for camp at sundown. Frightened by their long absence, Brigham Young thought members of the band were in danger, so he sent thirty armed men to find them.[3]

Entertaining in Keosauqua

On March 7, Brigham Young moved his camp and spent nearly two weeks at Richardson's point, near the small village of Bloomfield fifty-six miles from Nauvoo. News of the Mormon band spread, and some citizens from Keosauqua asked for a concert, but the musicians refused to make any commitment until they talked with President Young. On March 8, some of these residents traveled ten miles to the new camp and renewed their request. William Clayton consulted with Brigham Young, and the band consented to play. After spending a day practicing, the members of the band arrived in Keosauqua about 3:00 pm. They walked through town and played. At each grocery store, the owners treated them for playing special tunes. At the tavern, the keeper fed them "cake and beer." Next, they went to the Des Moines hotel, had supper, and then went to the court house to practice. This building was built in 1840

and is still used in 1996. At seven, a crowd filled the room, and the band played and sang until 9:30 pm. Clayton penned, "The audience seemed highly pleased and gave a loud applause. About the close one of the citizens got up and said it was the wish of many that we should repeat the concert the following evening and he took a vote of all who wished us to go again. The vote was unanimous. We made nearly $25.00 clear of all expenses."[10]

After getting Young's approval, the band agreed to return to Keosauqua the next day, Wednesday the 11th. Clayton remarked, the citizens greeted the band with "the same warm feeling as yesterday. Pitt had a severe chill... and when we got there it commenced raining and made it very unpleasant. The house was again filled but we only make $20.00 besides all expenses." Some disorder in the town, however, troubled the musicians. Several in the community, Clayton observed, were opposed to a party of socialists. Furthermore, the court had scheduled a man, named McCully, to be hanged on April 4th for murdering a man and his child. Clayton said, he did not feel as well about the concert as the previous evening. The band went to their camp in the heavy rains, which forced them to move to higher ground. Clayton wrote, "it [was] very muddy and unpleasant, all our bedding and things being wet."



Pitt's band played in this Keosauqua Court House

Local residents continued requesting the band to play. On Monday the 16th, some people from Keosauqua asked for still another concert, and the band performed the next day. Upon arrival, he said, he learned that "the priests had been hard at work preventing the sectarians from coming to the concert, saying that it was an infidel move consequently there were not many present." After holding the concert in the court house until 9:00 pm, the band had supper at the hotel, then played for a private party until three am. Compared with the performances on the 10th and 11th, Clayton concluded, "We had far the best concert... [but] We only cleared from both, about &7.00 over expenses, but were well treated."[11] The band returned to Richardson's point at 7:00 pm the next day.

Lightening the load and moving on

Meanwhile, the Mormons decided to lighten their wagons, due to the mud, rain, and bad weather. On Monday evening, they instructed artillery officer, John Scott, to cache between 2,300 and 2,400 pounds of cannon balls. Henry G. Sherwood picked a location near Richardson's point and surveyed a site some fifty five and one quarter miles from Nauvoo. So the ammunition could easily be recovered later, the Mormons took great pains in recording the exact location of the cache.[12] Hosea Stout sold his "bed stead... for eight bushels of corn." Two days later, he exchanged his table for a hog.[13] News spread the Mormons were selling various items to lighten their loads. Some even came to the Mormons seeking bargain prices. Dr. Elbert came to Richardson's Point and offered to buy Clayton's china, if he would bring it to Keosauqua. A few non-Mormons even attended Sabbath meetings and proposed exchanging oxen for horses, selling corn for labor, and buying any excess items, but some Mormons refused to buy on the Sabbath Day.[14] Brigham Young reported, "We have exchanged many of our horses for oxen, and thus multiplied our teams. We are also selling the most of the little crockery that we had in Camp, and hardware that is not used for cooking, and thus lighten our loads."[15]

On March 10th, Hosea Stout felt that he witnessed the hand of God in his life. It began to rain, he said, and his "tent leaked badly all day... thus endangering my sick wife." While trying to fix a dry place to sleep, he said, "A quail came fluttering in the top of the tent and lit down in the tent door & I picked it up with out any trouble." It reminded him, he said, "of the Children of Israel but [k]nowing it was not sent in wrath I had it cooked and it proved to be a blessing instead of a cursing as their quails did."[16] Six months later, the poverty stricken Mormon refugees, after fleeing across the river from Nauvoo, had a similar experience. Writing to his comrades in England, Brigham Young said, "The Lord sent flocks of Quails, which lit upon their wagons, and on their beds, and upon their empty tables, and upon the ground within their reach, which the saints and even the sick caught with their hands." He declared, tell the nobles, the kings, and the great ones that God fed His oppressed people, who are dear to Him, like He did Moses and the Children of Israel. Remind the oppressors that He is "God of the whole Earth and every knee bows and every tongue confesses, that Jesus is the Christ."[17]

After many days of rain, Brigham Young began moving the main camp on March 19 from Richardson's Point. When he crossed a bridge over the Fox River, Stout recalled some painful memories, when he recognized the "old Mormon trail," which he and twenty seven others had made while fleeing Far West, Missouri. He felt anger as he remembered "the vengeance of the mob under executive authority of Gov. Boggs in 1838." The next day, Stout and his men performed "some Danite evolutions of horsemanship as practiced in Davis County Missouri in the fall of 1838."[18] These maneuvers became one way for bonding the Saints and reminding them to fight all their persecutors. The Mormons continued using these drills at parades and celebrations as a reminder to defend Mormonism against all enemies until 1860.

On April 1, the Mormons began moving west from the Chariton campsite.[19] According to their own calculations, it took them six days to travel less than forty miles to reach Locust Creek. Half the time, the rain poured on these pioneers. On April 6, Hosea Stout recorded, this morning was "the most dismal dark and rainy after such a fine day as yesterday... The road was the worst that I had yet witnessed," going up and down oak ridges and through deep marshes and sloughs. "The horses would sometimes sink to their bellies on the ridges," he added, causing "the teams to stall going down

hill. We worked and toiled more than half a day and had at last to leave some of our wagons and doubles teams before... we arived at Locus Creek 3 miles [away]."[20]

William Clayton wrote, it "continued to rain all day very heavy. The camp is very disagreeable and muddy." In the evening, he said the band began to play in his tent, while the lightening flashed outside. Then at 8:00 pm, the wind "blew a perfect gale with heavy rain, hail, lightening and thunder... All tents in our company except mine and Pack's were blown down. The rain beat through the wagon covers and drenched the families and effects. It was the most severe storm we have experienced and with such wind it seems impossible to preserve our little clothing and provisions from being spoiled."[21] The wind uprooted a six inch tree and pushed it across a wagon. One scribe said, Willard Richards lay on his back holding his tent down, "while the pins were being driven [in the ground]."[22] During this same evening, Rufus Putman Stewart's wife, Maria Stewart, walked two miles, crossed on a log over a creek, and then began having labor pains. Stewart found a vacant house, where she gave birth to a baby, during this violent storm.[23]

Locust Creek historic site for "Come Come ye Saints"

Writing "All is Well" on Locust Creek

This bad weather forced the advance party of pioneers to remain camped for several days on three forks of Locust Creek, which were one mile apart. Meanwhile, some companies, that lagged behind, inched their way towards this camp site. This group, which included Heber C. Kimball, Parley P. Pratt, and William Clayton, continued wading through the mud. On the 9th, Clayton said, they expected to move eight miles, but could only manage five, because their teams were "entirely worn down." With wagons bogged down in the rain and mud, he said, "We could not make a fire and had little supper, our provisions being in one of the wagons back [along the trail]." "It took five yoke of oxen and twelve men," Clayton observed, to pull "Brother Peart's wagon out of the slough." He felt sad, for "it rains and blows very badly and is very severe on our women and teams." He said his plural wife, Margaret and her sister, Lidia, "are out all the time and continually wetting both feet and all over... Our teams fare hard with wet and cold, having very little corn."[24]

Tuesday morning April 14, William Clayton went back along the trail to help bring his and other wagons that had been left behind to camp, and before he returned, Charles Decker brought thirty letters from Nauvoo to the Locust Creek camp. One letter for Brother Pond contained the news, that Diantha Farr Clayton had given birth to a baby boy. When Clayton reached Locust Creek, most of the camp had already moved, but Brigham had left word for him to continue moving until he joined his camp on the middle fork of Locust Creek. Clayton double teamed his wagons and continued moving them over a very rough road, until his horses were "badly worn down." It was late, when he arrived in Brigham's camp. Since there was no guard, he spent the night keeping the cattle and horses from breaking into the tents and wagons.

The next morning, Wednesday April 15, Clayton said, Ellen Kimball told him that "Diantha has a son."[25] "I told her I was afraid it was not so," he remarked, "but she said Brother Pond had received a letter. I went over to Pond's and he read that she had a fine fat boy on the 30th... [of March], but she was very sick with ague and mumps." "Truly I feel to rejoice," he recorded, "but feel sorry for her sickness."[26] These feelings ran deep, even though William Clayton already had three other wives with him--Ruth and Margaret Moon and Alice Hardman--and four children.

On the evening of April 15 after hearing of the birth of his son, Clayton joined the band in playing for this struggling pioneer company, and then took his fellow musicians to his "tent to have a social christening" for his son.[27] Clayton said, we played and sang "until about twelve o'clock and drank health to my son. We named him William Adriel Benoni Clayton."[28] Later, however, this son was actually christened, Moroni. Possibly on this same cool clear evening, Clayton played his violin for some version of an old English tune, which came from oral tradition. Eventually, it was printed in an early southern publication of Union and Original Sacred Harp as an English folk song, "Good Morning, Gossip Joan." One Virginia oral tradition used the tune for "Good Morning, Neighbor Jones." Two years before the Mormon exodus, J.T. White from Georgia revised the song and made the tune popular. The first verse of the old version contains the following words:

What's this that steals (that steals) upon my frame--
Is it death? Is it death?
That soon will quench (will quench) this mortal flame--
If this be death, I soon shall be
From every pain and sorrow free;
I shall the king of glory see--
All is well All is Well[29]

With deep feelings of gratitude to his Heavenly Father, William Clayton used his creative genius, modified the words of this song, gave it some Mormon religious ideas, and kept the same title, "All is well." The new song expressed his deep feelings about the cold, the wind, the rain, the mud, the hunger, the illnesses, the fears, and the hardships of life, and death along the trail. After midnight, he penned,

Come, come, ye Saints, no toil nor labor fear
But with joy wend your way
Tho' hard to you this journey may appear
Grace shall be as your day.

'Tis better for us to strive
Our useless cares from us to drive;
Do this, and joy your hearts will swell-
All is well! All is well!
And should we die before our journey's through

Happy day! All is well!
We then are free from toil and sorrow too;
With the just we shall dwell.

But if our lives are spared again
To see the Saints their rest obtain,
O how we'll make this chorus swell
All is well! All is well!

After capturing his deep religious feelings in these few lines, that have become a symbol of the Mormon westward migration, Clayton described his private thoughts in his journal, "I feel to thank my heavenly father for my boy." Spare and preserve him and his mother, he plead, "so that we may soon meet again. O Lord bless thine handmaid and fill her with thy spirit, make her healthy that her life may be prolonged and that we may live upon the earth and honor the cause of truth."[30] Clayton felt so lonely for Diantha, that he asked permission from Brigham Young to send for her, and Young told Clayton that he could send for her as soon as they reached the Grand River.[31]

On the next Sabbath, the weather was cool, clear, and windy, when most of the pioneers met in a grove of trees north of the main camp at Pleasant Point for worship. The demands of preparing a report, however, forced Clayton to spent the day unpacking and inventorying church property.[32] Consequently, he did not hear his song, "All is well," sung for the first time in public. Nor did anyone make any special comments about it. No one expected it to become a celebrated Mormon hymn. John D. Lee simply observed, "The services... commenced [at 11:00 am] by singing from Elder[s William] Pitt and [John] Kay. The hymn or song was composed on the suffering of the camp while on their exodus to the west. Prayer was made by Bishop Miller. The Spirit of God Like a Fire is Burning was then sung."[33] The latter hymn, however, had already become important to the Saints, because it had been written especially for the dedication of the Kirtland Temple, but President Brigham Young made no comments about either song. Instead, he simply remarked, the inclement weather has hindered us from meeting, but "I know it is good for [the] Saints to meet and remind each other of their past experiences & when we commece our journey again we shall hold meeting[s] every Sabbath day. I never experienced a sweeter spirit in my life than... since we started [this journey]."[34]

Enduring many forms of pain

These pioneers in Iowa felt hunger pains and lonely feelings for relatives and friends in Nauvoo. Speaking about food shortage, Hosea Stout wrote, the hunters came to camp about dark and had "not killed anything but they sold three books and bought some bacon which was a great relief to us for we were suffering for want of food."[35] Then about 5:00 pm, many Saints cheered, when Porter Rockwell and Edwin Cutler brought three hundred and five letters from Nauvoo. They spent the evening eagerly reading letters and newspapers, and opening packages. William Clayton rejoiced when he read one from Diantha, which gave him absolute conviction of the birth of their son.[36] He expressed his deep feeling of affection for her, when he wrote a letter on Monday April 20, after attending another day of meetings.[37]

These Saints continued feeling the criticism of their enemies. One hundred forty eight Mormons began their Monday morning meeting by discussing the disturbing news articles from the Hancock Eagle and from letters about their "apostates" and enemies. Stout wrote, "Sidney Rigdon & his prophet shop was about down & that old Austin Cowles was seting himself up for some great one... the `old one eyed prophet' which I thought applicable to him." Cowles troubled the Mormons, because he had not only been an intimate friend of Joseph Smith and first counselor to William Marks in the Nauvoo Stake Presidency, but he was privy to the revelation on plural marriage. Equally as disturbing, Stout penned, were "some news papers... [reports] of the world about us." The most galling, he complained, was the "most rediculous & willful perversion of the truth" by Thomas C. Sharp about the sacred endowment. Stout charged, "He has evidently been taught some thing of the true oder by some traiterous apostate."[38]

Actually, Sharp published two articles in the Warsaw Signal, before April 20th, ridiculing temple ceremonies. The first account, printed just as the Mormons were crossing the Mississippi, characterized these rituals as "obscene." From two different sources, Sharp claimed, he knew the nature of the endowment. After the candidates pay a dollar fee, he wrote, they are brought into a room, where the men and women strip off each other's clothing and "wash each other from head to foot." Next, he said, officials separate them into different rooms, oil them with sweet perfume, and bring them into still another room, "where one of the Twelve pronounces a blessing upon them and gives them extensive powers and privileges-such as a plurality of wives to the male, and other similar blessings to the female." In the final ritual, they "are brought together, still in a state of nudity, into a room where they are allowed to remain together, alone... They are then invested with their robes and take their departure." "The really deluded among the Saints," Sharp concluded, "consider this ceremony as sacred and intended as a trial of their virtue. But it was invented by the Twelve, evidently for the purpose of offering them an opportunity for gratifying their brutal lusts.[39]

Tuesday morning was a warm cloudy day, when the Mormons began traveling, but it rained some during the day, which made it uncomfortable. After moving about eight miles, they camped beside a creek near the timber "over a level flat & wet prairie." Some of the grass caught fire and swept through Miller's camp, which had two wagon loads of gun powder[40]. After considerable effort, the Saints put out the fire, and then Brigham Young ordered them to move to the other side of the creek, which was named hog creek, because they killed two wild hogs. In the evening, two former members of his police force, Lewis and Moses Mecham, came to Stout and express feelings of goodwill, but Stout regarded their words as empty gestures, since they had recently refused to drive his wagon. "Such empty... [expressions] of friendship and good will... after deserting me in time of need," Stout bitterly recorded, "looked very mean & groveling & made me think less" of them than ever[41].

Just as camp started moving at 8:00 am the next morning, Louisa Stout began having labor pains and soon delivered a baby girl. The proud father, Hosea Stout recorded, "This was my first born in the wilderness as some of the old prophets once said." So, the Stout family remained behind, herded their livestock, and set a string of fires to make traveling safe, while most of the others continued moving along the trail.[42]

Reaching Garden Grove

Stout did not begin moving his family until Saturday 25 April, simply because the teams were being used for the artillery. He then made camp about noon, after traveling about eight miles over very bad and hilly roads during "a cold, windy, disagreeable day." Nevertheless, Stout said, his wife and family seemed to be healthy, except for his "children were taking the whooping-cough."[43] Monday morning, this little company gathered up their oxen, loaded their property about one o'clock and began moving through the rain, mud, and mire. "The roads would have been good," Stout wrote, "had it not been for the incessant rains & continual travial, which made... [the roads] nearly impassable." At four o'clock and after struggling for six miles, Stout and company arrived at the campsite, called "the farm," which was later named "Garden Grove," and witnessed the miracle of cooperative labor.[44]

"All seemed to be engaged in work," Stout penned, when he arrived on Monday. While passing through "a beautiful thick wood of tall shell bark hickory," he said, he saw "men at work clearing [the land] & cutting house logs." "The soil," he added, was "uncommonly rich & so loose now that our teams could but draw their loads through." Even before he came, Mormon leaders had already assigned Stout to "a company of plough makers along with Hunter & a number of others." He concluded, the system was on "the common stock order and all that a man had to do was to go to work. where he was told asking no questions." "I was well pleased," he wrote, "with the good order and business like appearance which the camp had assumed so quick[ly] in this `Magic City of the Woods' as it seemed to be."[45]

Meanwhile, food shortage also caused considerable misery as well as trouble among the Saints during this period. John D. Lee said he went through the entire camp looking for flour, and he learned, "the whole camp was allmost desitute. Bro. Ben. F. Johnson was the only man that seemed to have any supplies on hand."[46] This food shortage continued. Three days later, Lee said, he stayed in bed until late, "having neither bread nor meat in my tents. Still having 28 persons to feed."[47] On April 28th, Stout acknowledged his destitute condition, when he penned, I am "now out of meal & flour & went all round camp and could not get any for cash except of Br Henry Herryman [Herriman]. The people would not sell flour when they knew we were starving & some sick."[48] Stout's troubles continued, even though he reported, "girdling timber" in the morning, but he said he "did not work in the afternoon because I was out of provisions however I got some flour from Br Thomas Grover before night & some meat from the Commissary."[49] Two days later, Stout said"He had nothing to eat again. Hunted for flour till noon but got none... the wind blew... like a huricane the trees fell all around the camp... one fell on Br Lee's Mules and some ones cows. We had to hold up my tent... for my wife and child was sick."[50]

At this same time, William Clayton shared his food supply and suffered himself, because others were going hungry. "Many in the band are entirely desitute of provisions," he lamented, "and my flour is so nearly down I have concluded to eat biscuit. I have given the band considerable of my biscuit already." The wet weather and poor storage facilities added to this food shortage problem. Clayton spent May 4th inspecting his flour and crackers and discovered considerable damage and fixed his leaky wagon. Two days later, he again moaned, "Many tents blew over. One of mine blew over and most of the articles were wet and some nearly spoiled." After Clayton heard that Esther Kay complained because she was not as well off as others, he took her "a pair of shoes" and distributed "a large bag of biscuits... amongst those who [were] needy." Clayton, however, felt the poor were often ungrateful. He complained, "I have all the time let them have flour, sugar, bacon and other things as I had them and to hear of dissatisfaction because I will not let them have the last I have grieves me. I have given the band as near as I can estimate, twelve hundred pounds of flour, about four or five hundred pounds of bacon besides much of other things."[51]

Food shortage, harsh weather, and disease took a severe toll on these Mormon migrants. On May 2, Stout said, he herded cattle all day and was so sick, he wrote, "I came in before night almost fainting with the sick headache. In fact during my stay here I was almost confined to my be & some times felt that my constitution was giving way." On this same day, Samuel Thomas, a member of Stout's guard, died, having been ill since leaving Nauvoo. After the burial service, Brigham Young tried lifting the spirits of the pioneers by telling them the Lord had led them "through Iowa & into Missouri & then back into Iowya again." Like the Children of Israel, Young declared, "the Lord lead us and he did not care for the consequence as long as the presence of the Lord was with us."[52]

Nevertheless, the fear and thought of death troubled the Saints. William Clayton, for example, worried about the life of his new born son. Possibly troubled by Thomas's death, Clayton dreamed at the same time of seeing Diantha, who was expressing her sorrow, while bending over her baby, who was clothed in white and lying with its eyes closed. Clayton penned, when he approached her, "she flew to me earnestly...and I awoke. This dream troubled me considerably."[53]

Several others suffered the pain of losing relatives and friends. Five days later, the Green family brought Fidelia Green into camp and buried her. She died in Mercer County, Missouri.[54] On May 8, tragedy struck the Stout family. Even though he was ill, Hosea went into the woods to share his feelings with Benjamin Jones, when someone told him his little two year old son, Hyrum, was dying. Stout painfully recorded,

> I returned immediately home and found my poor little afflicted child in the last agonies of death. He died in my arms about four o'clock. This is the second child which I had lost both dying in my arms. He died with hooping cough & black canker He had worn down ever since he firt took it... I shall not attempt to say anything about my feelings at this time because my family is still afflicted. My wife is yet unable to go about & little Hosea my only son now is wearing down with the same complaint and what will be the end thereof. I have fearful forboding of coming evil on my family yet We are truly desolate & and afflicted and entirely destitute of any thing even to eat much less to nourish the sick & just able to go about my self. Arrangements were made to bury him this evening.[55]

After Hyrum's death, Stout continued to suffer from ill health for several days. In order to get some relief, he became desperate and turned to lobelia, an herb he had

never tried before. Dr. Chandler Roger prescribed this herb, and Stout said, "it made me so weak & nervous that I could not raise my head and my stomack [was] so irritable that I could not take all that was designed for me. It however helped me."[56] Stout and others watched other people suffer and die. For ten weeks, William Edwards suffered a fever and a gastric intestinal disorder, and then he finally died on May 12. Stout recalled his association with this devout servant and recounted his important roles in the restoration movement. Long before leaving Nauvoo, he served as one of "Old Police" organized by Joseph Smith. He later became purchasing agent for the first fifty organized at Sugar Creek and for the second one hundred, which the pioneers formed near the Chariton River.[57]

Suffering after leaving Mt. Pisgah

On June 23, it began raining and continued for several days, after the Stout family left Mt. Pisgah. Two days later, little Hosea became very ill. Stout said, "The laying on of hands seemed to do little or no good." So, Stout invited all the men and women who had had their endowments and have "the ordinance performed according to the Holy order & with the signs of the Priesthood." Brother Spencer led the prayer circle in Stout's tent. "We felt encouraged," Stout said, with "the influence of the ordinance of the Priesthood and we now had hope again that he would be delivered from... the power of the destroyer. But our hopes were destined to be of short duration for in the evening there came one of the hardest rains that had been this summer." "Water came in torrents," Stout wrote, "& the wind blew hard. In a few minutes our tent was down & water ran through the waggon covers and thus every thing we had was wet almost before we knew it." The Stouts found little Hosea lying in water that flooded his bed. He immediately turned for the worse, Stout lamented, "and thus our last hopes for him vanished."

The next day, the weather alternated between sunshine and rain. So, the ground continued to be extemely wet. Stout wrote, "The whole camp seemed to be dripping in water." Nevertheless, the camp flourished with activities. Indians swam their horses across the river, even though the river was at flood stage. William Clayton and others came from the Bluffs on their return to Mt. Pisgah. The Pottawottamies, he said, were leaving on a hunting excursion for Buffalo and to wage war against the Sioux.

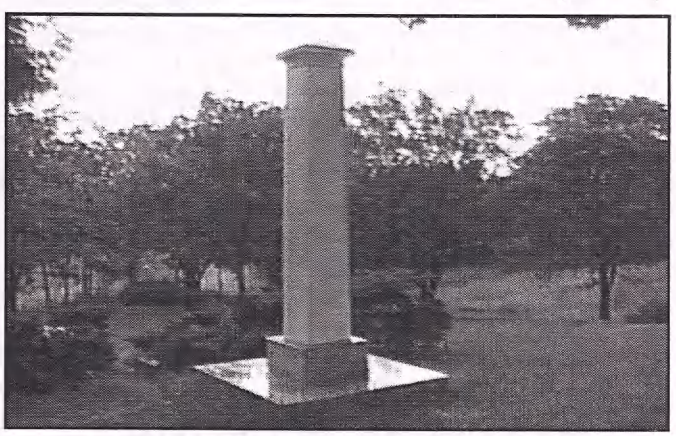
All these activities were insignificant to Stout, because he felt such a burden with his sick child, "who was [even] more dangrously ill [than before]." After laying hands on him again in the evenng, Stout felt extreme anxiety when he "found him to [be] troubled with evil spirits who I knew now were determined on his destruction." He showed "all signs of wrath to wards me & his mother... His looks were demoniac accompanied by the most frightful gestures I ever saw in a child. His strength was greater than in the days of his health." "His fierce & horrid look," Stout wrote, made him feel like abandoning his child to these evil forces. Nevertheless, Stout decided to "lay hands on him again that the powers of darkness might be rebuked if he could not be raised up." Alone with his wife, Stout determined, "We would not yield with the portion of the Priesthood which we had to the evil spirits." After laying hands on him, Stout said, "He ceased to manifest a desire to talk & his gastly and frightful gestures [dissappered]." Finally, little Hosea drifted off to sleep, and his parents left a candle burning in the wagon and eventually went to sleep themselves.

Sunday June 28th, Stout arose early and discovered that his child was dying. The evil spirit had gone, Stout said, and the little boy was "natural, easy, pleasant, [and] calm... but death was in his countenance." He gradually passed away at 7:40 am when his spirit left his "body without any apparent pain but seemed to go to sleep." Stout mourned deeply the loss of his only son, when he penned, "He had placed my own name [on him] and [he] was truly the dearest object of my heart." Feeling deep pains of anguish, Stout wrote,

> In this wild land... [we] lay him where the silence of his peaceful grave would only be broken by the savage yells of the natives... Discouraged, desolate & such frequent disappointments... had lately been my lot and no reason to expect any thing better... We had now only one child a daughter left &... [she] was born on the road & what was... [her] fate [to be] was it to be laid by the way side...
>
> I have often heard people mourning... for the loss of an only son. But never untill now did I fully feel and realize the keen & heart rending force of their words. I have once lost a companion for life and left without a bosom friend Left alone to lock [this] sorrow and disappointment up in my own breast. Left... to hide and disguise the effects of an overflowing heart of woe. But not then did... [I feel] This last loss of my only son. This my hopes for comfort in my old age. This the darling object of my heart gone seemed to cap the climax of all my former misfortunes and seemed more than all else to leave me uterly hopeless.[58]

After making a coffin and burring his son on a hill about a mile from the Nodaway river next to the grave of John Smith's infant son, Stout wrote, "We then pursued our journey leaving the two lovely innocents to slumber in peace in this solitary wild until we should awake them in the morn of the resurrection."[59] This caravan then moved four miles and camped on a ridge in full view of a Pottowattomie village, near a flooding stream the natives called the "Nickanobotany," but the Whites changed it to "Nishanabothany." In the evening, many natives visited the Mormons and expressed their friendship. They understood "perfectly well the nature of our move," Stout observed, and they expected to unite with the Mormons and eventually return with them to the lands of their inheritance.

Fearing a plot before forming the Mormon Battalion



Memorial for the Mormons who died at Mt. Pisgah

Many Mormons felt much more trust in these natives than in the government of the United States. On this same day, Phineas Wright brought news from Mt. Pisgah that the President of the United States asked for five hundred troops from the Mormons to march from Santa Fe to California. "We were all very indignant at this requisition," Stout declared, and "only looked on it as a plot laid to bring trouble on us as a people. For in the event that we did not comply... we supposed they would now make a protest to denounce us as enemies to our country and if we comply that they would then have 500 of our men in their power to be destroyed as they had done our leaders at Carthage."[60] On June 26, Wilford Woodruff said, when Captain James Allen came to Mt. Pisgah and asked for five hundred men to fight, "the camp was flung into soem excitement." "I had some reason to believe them to be spies," Woodruff concluded, "& that the president Had no Hand in it."[61]

On June 30th, Allen found Brigham Young and other leaders on the banks of the Missouri River. After lengthy deliberations, these leaders voted to send five hundred men to fight in the Mexican War. Brigham Young said, we must make a distinction between the United States government and the oppressors from Missouri and Illinois. Mormon leaders reasoned this opportunity would be helpful in making the exodus to the mountains. After speaking with Thomas L. Kane, Wilford Woodruff said, "We are convinced that God had began to move upon the heart of the President And others in this Nation to begin to act for our interest And the general good of Zion."[62]

Most Americans, in 1846, paid little or no attention to the Mormons' involvement on the national stage. So often many threads in the fabric of history go unnoticed until after the tapestry unfolds over an extended period of time, because contemporary observers only pay attention to those fibers they think will endure the test of time. Even many Mormon threads are no longer part of the ongoing story--the Strangites, Rigdonites, and many more splinters. Still other elements in Mormonism remain small and insignificant but may surface in the years to come. In 1846, many people expected Mormonism to wither and die after some 11,000 refugees evacuated Nauvoo and wove their way across Iowa. Instead, the membership increased until the Latter-day Saints have become an important denomination in America's religious heritage, with 4.7 million members listed on the records in the United States and nearly 9.4 million worldwide in 1996. This growth, even though much larger than the active membership, makes the story of the Mormon migration across Iowa important for millions of people, who thrill with discovering the fabric of their religious heritage. For these folks, the story of weaving our national history with the details of the Mormon struggle in crossing the De Moines River, founding Garden Grove, Mt. Pisgah, and Kanesville, and founding Winter Quarters has meaning and value. In the years to come, many may find enjoyment in celebrating this pioneer heritage by retracing the pioneer steps across Iowa. If a longer version of this story with some accurate maps and directions were published, sightseers would be able to find many historic sites and read a more detail narrative of the Mormons crossing Iowa in 1846 than this very short article provides.

Footnotes

1 For a good discussion of this them, see Bernard A. De Voto, *The Year of Decision, 1846*, (Boston: Houghton Mifflin, 1943). See also Eugene E. Campbell, *"The Mormons and the Donner Party," BYU Studies*, (Spring 1971), 307-311.

2 William Clayton, William Clayton's Journal: A Daily Record of the Journey of the Original Company of "Mormon" Pioneers from Nauvoo, Illinois, to the Valley of the Great Salt Lake, (Published by the Clayton Family Association, Salt Lake City, Utah: Desert News, 1921), 2.

3 *The Dairy of Hosea Stout*, 16 February 1846, 123. Stout had reference to Deuteronomy 23:12 15, "Thou shalt have a place also without the camp... [and] thou shalt dig therewith, and... cover that which cometh from thee: For the LORD thy God walketh in the midst of thy camp... therefore shall thy camp be holy: that he see no unclean thing in thee, and turn away from thee."

4 Stout, *The Dairy of Hosea Stout*, 122 and 127

5 Stout, *The Diary of Hosea Stout*, 128.

6 Stout, *The Diary of Hosea Stout*, 129-130.

7 The *Manuscript History of Brigham Young* reports the location of this camp was three miles from Farmington and about three quarters of a mile from the north bank of the Des Moines River. Orson Pratt said the camp was located at Latitude 40•42'26" four miles above Farmington. See *The Orson Pratt Journals*, compiled and arranged by Elden J. Watson (Published by Elden J. Watson, Salt Lake City, Utah), 322.

8 Stout, *The Diary of Hosea Stout*, 3 March 1846, 130.

9 *William Clayton's Journal*, 4 March 1846, 3.

10 *William Clayton's Journal*, 5 and *Manuscript History of Brigham Young*, 72-76.

11 *William Clayton's Journal*, 6-7.

12 *The Diary of Hosea Stout*, 136-137. John D. Lee recorded the cache was located on the west side of "a white oak tree near the roots, runjing thense with the needle pointing 80° degrees N L 130 links to a black oak tree - thence 39 links to another black oak tree thense 23 links to a mound with a pit on the side of said mound with a pit on the side of the said mound makin in all 192 lijs in a direct line from said white oak tree - thence from said mound S with the needle pointing 10 degrees E. L. & 135 links to a stone about 15 inches long & about 7 to 9 set in the ground on the east side near the root of a forked black oak Tree forked near the ground."

13 *The Diary of Hosea Stout*, 135-136.

14 *Manuscript History of Brigham Young*, 85.

15 *Manuscript History of Brigham Young*, 88.

16 *The Diary of Hosea Stout*, 136.

17 *Manuscript History of Brigham Young*, 410 and 496-497. The Mormons also publicized that many on river boats for some 30 or 40 miles along the river witnessed this phenomenon. See Cannon, *Juvenile Instructor*, vol. Xviii, p. 107 and the letter of Brigham Young to Elders Hyde, Pratt and Taylor, of Jan, 6th, 1847; *Millennial Star*, vol. ix, p. 99.

18 *The Diary of Hosea Stout*, 140-141.

19 Orson Pratt recorded the latitude 40°40'7" and longitude

92°59'15" for the camp on the west branch of Shoal Creek. He later moved to Locust Creek camp site. On April 13, he moved six miles with Brigham Young. Moved again six more miles on 15 April. Some move 8 more miles, but Pratt camped at a place not far from the head of Medicine Creek, which was named Paradise. Pratt said the latitude was 40°44'7" and one mile north Brigham Young and Heber C. Kimball camped, and they called it, Pleasant Point. See *The Orson Pratt Journals*, 333-340.

20 *The Diary of Hosea Stout*, 149.

21 *William Clayton's Journal*, 14.

22 *Manuscript History of Brigham Young*, 125-126.

23 *Manuscript History of Brigham Young*, 126-127.

24 *William Clayton's Journal*, 16-17.

25 Nearly thirty nine years after this event, Helen Mar Whitney, the duahgter of Heber C. Kimball, claimed that she told William about the birth of his son. See "Our Travels Beyound the Mississippi," *Women's Exponent* 12 (15 January 1884) :126-127.

26 *William Clayton's Journal*, 14th and 15th April, 18-19.

27 Wilford Woodruff and Heber C. Kimball converted William Pitt and the members of his band in England. They emigrated as a group and provided entertainment on many occasions. On 29 August 1845 for example, Hosea Stout recorded, "We had a most agreeable entertainment and had a very delicious Supper well served up, plenty of wine & beer & other good drinks. The feast was mostly entertained with music, (ie.), three violins bass viol and horn, with occasional Singing and agreeable conversation Br William Clayton, Wm Pitt, Hutchinson, Smithie & Kay were the musicians." Stout added, "We continued untill about half past twelve o'clock at night when we dismissed and went away." "I have been to but a few such agreeable parties in my life where few were assembled together with the same good feelings of friendship." he concluded, but "All seemed of one heart & partook of the enjoyment of the good things and comforts of [life] with that dignaty which bespoke that they knew how to appreciate the blessings of God in the way that he designed we should. May they all have many more such good & happy nights. I came home at day light." The others in the band included, Hutchinson, whose first name is unknown, Smithies, whose first name is also unknown, John Kay, Egan, Edward P. Duzett [Dusette], a drummer and adopted son of Brigham Young, Redding, William Cahoon, Charles a Terry, and his brother, James Clayton.

28 *William Clayton's Journal*, Wednesday 15 April, page 19.

29 George D. Pyper, *Stories of Latter-day Saint Hymns: Their Authors and Composers* (Salt Lake City: Desert News Press, 1939), 24-25. The source for this verse evidently comes from "Twelve Folk Hymns: From the old Shape Note Hymn Books and from Oral Tradition." Published by J. Fishcher & Bro., 119 West 40th St., N.Y. @ 1934.

30 *William Clayton's Journal*, 20.

31 *William Clayton's Journal*, April 15, 19-20.

32 *William Clayton's Journal*, 21.

33 *Nauvoo Exodus Journal*, Sunday April 19, 1846.

34 *Nauvoo Exodus Journal*, Sunday April 19, 1846.

35 *The Diary of Hosea Stout*, 154.

36 *William Clayton's Journal*, 21.

37 *William Clayton's Journal*, 21.

38 *The Diary of Hosea Stout*, 154. Stout does not make it clear which news papers were read, but other John D. Lee and the *Manuscript History of Brigham Young* for these dates mention that the leaders read several articles from the Hancock Eagle.

39 Thomas Sharp, *Warsaw Signal*, 18 February 1846.

40 *Manuscript History of Brigham Young*, 138, simply says, "The grass caught fire near the magazine, by the greatest exertions the flames were subdued." In "Pioneer Diary, *Improvement Era*, April 1943, 252-253, Eliza R. Smow recorded her impressions on Wednesday April 22. Taylor's Com[pany] encamp'd in our rear; towards night saw fire coming towards us with furious rapidity - our men immediately set fires to burn a broader space around our encampment, the wind being so strong that it would have swept across almost instantaneously. After getting ourselves secured we gaz'd with admiration & astonishment at the terrific & majestic sprad of the devouring element - the flames rising at times to the incredible height of 30 & 40 feet. I have often listen'd to and read descriptions of 'Prairies on fire,' & thought them too highly painted, but can now say that they reality 'beggars all description."

41 *The Diary of Hosea Stout*, 155.

42 *The Diary of Hosea Stout*, 155, Wednesday 22 April. *The Manuscript History of Brigham Young* incorrectly records the birth on Tuesday evening.

43 *The Diary of Hosea Stout*, 156, 25 April 1846.

44 *The Diary of Hosea Stout*, 156, 26-27 April 1846.

45 *The Diary of Hosea Stout*, 156-157, 27 April 1846.

46 John D. Lee's Nauvoo Exodus Journal, April 30, 1846.

47 Lee's Nauvoo Exodus Journal, May 2, 1846.

48 *The Diary of Hosea Stout*, 158

49 *The Diary of Hosea Stout*, 4 May 1846, 159.

50 *The Diary of Hosea Stout*, 4 May 1846, 159.

51 *William Clayton's Journal*, 21.

52 *Manuscript History of Brigham Young*, 154 and *The Diary of Hosea Stout*, 159.

53 *William Clayton's Journal*, 28.

54 *Manuscript History of Brigham Young*, 154 and *The Diary of Hosea Stout, 159.*

55 *The Diary of Hosea Stout*, May 1846, 160.

56 *The Diary of Hosea Stout*, 160.

57 On page 159, *Brigham Young's Manuscript History* records this death on May 12, but *The Diary of Hosea Stout* listed it the next day.

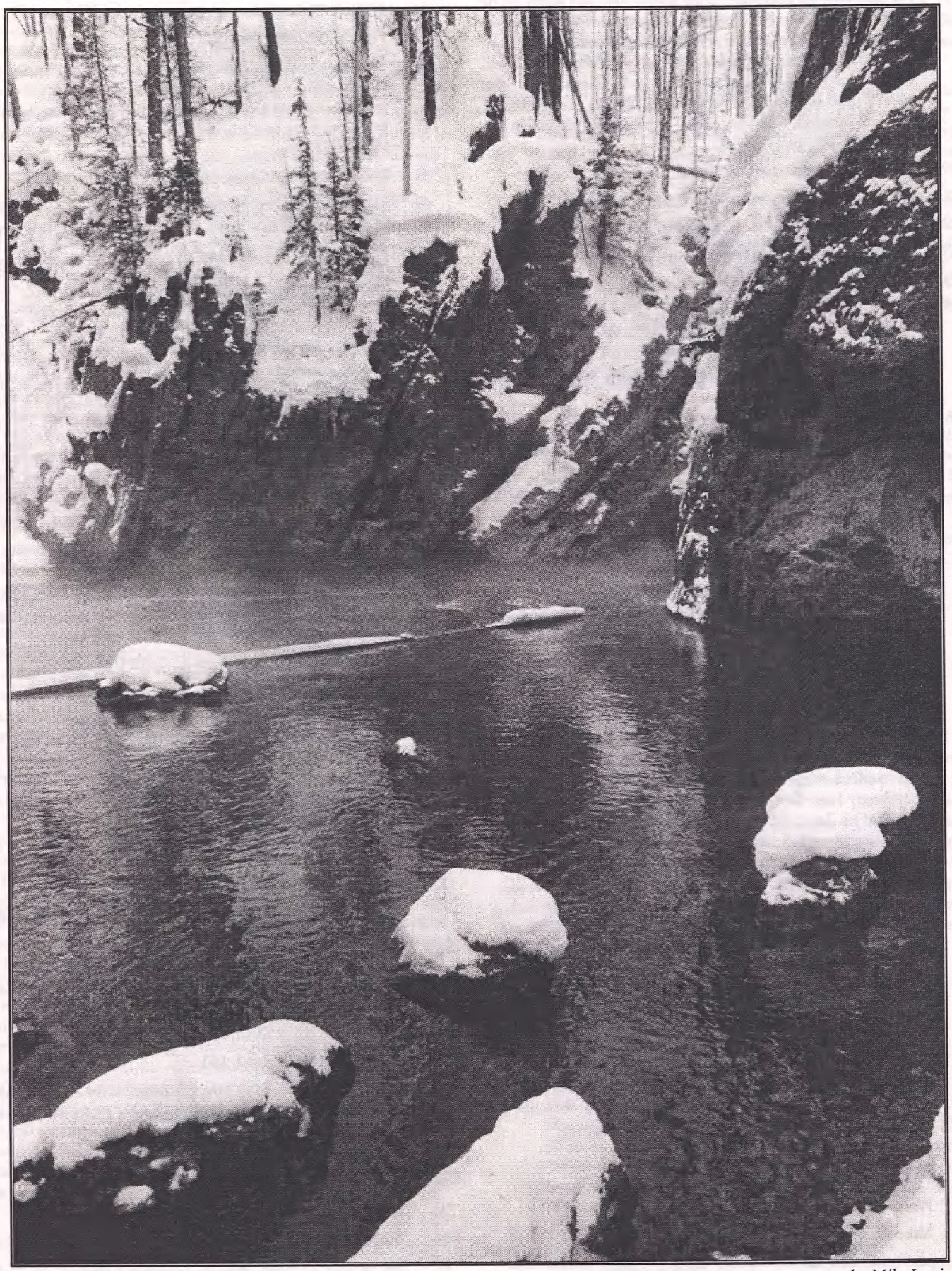
58 *The Diary of Hosea Stout*, 171.

59 *The Diary of Hosea Stout*, 170.

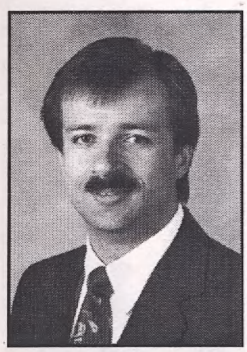
60 For June 28, 1846, see *The Diary of Hosea Stout*, 172.

61 For June 26, 1846, see *Wilford Woodruff's Journal*, vol. 3, 54-55.

62 See on July 11, 1846, *Wilford Woodruff's Journal*, vol. 3, 58.



by Mike Lewis



SIMPLER DAYS

by
Brett Cook
Bookstore

REMEMBER THAT BOX OUT BACK IN THE YARD
BATTERED AND TORN FROM ABUSE
NOT TOO LONG AGO IT WAS TREASURED
BUT TODAY IT HAS HARDLY A USE

I REMEMBER THE HOURS, DAYS, AND WEEKS
THE BOX DIDN'T MISS A DAY
FOR A CHILD WITH IMAGINATION
IT WAS ALL THAT WAS NEEDED FOR PLAY

TRANSFORMED EACH TIME TO VARIED FORMS
THE ADVENTURES NEVER WOULD END
CASTLES, SHIPS, CARS, AND HOMES
IT WAS CHANGED AGAIN AND AGAIN

SOMETIMES WITH THE HELP OF AN OLD BUTTER KNIFE
NEW PORTHOLES WERE CUT FOR A VIEW
A RAINY DAY SUBMARINE WAS BUILT
NO CONCERN THAT THE BOX WASN'T NEW

THE BOX WAS KEPT LONG AFTER BEING TOLD TO DISCARD
EVEN AFTER IT WAS CRUSHED, CUT UP, AND FLAT
IMAGINATIONS SENTIMENTAL VALUE WAS HIGH
BUT YOU KNOW, KIDS ARE LIKE THAT

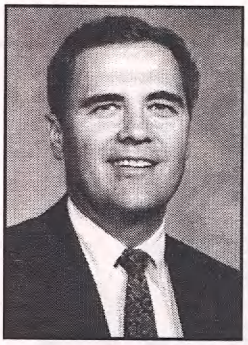
I BELIEVE THE BOX WAS NEVER TOSSED OUT
SOMETHING LIKE THAT WOULD HAVE BEEN MUCH TO HARD
HOWEVER WITH TIME THE BOX DISAPPEARED
THE WIND BLOWING IT TO ANOTHER CHILD'S YARD

IF THOSE DAYS ARE GONE, ITS A SHAME
LEFT WITH VIDEO, AND GAMES THAT PLAY BY THEMSELVES
THE CHILDREN TODAY MAY HAVE LOST MORE THAN WE KNOW
THEIR IMAGINATION CAN BE SET ON DESK TOPS OR SHELVES

TOO BAD THOSE THAT HAVE EXPERIENCED THE BOX
DON'T PASS IT TO THE YOUNG ONES TODAY
WE'RE KEEPING THEM FROM A MEMORY ONCE LOVED
AND HELPING THEIR IMAGINATION TURN GRAY

DON'T GET ME WRONG, PROGRESS IS GREAT
TAKE IN AS MUCH AS YOU CAN
JUST DON'T FORGET THOSE SIMPLER THINGS
BUILDING BLOCKS FOR A WOMAN, A MAN

HELP THE YOUNG ONES CHERISH THEIR CHILDHOOD DAYS
SIMPLE THINGS THEIR IMAGINATION UNLOCKS
RETURN TO THE DAYS OF THE GREATEST TOY
AN OLD EMPTY REFRIGERATOR BOX



EGYPT, THE LAND OF THE NILE

by
Steven D. Bennion
President of Ricks College

A land of pyramids and temples,
Of breads and unskinned fruits and vegetables;
A land of contrasting deserts and lush greens,
Of turbined and gowned men and of women unseen;
Where nearly all people live near the spine of the Nile!

Egypt is a land of camels, dust, and donkeys;
A land of long traditions from the antiquities-
Of pharaohs, hieroglyphics, and strange symbols,
Of emphasis on wisdom and fertility bulls;
Where nature feeds everything from the green of the Nile!

The people of Egypt capture you with their bright eyes,
Their paradoxical complexity and simplicity of life;
Where bartering merchants tease you with great buys,
Where men may have more than one wife.
And nearly all live close to the nurture of the Nile!

Egypt is a land of cartouches and mosques,
Of alabaster, sandstone, and many obelisks;
A land where the desert wind ever blows-
Far and near where the river flows,
Sustaining life from the thrust of the Nile!

Yes, the children of Israel from Egypt fled,
By Moses for many years were they led.
Where Jacob's older sons sold his favored one,
Who later led Egypt and kindly forgave his loved ones;
As he lovingly fed them from storage produced by the Nile!

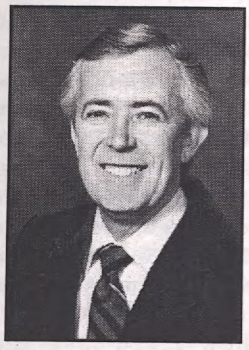
Egypt is a land of surprising reflexes;
Where what is upper and what is lower is totally unexpected.
Where uniting symbols of papyrus and lotus,
Show a people who thrive on peace and trust,
Along the northward flow of the life-giving Nile!

It is easy to overlook so much of biblical stories,
In a land with pryramids and great civilizations' glories.
Yet this peaceful land cradled the greatest in His infancy;
While jealous Herod toward young males showed no mercy.
Divine protection was provided along the tranquil Nile!

Yes, in this land we learn much of the bond and the free,
And about their Gods, pharaohs, and Abramic facsimiles;
Of Ishmael and his numerous branch of Abraham's seed,
Fulfilling prophecy and yet awaiting the gospel's decree.
Among the countries of the world as well as next to the Nile!

How blessed will be the day when the fulness will come
To nearly a billion Arabs who history has left unsung;
Perhaps because we use inaccurate stereotype castes;
Where others who were first, but Ishmael's will no longer be last.
From Saudis, Syrians, Jordanians to Egyptians along the Nile!

Indeed, He whose right it is to rule and reign
Will embrace the righteous among a people in the desert framed.
Like the people of Galilee and Samaria who showed great faith-
"Come unto me and I will give you rest," the Savior saith . . .
To Ishmaelites around the world as well as on the banks of the Nile!



EAGLE

by
Allen Hackworth
English Department

Two perfectly formed, adolescent, bald eagles, each from different ranges of the Grand Canyon of the Yellowstone, received daily training from wise parents in the ways of flight, hunting, and survival. As yet, the young birds had never met. When fully grown, Talon, the male, would measure almost three feet from head to tail and would stretch nearly eight feet from wing tip to wing tip. Aquiline, the female, would be smaller. In their two, separate, practice areas, Talon and Aquiline learned well the skills needed by mountain eagles. Their physical strength and prowess grew each day as they pressed against the powerful updrafts near the cliffs, and as they dove for fish and rodents hundreds of feet below their nesting areas.

One day, when Talon's father was teaching him about high-speed dives, Talon asked, "Father, will I become bald? " His father explained impatiently, as if Talon should have known already, "Of course not, none of us will be bald! Our name was given because of our bright, white feathers which cover our heads and necks." Silent for awhile, his Dad then added, "Son, the bald eagle is the symbol for the United States of America."

In time, as if by destiny, Talon and Aquiline met. Each was awed by the magnificence and skill of the other. Talon immediately wanted Aquiline for his mate, and a courtship began. As with all bald eagles, the courtship included aerial acrobatics. The beautiful, mighty birds then locked talons and plunged to the earth. Just seconds before smashing into the ground, they released their grip and swooped over the earth. Then they quickly climbed again into the high, mountain sky. Mated for life, this courtship ritual would be repeated every year for as long as the birds could fly. After the courtship, the love eagles soared for hours on the high winds; they dove in flawless formation at 120 miles per hour. They fed together on the fat rodents which scurried below and made their homes on the canyon floor. Life was perfect. Talon and Aquiline both knew they were invincible. It had been so ordained by the Great God.

One day, for diversion and for a new experience, Talon and Aquiline perched next to an old wizard, Buzzard Beelzebub. They wanted to pass the time of day with this grizzled grandfather. Beelzebub just had an interesting look about him. Perhaps it was the hunched shoulders; perhaps it was his massive beak. Beelzebub looked like he knew some secrets about hunting and flight. He looked like he had some good stories to tell. Little did the eagles know that Beelzebub was jealous of the eagles' perfection. The old buzzard resented the eagles' freedom and their strong bodies. He resented the control with which they flew. So Beelzebub made a sinister plan to destroy both Talon and Aquiline. Feigning friendship, Beelzebub showed interest in the youth. He told some war stories. He passed on information about flight and hunting that appealed to the adventurous birds. Beelzebub knew what the young fliers wanted to hear, so he skillfully spun stories which lured and fascinated the eagles.

After Beelzebub won the confidences of Talon and Aquiline, he presented to the pair a fat, succulent, freshly killed rodent. He said, "Dear King and Queen of the skies, you can have this feast if you will give me one of your feathers." The birds quickly accepted the easy trade. Talon and Aquiline both winced when the small feathers were pulled, but the pain soon passed. Feeling well fed, the eagles again soared in their beloved sky.

The next day, after the eagles left their nest for hunting, Aquiline said, "Let's swoop by and speak to Beelzebub. Then we'll go hunting." Just as the day before, Beelzebub had in his claw a freshly killed rodent. He said, "Good morning, friends. I'm glad you are here. You can have this delightful meal if you will each give me one of your feathers." Two days in a row -- this seemed too good to be true. The eagles gladly made the exchange. Again, they felt the sting of the lost feathers, but the pain passed almost immediately. They gained so much so easily. The immediate pleasure of the tasty rodent required little effort. No scorchingly fast dives were needed; no misses; no need to climb painfully high into the bright sky in order to try again.

Although Talon and Aquiline hunted occasionally, they grew more and more dependent on Beelzebub's handouts. They grew more and more accustomed to visiting Beelzebub and exchanging a part of themselves, a part of their integrity and beauty, for an easy meal. After several months of this behavior, the cost which the eagles paid began to show. Although their metamorphous from King and Queen of the sky to Creatures of Indolence could not be measured from day to day, if one compared what the birds once were to what they had become, their degeneration was obvious. Eventually, the day came when Talon and Aquiline could no longer fly with the other eagles. As hard as they pressed and strained, they could not attain their previous heights. They had too few feathers; they had spent too much of themselves falsely. And now their freedom to climb and to soar had been taken away. The consequences of the eagles' poor choices, encouraged by the old buzzard, had partially destroyed Talon and Aquiline. Beelzebub brought the once mighty birds down to his level. Instead of soaring with the eagles, Talon and Aquiline could now only flap around with the awkward buzzards.

Realizing what had happened, realizing that Beelzebub was false and sinister, the crippled, wounded eagles quit using the old buzzard's services. As difficult and ineffective as it was, they struggled desperately to hunt on their own. They tried hard to remember who they once were. They remembered the joys of flight. They remembered what it felt like to press strength into their wings. They remembered the wind against their eyes as they dove from 7000 feet. They remembered soaring on the thermals high above the far cliffs. And they remembered the stories of the Healer, the Son of the Great God, who could miraculously restore fallen birds to their former glory. They remembered the golden words, "Go thy way and sin no more."

Because Talon and Aquiline could remember, and because they now put their trust in the Son of the Great God, and because they avoided Beelzebub at all costs, their wings, breasts, and hearts gradually healed. Because of the humiliation, pain, and trauma which Talon and Aquiline experienced, their parents' teachings became more meaningful. They KNEW first hand that "wickedness never was happiness," that they were meant to fly with freedom, power, and dignity, and that the joys of difficult, challenging flight were far superior to the easy, deceptive bargains of Beelzebub. Power returned, and Talon and Aquiline once again joined their brothers and sisters, the Kings and Queens of the mountain skies.

THAT FIFTH BREAD PAN

by
Marie Parkinson
Physical Education

I suppose there are some things in this world that a child never has a chance of understanding. Believe me, this is one of those things.

It all started when I became old enough to go to school. Mom took me into the kitchen and we sat down at our table. "Katie, you are old enough to go to school now, so I believe you are old enough to help me a little more. There is one very special job that my mother gave me when I started school, so today I'm giving it to you. Every Monday and Thursday I bake bread. Now it is your job to come in from school on those days and wash the bowls and pans I use to make bread."

Well, I'm afraid my face showed a bit of disappointment. That didn't sound fun, exciting, or like a mighty responsibility I could brag about. Washing the doughy bread bowls - yuk!

Mom never missed a thing. "You look as excited as I did," she said. "It didn't sound very fun to me either. The first day I came into the kitchen with the bowls and pans and flour all over the cupboard, I was thoroughly disgusted. I knocked and banged those pans as loud as I could. Finally, your grandpa came in to see what all the upset was about. When I explained, he looked a bit dejected. Then your grandpa took me by the arm and led me to the table."

"Oh, Mom," I interrupted, "This isn't going to be another one of those stories about how far you walked to school every day, is it?"

"No, Katie, this is a story about developing family traditions."

"Family traditions? What are family traditions?" I asked.

"Well, it is something I do because my mother did it, and someday I hope you will do it, too." Mom explained. "Now, can you listen for just a minute?"

"I guess so," I replied as I slumped into my chair.

"Where was I? Oh, yes, Grandpa had just taken me to the table. We both sat down and he started to slice the bread and fix both of us a piece. As he handed me my slice, he said, 'You can't be upset about helping your mother make bread. It's a family tradition. Why, I can always remember coming home to that wonderful smell even as a boy. It not only filled the house, but the whole yard as well. My father would yell, "It's bread day, Henry, let's head for the kitchen!" When we walked into the kitchen, there would always be a fresh loaf of bread, a plate of butter, and a jar of honey with two knives sitting on the table. Then my father and I would sit and talk about life and solve the world's problems. You'll never know how much love and understanding came from that. There will never be anything as wonderful as homemade bread in my home. It puts warmth and love in our home sweet home.'"

As her thoughts returned to the present, she brushed a tear from her cheek and said, "Then I grasped how important my new job was. Now do you understand?"

"Kind of," I replied, noticing the half loaf of bread on the table. I loved homemade bread, and no one could make it better than my mom. It would probably be fun to become part of a family tradition.

Before long I started noticing something really strange. As I was washing the bread pans, I counted five bread pans. On the table remained one loaf and Mom was putting three loaves away. Three plus one was four, so why was I washing five bread pans?

When I asked Mom, she smiled a teasing smile and explained, "Well, my mother gave me five bread pans as a wedding present. Sometimes there is enough dough for five, sometimes only for four. It probably sounds silly, but I feel like one pan would feel left out if I didn't get it out and at least wash it."

Silly, it sounded really silly! But, at least it satisfied me for a while. One day as I was washing, I got the idea to cheat a little. I checked all the pans to see which one hadn't been used. They were all warm and they all looked the same. I double checked the count and, sure enough, there were only four loaves. This time I had proof. When Mom came in, I confronted her.

"Oh, goodness," she said looking very shocked. "Your daddy must have eaten two loaves. I hope he doesn't do that often. He is starting to bulge a bit."

Now I was really in a predicament. If I pursued it further, I might get Daddy in trouble. Best to wait and do a little more detective work.

Each time possible, I hurried to the house to see if I could solve the mystery. Each time Mom had some silly answer I couldn't understand. Finally, I asked Daddy if he had really ever eaten two loaves of bread.

"Heavens no, girl," he chuckled, "Not that I wouldn't. But we must use moderation in all things."

"What?" I replied.

"You can't eat that much and not get sick, even if it is good for you," he explained, and off he went.

When summer came, I knew I could find the answer. The harder I tried, the more confused I became. Once I even reached into the oven to count them, but I burned myself instead.

Sometimes there would be an extra loaf in our freezer, but not very often.

Another time I went in our storage room and opened all the cans to see if Mom was storing homemade bread. She wasn't!

Finally, Mom just explained that there were five bread pans to wash, and I better accept it or I would drive the whole house crazy. I agreed, but I still didn't understand.

Even without learning why there was a fifth bread pan, I certainly grew to understand the importance of making bread. If there was anything of significant importance, any holiday, birthday, or the like, Mom was sure to be making breads and rolls. Christmas was different at our house than any other. Most families are awakened by the noise of children playing with the new toys. In our home we always woke to the smell of bread baking. Mom got up around 4:00 a.m. and started one batch after the other, braided breads, Swiss breads, raisin breads, nut breads, and candied breads. Then, after the presents were opened, all but Mom delivered it to the widowed, sick, poor, and our neighbors. Homemade bread! It was a family tradition.

The years passed and the mystery remained. My job turned into a real adventure, continually looking for and never finding that fifth loaf of bread. I even started to dream about it.

When I was in high school, the bus had to take us home early once because of a blizzard. It was a Thursday, and I wondered if today I would find the truth. As I burst into the kitchen, Mom was standing kneading the bread. Tears were streaming down her face.

"What's the matter?" I asked.

"Oh," she stated, "making bread is my relief. If I'm upset, I knead it hard; when I'm happy, I play with it. It's as though all my problems are solved by kneading the bread."

Well, what has happened?" I inquired.

"Sister Jones passed away this morning." she explained.

"Oh, that's too bad, Mom. But, we hardly knew her. She always seemed kind of cranky to me. Probably why she didn't get married."

"She wasn't cranky, just lonely. It's hard to go through life with so few pleasures."

"Yes, I guess," I said as I started to my room. That night I counted four loaves for the first time in years. The next Monday, again there were only four and the mystery remained.

Much time has passed, and things have started looking up for me. I recently became engaged. It's the week before my wedding, and today Mom took me into the kitchen where a large box was wrapped.

"Today, I want to give you your wedding present. Forgive me if I'm sentimental. It's the same gift my mother gave me."

I hurried to open the box. There was a can of yeast, a big sack of flour, salt, shortening, sugar, a huge stainless steel bowl, and a set of bread pans.

"Count them," she said.

I picked up each one. There were five bread pans. In the fifth bread pan was a recipe which first stated: "Follow each direction carefully and your home will be filled with warmth and love." All the ingredients and directions were listed and then:

"Serving Commandments;

1st loaf, on the table, fresh and warm with a plate of butter, jar of honey and two knives. Yield: 5 loaves of love: 4 for the family - 1 for the Lord. A woman can give no greater gift than the warm fresh goodness of homemade bread. Search out the sick, the poor, or forgotten and give of yourself. Your joy will be unmeasurable. The gift of one will take away the work of four. But remember, be charitable. It's a gift of the heart."

"I hope you like your present," Mom stated. "You'll never know how much mine has come to mean to me. It's not only a family tradition, but it's brought me years of happiness I could never have done without. It's very important that you set your traditions. Never become too busy to notice other's needs. You'll find such happiness in that fifth bread pan." Then Mom cleared her throat, cracked a smile, and said, "And you and your mystery of continually searching for that loaf of bread, you gave it the spice it needed."

Well, tonight I understand. I'm a little embarrassed, but I finally understand. How grateful I am for my wonderful heritage. That Mom of mine; she's the greatest! Oh, how I love her, and homemade bread, and even that fifth bread pan.

"YEA, THO I WALK THROUGH THE VALLEY. . .

By
William D. Conway
English Department

It snowed during the night. The wind whistled through the eves. Gusts shook the house to its foundation. In the morning they found a miniature snow drift in the front room where snow had pushed under the front door. Outside there was a foot of new snow with a five-foot drift curving in toward the house.

As the wood stove began to chase away the cold in the kitchen, the kids wrapped themselves in the quilts from their beds and raced into the kitchen to snuggle up with the stove. In their rooms they had been able to see their breath in the air.

It was Saturday, December 1, 1919. They didn't have to go to school. More importantly this was the day the money came. Papa worked in Deerlodge, some 75 miles away, and sent them money every two weeks on the train. During October, crushed by a second year of drought and "without a cent to my name," he had given up the land, turned the stock loose, and taken the only job he could find anywhere in the region, as a clerk in a hardware store. He'd said, "It was to keep the wolf from the door." And it was kind of. They were always out of food when the money arrived and had just enough to make it to the next time.

For Lucille and Angela, the oldest kids at home, this Saturday was a special day because it was their turn to walk to town, meet the train, visit the store, and carry their purchases home. Lucille, the oldest of the two at sixteen was in charge. Angela age 14 wanted to go for the adventure and to help carry the supplies home.

By 10:00 the weather had improved enough that they could see Ringling sprawled at the foot of the hill. The train was in and gone. Someone had been down the road with a team of horses and left a good track through the drifts. But even though the wind had dropped and the snow stopped, any fool could see that the storm wasn't over.

"Now Lucille, you just walk up to the post master, Mr. Mahoney and say, 'Do you have a letter for Mrs. William Burke?' It's as simple as that."

"Mama, I'm sixteen. I know what to do."

"Here's the list of supplies I need. Be very careful with the money. Where are you going to carry it?"

"In this pocket, Mama. It's deep and can't fall out."

"Wear your hats and gloves and an extra sweater. I don't like the looks of that sky. Oh, I wish Papa was here."

"We've got extra sweaters on and long underwear. We'll be fine Mama. Don't worry."

"I want you to run your errands and come right back home."

"Yes, Mama."

The girls felt a release as the door closed and they walked to the road. They were on their own for the day. They'd get to see someone besides family. Maybe they'd see their friends, maybe even meet some boys. Mama was so worried all the time. She wasn't much fun to be around, particularly since Papa had left.

When they reached the road, the footing was much better. The team had broken the drifts and the walking was almost easy. Besides they were going down hill. Overhead the clouds raced by, some were low and dark. Ahead they could see Smith's barn and further in their school. Smoke rose from most chimneys only to be dashed away by the south westerly wind racing over the scene. The girls walked eagerly into town.

"We've got to go, Buster. It's getting dark and Mama will be worried. It was awful nice of you to buy us a soda," said Lucille, making no effort to actually leave.

"Aren't you going to stay for the dance?"

"We can't. We've got to get these groceries home."

"Awe, Gee, the dance won't be the same without you."

"Really?"

"It won't, mon cheri," he grinned, wondering if she understood the only two French words he knew. When she blushed, he had his answer.

"Buster Elliot, that's all the French you know. What does this mean? 'En hiver, il fait tre froid a Ringling. Il neige, maintenant!"

It was Buster's turn to color for a different reason.

"See I told you so. We have to leave. It really is snowing. And Buster, "Merci beaucoup" for the soda."

He smiled. "See you girls at the dance if you can make it."

Lucille, grabbed Angela's arm and hurried out the door of the drugstore. The sky was dark, almost black. The wind whipped the snow up in clouds.

"We've got to get home, RIGHT NOW."

"I've been ready for an hour while you sweet talked Buster Elliot. Don't tell me to hurry. But lets, it looks awful." The girl's, each holding a satchel like canvas bag full of groceries, bowed their heads to the wind and pushed up hill as fast as they could go. Even though it was just 4:00, it was nearly dark. The wind lashed their faces with snow. The temperature dropped with every step they took. Drifts had reformed on the road, only now they were higher and harder to break through. The pair struggling up the hill stopped to get their breath. They couldn't see the top of the hill or the town they had just left. The air was so full of snow it was hard to breathe.

"Lucille, I'm cold and afraid."

"I know. It's awful. But we can make it; we must be almost there."

"But I can't see anything. It's hard to even see you. I'm scared."

"Let's hold hands so we don't get separated," panted Lucille as he took a step up the hill.

"But I don't even know which way to go. I can't see anything." "Well, we can see one thing--the fence line. Let's follow it up the hill. When we get to the corner we'll know we aren't far from home. Come-on, we've got to walk or we'll freeze to death. Now hold on to the fence and stay right behind me. We've got to stay together."

The wind ripped at them, reaching icy fingers into their coats, their knit gloves, through their scarves and down their necks. Despite the intense work of wading through the snow, the chill reached deeply into their bodies.

They plodded on, holding on to the wire as a lifeline. But the barbs keep catching on their gloves, pulling them off. The bags of groceries slowed them up but it never entered their minds to abandon them for better speed.

Their faces hurt at first but then seemed almost warm as they went numb. Lucille realized they were freezing. They had to get home soon or they would never get there.

"Come on, Angela, we've got to push harder."

"Angela, come on." Lucille pulled on her arm when she got no response. "Come on," she yelled in a scared voice. Angela responded with a step but she was obviously losing her will to live. Lucille jerked her up close and yelled in her ear, "We're just about there. You walk first." With that she shoved her a head. Angela took several steps and began to falter. Lucille shoved again, and again.

Lucille's thoughts raced. They couldn't turn back--they'd never make it. If they didn't get there soon, they wouldn't make it anywhere. Oh, where, where is the end of the fence line? In her heart she tried to say a prayer--"Holy Mary, mother of God, pray for us sinners now and at the hour of our death." Death, the word nudged her numbed brain. They were dying. No, she though, no, I won't let it happen. She shoved Angela again then realized they were at the end of the fence line, three hundred feet from home.

"Angela, it's the end of the fence line. Home is right here. Come on, we've GOT to make it!"

Angela responded by raising her head a looking around. Other that the fence post in her hand she could see nothing that looked familiar.

"We've got to hold hands. Don't let go no matter what."

"But Lucille, which way do we go?"

Lucille took a deep breath. She was reluctant to let go of the fence and step off into darkness of the blizzard. But she was the older sister. She was in charge. Mama was counting on her. She was the one who had stayed too long talking to Buster. She had to do something, now.

"The house is over here. Now hold on. Here we go." After only ten steps they ran into a drift up to their shoulders. They struggled, kicked and finally crawled over

and through it. The fence had disappeared. The world held little light. They were drowning under a sea of snow.

"Which way?" shouted Angela.

Lucille looked all around for any sign of which way. The struggle through the snow drift had turned her around. She tried to see their tracks to get a sense of direction, but the wind had already erased them.

"I, I, I think it's this way. Come on." She pulled on Angela's arm and struggled ahead, every step an agony of effort. The snow was deep, pulling at them, dragging them down. Angela fell into the snow, nearly pulling Lucille down with her. She didn't get up.

"ANGELA, GET UP--GET UP." With an almost superhuman effort Lucille pulled her to her feet. She pulled her face up to her own. Angela's eyes were closed like she was asleep.

Lucille boxed Angela on the ear with her free hand. Angela's eyes popped open at the pain.

"YOU'VE GOT TO HOLD ON. NOW LET'S WALK." They started off again only to encounter another drift, even bigger than the last. Lucille struggled into it awkwardly, afraid to let go of Angela's hand. She found herself fighting the snow with her eyes closed. It's all useless she thought. We aren't going to make it. Just then the top edge of the drift broke and they fell down the other side. Angela lay still. Lucille pulled her own head up and opened her eyes. Through the swirling snow she thought she saw a light. Then it disappeared. After a minute she saw it again. It was a light.

"Angela, get up. We're almost there. I see a light." Angela didn't move, but then finally pulled her head up. "Where?" she asked.

"There." Lucille pushed Angela's head around so she could see it. "There."

Lucille tried to get to her feet but couldn't. "Come-on, we got to crawl." Their movements were exquisitely slow, painfully so, but the light was clearer now.

"Come-on, Angela, we're just about there. Mama must have a lantern hanging in the front window."

They crawled over one last drift, still dragging the food bags on one side. When they were five feet from the porch, the door of the house opened and Bill, Teresa, and Mama rushed out to grab them. In moments, they were inside. The wind slammed the door, shaking the whole house.

"Thank, God. Thank, God," Mama kept saying over and over as she pulled the outer clothes from the girls who lay on the floor, so exhausted they couldn't move.

"Come on, kids, help me drag them into the kitchen where it's warm. Thank, God, thank, God," she repeated again just barely audibly.

Later as Lucille tried to swallow the hot broth her mother held to her lips, she murmured, "Mama, it was the light. The light saved us."

Angela added weakly, "It was awful, Mama."

"Thank God," Mama said, her head bowed, tears running down her cheeks. "Thank God."

Note: Story based upon an actual incident in author's family history.

Rodney D. Keller,

Aims and Options A Thematic Approach to Writing

Reviewed by
Julie Clark
English Department

Rodney D. Keller. *Aims and Options:* A Thematic Approach to Writing. Boston: Hughton Mifflin Company, 1995. 332 pp., appendix, acknowledgments, index. Paperback, $31.60.

I have used Professor Rod Keller's textbook, Aims and Options, for my College Composition classes for as long as it has been available, three semesters. Because of Professor Keller's generosity, I had already used many handouts and ideas that would be incorporated into the book. I am most impressed with both the book and the author and would like to share with you some of the strengths I have found in this text.

As a teacher of freshman writers, I often find myself reminding students that an introduction should give the reader more than a hint of what you are going to write about. After three semesters of using Professor Keller's book, I only now realize that the text itself is an excellent example of the basic concepts of clear, concise writing. For example, in the first paragraph of the Introduction, he emphasizes the purpose of his book.

> The overall purpose of *Aims and Options: A Thematic Approach to Writing* is to provide clear and simple general instructions for writing college papers. A more specific purpose is to help you--the student writer--come up with new ideas and draw on your experiences both to enrich the writing process and to improve the quality of its product.

Professor Keller's style truly is "clear and simple," although I think his instructions go beyond the "general" into specifics that are workable for writers of all ages, backgrounds, and levels.

The fact that Professor Keller has used a thematic approach to enhance and enrich the student's choice of topics for writing is support of his "more specific purpose." Each of the eight chapters in *Aims and Options* focuses on a specific theme. Chapter one revolves around the theme of work in a conscious effort to lead students to write about themselves without being totally "self" centered. The other themes are education, environment, health, self (left purposely until the middle of the text), relationships, law, and community.

One of my favorite features is the list of topic ideas called "Starting Points," at the beginning of each chapter. For example, such broad topics as dual-career families, labor unions, team work, and worker attitude are included in the list at the first of chapter one. Along with the two professional essays that follow the list, these topics are good springboards for discussion and exchanges of experiences, ideas, and feelings. Both the list and the essays help us get not only an abundance of good writing ideas but they also draw us together because we share personal bits of ourselves. I find students more willing to work together in rewriting and editing exercises and more comfortable on group papers and projects. It is rewarding to see them talking over ideas, experiences, and papers in informal comfort.

Besides being idea springboards, the short professional essays are excellent examples of the strategies and skills which will be discussed within the given chapter. They are carefully chosen to be within the range of the students understanding and emulation.

The body of each chapter is devoted to the writing process. Prewriting, drafting, rewriting, and editing are each explored in detail. Such skills as listing, clustering, and cubing are taught in the prewriting sections. Drafting encompasses ideas like nonstop writing, thesis development, and journal keeping while also including the eight writing strategies: narration, description, definition, cause and effect, classification, comparison and contrast, explaining a process, and persuasion. The rewriting section of each chapter covers skills like analyzing your audience, determining voice, and concise word choice. This section also includes an annotated student essay in process, thus providing the students with an essay to evaluate and learn from. And finally, the editing section covers comma placement, agreement, and other mechanical and grammatical skills.

Central to each section of *Aims and Options* are the four aims or purposes for writing: to reflect, to inform, to persuade, and to speculate. The text assumes that the writer's purpose/aim for writing is the "most important influence that governs the writer's options regarding all aspects of writing. . . ." By the time this book is covered, it is possible for the students to have at least eight different skills in each area of the writing process, plus numerous topic ideas, and a firm grasp of the importance of purpose/aim. Wise students, with the help of their instructors, will be able to adopt the techniques that work best for them and to greatly improve their writing skills.

The final section of the book is the appendix, a brief reference to help students with researching and documenting. It has valuable information about research, and I especially like the clear definition of plagiarism. But, for most students, it is only a basic introduction to research and documentation.

I am very impressed with Professor Keller's *Aims and Options.* He has fully documented the professional essays in the Acknowledgments. The rest is of his own creation--a cumulation of his best and most successful ideas from the past 14 years of teaching College Composition at Ricks College. He is very much aware of his audience and provides multiple options for students at all levels. His text is very well organized but also very flexible for both teachers and students. He writes as he teaches, with accessibility, knowledge, and a friendly, guiding hand reaching out to each reader/student.