

The Concept and the Sciences

The Integration of Faith and Learning within the Natural and Social Sciences

Spring Arbor University is a community of learners distinguished by our lifelong involvement in the study and application of the liberal arts, total commitment to Jesus Christ as the perspective for learning, and critical participation in the contemporary world.



Featuring the writings of
faculty and administrators
of Spring Arbor University

In *The Concept and the Sciences*, the natural and social sciences faculty and administration of Spring Arbor University communicate how the mission of the University impacts and informs the integration of faith and learning within the Christian liberal arts.

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The Concept and the Sciences

The Concept Series
Volume III

The Concept and the Sciences

The Integration of Faith and Learning
within the Natural and Social Sciences

*Featuring the writings
of faculty and administrators
of Spring Arbor University*

General Editors

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"For since the creation of the world God's invisible qualities—
his eternal power and divine nature—have been clearly seen,
being understood from what has been made..." - Romans 1:20

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The Concept and the Sciences

Table of Contents

Spring Arbor University Concept	vi
Foreward	vii
The Concept and the Arts and Sciences	17

Part One: Natural Sciences

The Concept and Natural Sciences	35
The Concept and Environmental Health.....	53
The Concept and Genetics	69
The Concept and Geology	89
The Concept and Health and Fitness	103
The Concept and Physics and Astronomy	121

Part Two: Social Sciences

The Concept and Social Sciences	135
The Concept and Cultural Anthropology.....	153
The Concept and History	169
The Concept and Political Science	191
The Concept and Psychology.....	211
The Concept and Social Work.....	227
The Concept and Sociology	245

Spring Arbor University Concept

Spring Arbor University is a community of learners distinguished by our lifelong involvement in the study and application of the liberal arts, total commitment to Jesus Christ as the perspective for learning, and critical participation in the contemporary world.

Foreword

Beginning with the rise of science and the “modern” worldview in the 17th century, there has been a growing and general impression that an incompatibility exists between Christian belief and scientific process. Up until this time, the “book of creation” and the “book of Scripture” were considered parallel tracks for discovering and strengthening our life with God. In due time, this division between science and faith became known as the fact/value dichotomy. The chasm between faith and reason has deepened further with the ascendance of the belief that only “fact-based” science can be used to construct social policy, while “value-based” religion must remain sequestered to the private domain where it can prop up individual life, but not intrude on the public square.

This chasm has been disastrous and unnecessary. The purpose of this volume is to bridge this gap by demonstrating not only that Christian belief and natural science are compatible, but also that the very birth of science owes a great deal to a variety of core Christian beliefs. Rather than being its rival, Christianity

is one of the major contributors to the existence and progress of modern science. To amplify this point it is important to illustrate the way in which key attitudes within a Christian worldview have contributed to the rise of science, and remain in deep harmony with genuine scientific thought and methodology.

Diogenes Allen is especially helpful through his work, *Christian Belief in a Postmodern World*.¹ Here, Allen identifies six key attitudes that gave rise to modern science. He begins by raising the question, “Why did the classical scientific method emerge when it did and where it did?” In other words, why did it emerge in the late 16th century in the heart of a Christian civilization? Allen asserts that this is a direct result of the Christian belief in a creator God, the goodness of creation, and the belief that humans made in the image of God can analyze and reason their way to an understanding of God’s purposes.

Positive Christian Attitudes toward Science

These innate capacities made the first of the six attitudes possible: the attitude of awe. A Christian worldview regards the study of science as part of God’s infinite, wondrous handiwork. The Christian scholar, by identifying

and understanding what can and cannot be known by the limits of human research, is able to maintain an appreciation for the infinite and divine nature of the universe.²

The second attitude is one of interest. Christians believe the entire universe depends for its existence on a perfect being, but they also believe that nature is good, and by association that matter is good. This is not true of every culture and in fact is noticeably absent from most.

The third attitude is that nature is orderly, and that it behaves in a consistent and rational way. Christians believe that nature is orderly because it is created by a good and rational being. Although God could have ordered creation in any number of ways, God chose to order creation the way that it is and the way that we have come to know it. Thus, Christianity, with its notion of a personal God as creator, emphasizes that the order we observe depends on the original choices made by a divine intelligence. This understanding of God encourages a search for order in a nature that is rational and discernible.

The fourth attitude is the belief that nature can be understood. Believing that nature is ordered leads naturally to the belief that this order can be observed, studied and comprehended. Therefore,

as one discovers more and more about creation and creation's order, one is discovering more and more about the Creator who made them.

The fifth attitude is the attitude of design. Claerbaut observes this attitude by stating, "if the world contained nothing more than several trees and plants, one could imagine it was the result of random forces. Because human beings have motivations, plans and designs, it is reasonable to make the connection that those characteristics bear the mark of the Creator—who also has motivations, plans and designs."³

The sixth and final contribution of Christianity to science is the attitude that the results of scientific investigations are to be shared. The study of science and the application of the scientific method is a community affair. The communal nature of inquiry mimics the communal nature of our Christian faith. As Christians down through the centuries have felt it their responsibility to study nature in order to improve our physical life on earth, so this discipline eventually turned its attention to human societies spawning a whole new set of disciplines: the social sciences.

Just as the scientific method gave rise to the natural sciences, so the attempt to apply the scientific method to human behavior created the

whole new realm of the social sciences. This application of the scientific method to human behavior culminated in the massive exodus of intellectuals from the church at the end of the 19th century and deep into the 20th century.

It was not until midway through the 20th century that writers such as Michael Polanyi (*Personal Knowledge*), C.C. Gillispie (*The Edge of Objectivity*), Austin Farrer (*Faith and Speculation*) and E.E. Evans-Pritchard (*Theories of Primitive Religion*) began to break the spell that the scientific method held over the natural and social sciences, and started to make room for Christian belief. Each one in its own way demonstrated the impossibility of pursuing “scientific” truth without regard for the reality of God, and especially the purposes God has placed within the natural and social world.

Conclusion

Still, despite many noble and growing efforts, great opposition to a Christian worldview persists. There are many who believe science will one day provide a complete explanation for nature and its laws and will do so with no regard for God. Yet even this attitude and posture misses the limits of science. Science can explain in great detail how

nature works, but it cannot explain why it exists in the form it does or why it exists at all.

The guiding premise of this volume is that the social and natural sciences are two of the most important arenas of human knowledge, but they can only be fully understood when placed in the broader context of a Christian worldview. To study the world biologically, chemically, psychologically, sociologically or anthropologically is to introduce boundaries to an area of study so that we can study life through the lens of one systematic approach. But this is to approach knowledge without ever developing a complete worldview. It is the premise of this book, and the commitment of each of these authors, that by virtue of being in relationship with the Creator of the universe one is better equipped to understand the purposes and intents of nature and every human society.

As you read this volume, it is our hope that the attention given to the integration of the social and natural sciences with our Christian faith will propel you to a deeper life with God. There is real humility in this volume, and a recognition that even with as much as we know there remains a vast amount of life about which we know little or nothing. Rather than proclaiming a “triumph of human reason,” we strive to reveal both the action

of a sovereign God who is known through his word
and the evidence of his handiwork in his world.

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Spring Arbor, Mich.

June 13, 2007

Endnotes

¹ Allen, D. (1989). *Christian belief in a postmodern world: The full wealth of conviction*. Louisville: Westminster/John Knox.

² Claerbaut, D. (2004). *Faith and learning on the edge: A bold new look at religion in higher education* (pp. 163-165). Grand Rapids: Zondervan.

³ Ibid.



This is My Father's World

Words: Maltbie D. Babcock, 1901

This is my Father's world, and to my
listening ears
All nature sings, and round me rings the
music of the spheres.
This is my Father's world: I rest me in
the thought
Of rocks and trees, of skies and seas;
His hand the wonders wrought.

This is my Father's world, the birds their
carols raise,
The morning light, the lily white,
declare their Maker's praise.
This is my Father's world: He shines in
all that's fair;
In the rustling grass I hear Him pass;
He speaks to me everywhere

Some knowledge of the sciences also, is, to say the least, equally expedient [as history]. Nay, may we not say, that the knowledge of one, (whether art or science) although now quite unfashionable, is even necessary next, and in order to, the knowledge of the Scripture itself?

—John Wesley

The Concept
and the
Arts and Sciences

Garnet (Smith) Hauger, Ph.D.

John Wesley was clear about the value of a liberal arts education for the clergy. B.T. Roberts extended that advice to all Christian workers when he said, "Literature, mathematics, in short every branch of human knowledge can be used to advantage in the work of winning souls to God."¹ E.P. Hart, the founder of the seminary at Spring Arbor, believed in the value of a liberal arts education in fitting students for worthwhile lives and in saving them from lives of uselessness.²

In his book *The Idea of a Christian College*, Arthur Holmes noted that because the individual has an eternal destiny, the education that individual

pursues is important since it contributes to that destiny. In short, “Christian liberal arts education has an eternity in view.”³ David McKenna, the author of the Spring Arbor University Concept, made one of the most powerful statements about the purpose of a Christian liberal arts college:

In the final analysis, the Person and Work of Jesus Christ also provide the basis for defining an evangelical Christian college. It is a *college* because its primary interest is given to a process of involvement in—and appreciation for—the life of learning. It is a *Christian college* because the prerequisite for purposeful involvement in the life of learning is commitment to the redemptive power of Jesus Christ. It is an *evangelical Christian college* because its end and purpose is to accomplish sanctified participation in the affairs of life through the Christian vocation and social responsibility.⁴

The Concept and General Education

It has been over 40 years since the formation of the Spring Arbor University Concept, and in

the intervening decades, there has been much conversation about the meaning of the Concept and how to translate it, both formally and informally, into a meaningful curriculum. The original general education curriculum growing out of the Concept consisted of a set of eight courses, two courses from each of the four academic divisions. These courses had interesting titles such as “God and Man” (religion), “Freedom and Order” (social science), “Structure and System” (natural science), and “Image and Idea” (humanities).

The advantage of this curriculum was that it placed the primary focus for the integration of faith, living and learning on a small set of required courses. The design of these courses was a grand experiment in implementing the Spring Arbor University Concept in creative and exciting ways, and it helped to guarantee integration of faith, living and learning in a uniform way for all students, semester after semester.

The “one-size-fits-all” approach to general education did not meet the needs of some—maybe most—students, which was a disadvantage of this curriculum. It did not take advantage of students’ previous educational backgrounds, nor did it necessarily help them advance their knowledge in ways that contributed to the achievement of

their career goals. It had the added disadvantage of making transferring into or out of the institution difficult.

In the early 1970s a week-long faculty workshop led to a less uniform general education curriculum, one that allowed students course options in each of the four academic divisions. Each division formed a list of general education courses from which students could choose. This version of the general education curriculum was more consistent with a “cafeteria approach.”

This approach required the creation of additional courses to meet the needs of a student body with more diverse educational backgrounds and career destinations. It included many disciplines specified to their majors and the general education courses necessary to complement their major program and support their career plans.

While this was clearly an advantage from the student viewpoint, it created its own set of problems. It led to course proliferation, since several new courses had to be added to the curriculum to meet the needs of students with different educational backgrounds and career goals. It also led to problems with student advising. Even though students were encouraged to take general education courses to fill holes in

their previous educational backgrounds—or to take a more advanced course in an area where they already had relatively strong backgrounds—they often chose courses that represented a repeat of material they had learned in high school.

A more serious disadvantage related to managing how the Concept was embedded into each general education course. Over the years, the general education program grew from eight uniform courses developed specifically to guarantee integration of faith, living and learning, to a program that offered multiple options in eight categories (called liberal arts requirements), three courses—one in writing, one in speech and one in physical fitness (called basic institutional requirements), and five courses in the CORE program.

Today, the number of courses listed as options in the eight categories for the liberal arts requirements is 45, not counting the options students have for taking more advanced courses in place of the listed courses.⁵

Integration of Faith, Living and Learning

It has been difficult to oversee the integration of faith, living and learning in this version of the general education program. Nonetheless, under

the direction of the Christian Perspective in the Liberal Arts (CPLA) committee, multiple efforts have been made to keep this as a primary focus. In May 2000 the faculty approved eight objectives that every general education course must meet in order to integrate the Concept:

1. Encounter the Christian faith, and understand and apply concepts of a Christian worldview.
2. Develop an ability to think creatively and critically, demonstrating both cognitive and effective learning, as well as logical thinking patterns.
3. Demonstrate proficiency in writing that includes effective use of the printed word to express ideas, competency in research writing, and other critical forms appropriate to the discipline.
4. Demonstrate effective verbal communication skills, including public speaking, listening and interpersonal communication.
5. Demonstrate skill in effective decision making, including quantitative and qualitative approaches to ethical, social and personal concerns.

6. Learn basic skills, methods and resources that are essential to the discipline involved.
7. Confront significant disciplinary “issues” that enable a student to intelligently discuss concerns of contemporary life.
8. Understand the “connectedness” between particular disciplines.

Some of these objectives connect directly to particular planks of the Concept. For example, objectives 2-6 represent basic intellectual skills and knowledge that form the basis of a liberal arts education. These objectives relate most directly to “lifelong involvement in the study and application of the liberal arts.” Objective 1 concerns “total commitment to Jesus Christ as the perspective for learning,” while objectives 7 and 8 deal with “critical participation in the contemporary world.”

It is appropriate that five of these eight objectives deal with the study and application of the liberal arts. The University is first and foremost a liberal arts college, and as such it must make the acquisition of basic and powerful intellectual skills and knowledge a high priority. No less

important are the two primary ideas contained in the first objective—encountering the Christian faith and understanding and applying concepts of a Christian worldview. This is at the heart of our “commitment to Jesus Christ as the perspective for learning.” Finally, the two objectives related to “critical participation in the contemporary world” make it clear that it is our knowledge of the various academic disciplines and issues related to that disciplinary knowledge that prepares us for work in the Kingdom of God.

The multi-year effort to form and refine these objectives laid the foundation for a review of our general education program. One of the first acts of that review was to assess the alignment of the current general education program with the eight objectives. In the 2001-02 academic year the CPLA committee authorized the dean of the School of Arts and Sciences to conduct that assessment.

A rubric was developed for each of the eight objectives, and the extent to which each course met each objective was then assessed according to this rubric. The rubric specified a 1 (minimally met), 2 (satisfactorily met) or 3 (outstandingly met), and each general education course received one of these scores for each of the eight objectives.

Objective 1 is especially inspiring and possesses an informed and deep effort to apply the Concept to the University's general education curriculum. To help achieve that, the University offers these courses:

BIO 281 – Environmental Science

The Christian faith is encountered during the first class session when a biblical basis for environmental stewardship is described. Applications of Christian principles are applied to various topics like world hunger, population and endangered species. Also examined is the work of Christian environmental missions projects where part of their ministry is to improve the environment.

PSY 100 – Introduction to Psychology

A larger percentage of the subject matter here is directly relevant to the Christian faith. By using *Psychology in Christian Perspective*, weekly discussion sections are used to cover topics like cognitive development and

its relationship to spiritual growth, Christian versus non-Christian psychotherapy, mental illness and sin.

ART 205 – Photography

One of the major assignments is to take (shoot) a “Christian photograph.” The students are intentionally given little direction and are expected to wrestle with how to define the terms. The critique after the photographs have been submitted helps students better understand whether “Christian” is a noun or an adjective and how to better integrate a Christian viewpoint into their artistic work.

ENG 112 – Literature, Discovery and Analysis

A Christian worldview is used as the benchmark for literary analysis of texts read and is directly encountered in the writings of Augustine, Dante, Chaucer and Milton. Students are encouraged to conduct a comparison between classical and biblical heroes for the required contrast/compare paper.

These descriptions make it clear that our faculty take serious efforts to make our general education programs directly relevant to the integration of faith, living and learning. We take seriously our charge to connect knowledge in each discipline to a Christian worldview, with an emphasis on using that knowledge to make a difference in the world.

The CORE Program

Another effort to help guarantee that the Spring Arbor University Concept remains foundational to our curriculum is the current work in reviewing and revising the CORE program. In December 2003 the academic senate approved name changes to these five courses:

CORE 100 – Discovery in the
Liberal Arts Through a Community
of Learners

CORE 200 – Involvement in the
Christian Faith: Issues and Cultures

CORE 274 and 275 – Critical
Participation in the Contemporary
World Outside One's Own Culture

CORE 300 – Discovering the
Christian Faith: Its Practices Through
Jesus Christ as the Perspective for
Learning

CORE 400 – The Christian in the
Contemporary World

One does not have to look very long at the titles of these courses to realize the Concept is the foundation of this course sequence. Indeed, that was the single most important resource for designing these courses in the first place many years ago; it was also the resource for the recent attempt to review and revise them.

In Fall 2003, task forces for each of the five courses were formed under the leadership of Mary Darling, professor of communication and director of the CPLA committee. Each task force considered the relationship of these courses to the Spring Arbor University Concept and then took the first steps to modify and strengthen them, making that relationship more obvious. In particular, new course descriptions were written and “Concept relevant” objectives were written for each course. The remainder of the 2003-04 school year was used to transform those lofty objectives into a

curriculum that, we hope, will impress upon our students and others the importance of the Spring Arbor University Concept and how it can be implemented into a workable curriculum to make a difference in the lives of our students.

Conclusion

The major focus of this chapter has been the relationship of a liberal arts education to the Spring Arbor University Concept—for understanding and applying basic intellectual skills and knowledge, for viewing that knowledge from the perspective of a Christian worldview, and for using that knowledge in meaningful service for the Kingdom of God. Over the last 40 years of Spring Arbor University history, this imperative has been fueled by the Concept and is the foundation of the general education program. Faculty members continue to look for ways to translate the Concept into a curriculum that educates people for meaningful service for Christ and His kingdom.

Endnotes


¹ Roberts, B. T. (2003). A concept of education. In G. D. Beebe & J. S. Kulaga (Eds.), *A concept to keep*. Spring Arbor, MI: Spring Arbor University Press.

² Hart, E. P. Reminiscences of early Free Methodism. In G. D. Beebe & J. S. Kulaga (Eds.), *A concept to keep*. Spring Arbor, MI: Spring Arbor University Press.

³ Holmes, A. F. (1975). *The idea of a Christian college* (p. 45). Grand Rapids, MI: Eerdmans.


⁴ McKenna, D. L. (2003). A concept of Christian higher education. In G. D. Beebe & J. S. Kulaga (Eds.), *A concept to keep*. Spring Arbor, MI: Spring Arbor University Press.

⁵ Spring Arbor University. (2002). *2002-04 undergraduate catalog*. Spring Arbor, MI: The Author.



Joining the faculty in 1971, Garnet (Smith) Hauger has served as professor of mathematics, chair of the natural science division, and chair of the mathematics, computer science and physics department. She is currently dean of the School of Arts and Sciences.

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Part One:

Natural Sciences

Humanity is charged with the tending of creation, in the full knowledge that this creation is the cherished possession of God... Stewardship, to put it simply, is recognizing our limitations as God's creatures, and more specifically our obligations to tend and care for God's good creation.

—Alister E. McGrath

The Concept
and the
Natural Sciences

David A. Johnson, Ph.D.

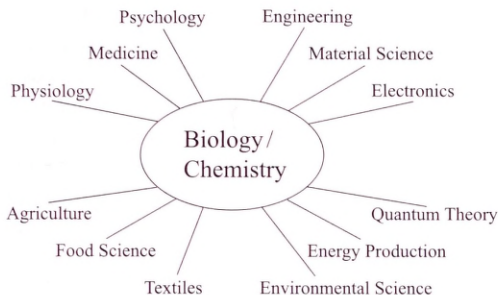
What is a liberal arts education, and why does the Spring Arbor University Concept include study and application of the liberal arts? We have traditionally equated a liberal arts education to a broad, general education that ranges across the natural sciences, social sciences, humanities and religion. A liberal arts education, however, means far more than just a curriculum or course of study. A true liberal arts education does something to the learner; it develops a humanity and implements the highest calling of Christianity. Arthur Holmes reminds us that we are at the least rational, historical and valuing beings, and a Christian

liberal arts education is one that develops these capacities.¹

The faculty of Spring Arbor University has described the goals of a liberal arts education in the Spring Arbor University's Ideal Graduate statement (see Appendix). They include the ability to communicate effectively, think and make sound judgments, understand and appreciate the past, and creatively participate in the future. The curriculum and co-curricular experiences required for graduation from Spring Arbor University are designed to encourage growth in all these areas.

How does the study of science contribute to a liberal arts education? Why should a student of the arts, literature, philosophy, religion, business, education or social science study the sciences of biology and chemistry? At least five reasons can be given.

First, biology and chemistry are uniquely tied to many of the areas that directly affect our lives. Page 37 displays a diagram that shows how biology and chemistry connect to many areas or experiences we encounter on a daily basis. Because of this wide-ranging interaction with everyday living, the study of biology and chemistry reminds us of the far-reaching effects of these disciplines.



The development of science has led to an explosion of scientific knowledge never experienced before in human history. When combined with mechanical ability and skill, it has led to innumerable applications to practical problems and technology. These applications have completely transformed the world but have produced a mixed legacy, creating tools that heal but also destroy, that enhance life but also threaten it with annihilation.

Second, modern science, including modern biology and modern chemistry, influences society and culture in profound ways and in so doing raises ethical questions that only society as a whole can answer. For example, scientists have successfully cloned copies of adult animals. The potential

impact of cloning humans, which is currently being attempted, are huge. Persons could parent genetic copies of themselves. The genetic copy would resemble the parent as one twin resembles its sibling. Is this a process society should allow or prohibit? Only society as a whole can decide this. If we as a society are to make intelligent discussions we must have a basic understanding of the scientific principles involved.

Third, decisions involving scientific principles are often made by persons who are nonscientists. Persons who participate in political decision-making processes and the persons electing them are generally not trained in the sciences. Yet politicians make decisions concerning science policies, science funding, environmental regulations, and regulation of nuclear weapons and energy. Unsound scientific policy can potentially be imposed on an uninformed public. For example, a clear understanding of the role of nuclear medicine in diagnosing cancer and the need for research of nuclear reactors to provide the appropriate isotopes would be most helpful in dealing with support for converting research of nuclear reactors using highly enriched uranium fuels to lower enriched uranium fuels. Highly enriched uranium fuels can be converted

to weapons of mass destruction, whereas low enriched uranium fuels cannot be used for nuclear weapons. If we are interested in making the planet a decent place to live in the future, we need to understand the scientific issues that our society faces and make intelligent decisions that will benefit our children and grandchildren.

Fourth, science is a fundamental way to understand the world around us; it enables us to obtain knowledge not attainable by other methodologies. New scientific knowledge serves to deepen and enrich our lives in many ways. For the uninformed, the world is a two-dimensional, shallow place, and for the informed, it is a deeper, richer and more complex place.²

A fifth reason for studying biology and chemistry is to understand the thinking processes scientists use to determine scientific knowledge. Scientists use certain key terms to describe the way they conduct their work. Scientific knowledge, which includes biology and chemistry, is understood to be testable, reproducible, explanatory, predictable and tentative.

Scientists often begin their studies by making observations of natural phenomena and a hypothesis or a tentative explanation or prediction. Many times the hypothesis is simply an

educated guess, but must be testable. The next step involves testing the hypothesis through carefully controlled experiments in which observations and measurements are made. All data must be verifiable or reproduced by other scientists carrying out similar experiments. Results of experimentation are then analyzed to identify patterns. The ultimate goal of scientific endeavor is to develop theories or explanations for the phenomena studied. Theories are important because they allow scientists to predict scientific behavior in other similar cases and frequently serve as a framework for organizing scientific knowledge. Contrary to some popular notions, scientific knowledge is not absolute, for no hypothesis or theory can ever be proven completely true; it can only be disproved. Thus, scientific knowledge is always growing, changing and tentative. Scientists are continuously abandoning or modifying old concepts when new research tools provide new data and better concepts.³

In the study of the sciences, one not only has a better understanding of the process by which scientific knowledge is obtained, but also how experimental data is analyzed. Critical thinking plays an important role in determining how good or valuable scientific data is. Thus, some

data is more valid or believable than other data. Associated with any scientific work is an analysis of the relative value of the work. This is frequently given in statistical terms as the average and the standard deviation.

A study of the biological and chemical sciences helps students develop and use the tools of critical analysis. Such study will enhance student skills in problem solving and in the interpretation of the relative value or certainty of scientific knowledge. The study of the sciences clearly helps students develop skills and qualities associated with a liberal arts education, and contributes to the qualities required for effective leadership and citizenship.

Community of Learners

An important plank of the Spring Arbor University Concept is the call for a community of learners. Former president Gayle D. Beebe describes the learning community in the following manner:

To accomplish this purpose, the educational community at Spring Arbor University, built on the Concept, and seeking to embody it, strives to

cultivate a student-focused, teaching-oriented, Concept-driven community. By design the faculty and staff are closely involved in the lives of our students. Additionally, our programs are designed not only to prepare one for a meaningful career, but also to provide a learning community that shapes one's spiritual, moral and intellectual life.⁴

One of the unique characteristics of scientific knowledge and discoveries is that the larger scientific community plays a significant role. Scientific knowledge is almost always discovered in collaboration with many scientists. Ideas and results are shared and tested through professional meetings and peer review publications. Because of the involvement of peer review groups, scientific knowledge is subjected to critical analysis. The effect of community collaboration makes for the highest integrity and believability of scientific methodology and thought.

Interesting applications of this collaborative action in science at Spring Arbor University are study groups, cooperative lab experiments, and collaboration with faculty in undergraduate

research projects. Students working with knowledgeable and well-trained faculty are taught by example, and they strive to match the academic strides of their mentors. This sense of community by collaboration with other students and senior scholars is a major academic strength of the University, and accomplishes or fulfills the ideal of a learning community.

Lifelong Learning and Commitment to Jesus Christ

The Spring Arbor University Concept also calls for our learning to be lifelong and from the perspective of total commitment to Jesus Christ. What is the relevance of our commitment to Jesus Christ with respect to the study of the liberal arts, to the study of the sciences and to lifelong learning?

The apostle Paul reminds us in I Timothy 4:1-5 that everything in existence is created by God and consequently has tremendous value. In the first chapter of Genesis the word “good” is applied six times to the various parts of creation, and “very good” is used in reference to the complete creation. God declares in the first chapter of Genesis that all creation, each part and the total, is of value to him. Paul simply adds that since the

created world is of great value to God, it should be valued by humans and especially by those who profess the name of Christ.

Biology is the science of living things, whereas chemistry is the science dealing with the composition of substances and the changes that occur when they react with each other. When one studies biology or chemistry, he or she is studying what God has created and given to humans to care for and manage. Both of these fields are dynamic and ever changing. One sees the creativity of God in examining the living things He has created as well as observing changes that occur in substances. God's handiwork is clearly evident to those studying biology and chemistry.

Arthur Holmes, in *The Idea of a Christian College*, suggests three aspects of humanity that are essential to a Christian worldview.⁵ Humans are first rational beings requiring intellectual development. Aristotle declared that all men by nature desire to know. Since we are by nature inquisitive, a Christian liberal arts education should ignite this native inquisitiveness. Our God-given intellectual curiosity should be encouraged to explore the depths of human knowledge. If God also is rational and we attempt to think God's thoughts after him, the rational life has tremendous significance for believers.

Critical Participation

Humans are also historical beings with a past, present and future. A critical knowledge of the past enables us to understand the present and to creatively participate in the future. Since we have been created in the image of God by our creative activity, we image the creativity of God. Christian liberal arts education contributes to the development of persons into free agents who creatively and critically participate in history. As Christians involved in the serious study and application of the liberal arts, our study and application of the liberal arts is a sacred trust given to us by our Creator.

Humans are not only rational and historical beings but are also valued beings. We routinely make value judgments and act on those judgments. A Christian worldview unifies our thinking, as well as provides direction and orientation, so that we look at life as a whole. If a person values truth, he or she practices truthfulness. Persons who value peace and justice express these values in the arts, sciences, politics, the social institutions and in the very history they create. In the terminology of the Spring Arbor University Concept, they are critical participants in the contemporary world.

What is the relevance of the Christian

worldview with respect to scientific endeavors? Does the fact that we have been redeemed through faith in Jesus Christ require that we approach science in a different manner than unbelievers? It is my personal conviction that the answers to these questions can be derived from the conscientious application of the biblical doctrine of stewardship.

Christian stewardship is the response of the believer to God's great love in creating, redeeming and sustaining him or her. It is, simply put, the management of the believer's redeemed life and possessions by the power of the Holy Spirit under the direction of Scripture. The primary purpose of Christian stewardship is to bring glory to God and benefit to humankind.

The basis for Christian stewardship lies in the fact that the universe, and all that is in it, ultimately belongs to God alone. Psalm 24:1 clearly states, "The earth is the Lord's, and the fullness thereof, the world, and those that dwell in it."

Christians, however, are owned by God in a very special way. They are His by redemption as well as by creation. I Corinthians 6:19-20 states:

Do you not know that your body is the temple of the Holy Spirit within you,

which you have from God? You are not your own, you were bought with a price. So glorify God in your body.

Consequently, if we acknowledge Him as Lord of all, we are recognizing His ownership of us, and of all things.

The Word also teaches very clearly that God's Creation has been entrusted to humankind. In Genesis 1:28, God said, "Be fruitful and multiply and fill the earth and subdue it and have dominion over the fish of the sea and the birds of the air and over every living thing that moves upon the earth."

God's Word clearly teaches that Christians are accountable personally for stewardship of what has been entrusted to them. Christ emphasizes this in Luke 19:12-27. And Romans 14:12 is particularly clear at this point: "So each of us shall give account of himself to God." This accountability extends into every area of life including politics, work, community life, family life, recreational and leisure behavior and more. It is not limited to activities generally associated with the church.

As Christians we understand our role the clearest when we see ourselves as caretakers of

what God has allowed to rest in our hands for a short period of time. It is this awareness and acceptance of the role of caretaker (or steward) over God's world that helps form the basis for responsible Christian living in a period of rapid change in science and technology.

Critical participation in the contemporary world is a natural response to the call to Christian stewardship. With so many issues arising in the sciences, how does one approach those that are more crucial to the individual Christian? The following learning sequence has been helpful to the writer:

1. Clearly identify the issues involved.
2. Carefully analyze the issues involved.
3. Establish the role of a Christian worldview in the analysis of the issues.
4. Integrate the analysis with a Christian worldview.

What areas arising from modern science could profitably be addressed from a Christian perspective? The possibilities are enormous. Here are some:

1. Environmental issues: global warming, nuclear wastes, water, soil and air pollution.
2. Energy resource and production issues: natural energy resources, new energy resources, alternate energy sources, efficient uses of energy.
3. Food science and agriculture: food sources for Third World countries, more efficient food crops.
4. Textiles: newer types of polymers.
5. Material science: more and better materials for everyday use, more efficient and useful materials for medical and health use.
6. Medical purposes: should we do everything science can potentially enable us to do, e.g., reproduction processes, euthanasia?

The study of biological and chemical sciences enables one to better understand and appreciate our natural world. In addition, the study of these sciences from a Christian perspective enables one to also understand the Christian's responsibility to manage and care for the natural

world. A helpful scheme for integrating scientific issues and a Christian worldview is presented, along with a number of contemporary scientific issues that will require careful consideration by thoughtful Christians who desire to be critically engaged citizens in our society.



Endnotes


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³ Hill, J. W., & Petrucci, R. H. (1999). *General chemistry: An integrated approach* (pp. 7-9). (2nd ed.) Upper Saddle River, NJ: Prentice Hall.


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⁵ Holmes, *Idea*.



As former director of the Christian Perspective in the Liberal Arts program, David Johnson played a significant role in shaping the student experience at Spring Arbor University. He has had extensive experience as a consultant and evaluator in higher education. He received his doctorate in the area of physical chemistry and has had post-doctoral experience in inorganic chemistry, electrochemistry and solid-state chemistry. After 39 years of service, Johnson recently retired as professor and chair of biology and chemistry at Spring Arbor University.

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Spring Arbor, 1965-2004



*The Concept
and
Environmental
Health*

Chris Newhouse, Ph.D.

**Why Bother? Why environmental stewardship
should be a Christian lifestyle**

*Christians have...a special relationship
with God—a relationship which is
enhanced by our treating all the
things He has made in the same way
as He treats them. – Francis Schaeffer,
Pollution and the Death of Man¹*

“Dr. Newhouse, what do you think is the worst environmental threat?” This question was asked by a student in my Spring Arbor University Environmental Science class after she had heard about many different potential environmental threats. The importance of the question left me without an easy reply. After reviewing critical environmental concerns, including climate change, energy depletion, toxic substances, water availability, biodiversity, topsoil depletion, etc., my response seemed less certain than when she had asked. But considering the question in a more abstract manner brought a conclusion. My answer to her was “human selfishness.” In the immortal words of Pogo, used quite effectively by Walt Kelly for Earth Day 1970, “We have met the enemy and he is us.”² Disappointingly, “us” is especially applicable to many evangelical Christians.

Cal Thomas, in a recent editorial, asks, “Should influencing the White House (about creation stewardship) be the primary or even a major objective for evangelicals, or should their goal be to please God?”³ His question demonstrates an either/or thought process characteristic of too many evangelicals. It also demonstrates a short-sightedness responsible for current environmental

problems and possibly for future environmental catastrophes. Do we have to choose to *either* be environmentally responsible *or* please God? In reframing his question, it becomes possible to see the answer. A wholly Christian life should do both. The thesis of this chapter is that being environmentally responsible may be one of the best ways to serve God.

What are the connections between Creation care and being a whole-life Christian?

I grew up in Northern Michigan on the shore of Lake Huron. While not a Christian except in the general cultural sense of the word, I certainly understood that there was a God. Creation spoke eloquently on that topic. Walking along a deserted beach while watching the waves, seeing a powerful thunderstorm roll in across the lake, listening to the wind chorus in the tops of towering white pines, being entranced by the shimmering waves of color from the aurora borealis—all were mystical, spiritual experiences. But none of those was enough to make me any more serious about looking for the Source of the experiences. And nobody else talked about those spirit-stirring topics.

My college biology major was an attempt

to learn more about that fascinating world I had experienced. I learned a great deal about the mechanisms of nature, but no more about the underlying reasons. Graduate school in biology stacked knowledge even higher, but it provided no superstructure. It didn't add any understanding of *why*? Eventually, regardless of all the academic understanding I had accumulated, I began a search for the spiritual reason for creation. This ultimately led to me becoming a born-again follower of Jesus Christ and understanding the role of God as Creator. This provided the superstructure for my understanding of both life and science. Now that life made sense, it seemed integrated. I had an understanding that complemented the natural with the Divine.

This understanding led to my choosing a Ph.D. research topic investigating Christian involvement in Creation care. How many of my new brothers and sisters shared my passion for Creation? To my disappointment, the answer was "very few." Christians as a group were found to be less environmentally active and less concerned about the environment than the non-Christians surveyed.⁴ While there are reasons to hope this trend is changing, the problems caused by our thoughtless uses of Creation have become potentially more severe.

Why should Christians go beyond the Great Commission (Mat. 28:19) of discipleship and invest themselves in taking care of the Earth?

To those in the church, it is instructive to examine two of the many Biblical rationales for creation care.

First, when God speaks directly to Job in chapters 38-41, He uses Creation to teach about Himself and His power. He seems proud of examples of Creation like the ostrich, the lion, the rain, the eagle, and the whale. For Job, Creation was the language and the message. Especially significant is that each illustration uses the object in its own natural context, not as an example of economic value. We need to recognize what God is proud of and give it special honor. Howard Snyder says about God's message to Job, "We see God in his works, and lift our eyes from nature to nature's God—but then look back again at nature with new eyes, seeing the garden we are to tend."⁵

Second, in Ezekiel 34:18, 19, God gets personal with specific details. "Is it not enough for you to feed on the good pasture? Must you also trample the rest of the pasture with your feet? Is it not enough for you to drink the clear water? Must you also muddy the rest with your feet? Must my flock feed on what you have trampled

and drink what you have muddied with your feet?" Our overuse of resources is noticed and judged by God.

John Wesley's ideas are especially revered in the Free Methodist Church, Spring Arbor University's founding denomination. In his sermon number 56, "God's Approbation of His Works," he wrote, "How small a part of this great work of God is man able to understand [speaking about Creation]! But it is our duty to contemplate what he has wrought and to understand as much of it as we are able."⁶ Given Wesley's practical bent, to understand anything, but not act on that understanding, is unthinkable. Ignorance about the environment is not an option. With education comes increasing understanding, respect, and care for the environment.

Aldo Leopold, one of the earliest American ecologists, but not known for his spiritual dimension, gives us an understanding of how we can use Creation to bring others into God's kingdom. This should help those like Thomas who see the need to evangelize, but do not see the value of environmental stewardship.

In his essay, "Goose Music," Leopold writes:

What value has wildlife from the

standpoint of morals and religion? I heard of a boy once who was brought up an atheist. He changed his mind when he saw that there were a hundred-odd species of warblers, each bedecked like to the rainbow, and each performing yearly sundry thousands of miles of migration about which scientists wrote wisely but did not understand. No "fortuitous concourse of elements" [Leopold's euphemism for evolution] working blindly through any number of millions of years could quite account for why warblers are so beautiful. No mechanistic theory, even bolstered by mutations, has ever quite answered for the colors of the cerulean warbler, or the vespers of the woodthrush, or the swan song, or goose music. I dare say this boy's convictions would be harder to shake than those of many inductive theologians. There are yet many boys to be born who, like [the prophet] Isaiah, "may see, and know, and consider, and understand together, that the hand of the Lord hath done this." But where shall they see, and

know, and consider? In museums?⁷

The Ph.D. dissertation referenced earlier demonstrated that although the Christians who were studied placed high importance on the value of family, obedience to God, and relationship to God, they did not make the connection to environmental care. Leopold's essay indicates that our job is to show that connection.

To relate to the values of most Christians, I learned in my research that we should relate to their children and grandchildren. Howard Snyder, SAU Board of Trustees member and professor at Asbury Seminary, says in his essay *Creation Care and the Mission of God*,

Today as we look back at Christian slaveholders in the eighteenth and nineteenth century and ask, How could they not see that slavery was incompatible with the gospel? What did they think they were doing? Our grandchildren, as they wrestle with ecological issues, will look back on this generation and ask: Why could they not see the Christian responsibility for earth stewardship? Why did they

wait so long? What did they think they were doing when they failed to defend the forests and the seas and to protect earth's endangered species? Did they not understand what they were doing to their own descendants?⁸

Wendell Berry stated the same thought about future generations somewhat differently. "By laying up 'much goods' in the present—and in the process using up such goods as topsoil, fossil fuel, and fossil water—we incur a debt to the future we can not repay. That is, we diminish the future by deeds that we call 'use,' but which the future will call 'theft'."⁹

Consideration of our descendents offers a powerful force, but not the only force. Our actions are being noticed by those outside the Christian community. Connie Barlow is a friend, an environmentalist, a talented and prolific writer, and an atheist. She was influenced by the writings and ideas of Lynn Margulis, who popularized the idea of Gaia—Earth as a mega-organism. This idea has been adopted as part of their rationale by those who worship the Earth. Connie married a former Pentecostal preacher who had changed his beliefs and is now what one writer called, "an

evolutionary evangelist.” They are now traveling and speaking as “apostles of evolution,” speaking on evolutionary spirituality—understanding the object of spiritual awe as evolution itself. Their audiences have included university students, Unitarian Universalist Churches, alternative spiritual communities, Native American groups, and Quaker groups. They describe “a new kind of Lord for a new kind of world.” They regularly communicate with many interested, seeking, and—from our Christian perspective—lost individuals.¹⁰

Regarding God, Barlow states “... there is nothing for me to pray to or for. Instead I go into nature when I am troubled. Yet even there I do not expect to be comforted. I will find solace, ... but solace is not the same as comfort, as being held by a benevolent grace.”¹¹ Though more articulate than many others, she illustrates that there are many people who are seeking spiritual meaning, and who are interested in the environment, but not considering Christianity. We have a personal savior and a reason to live which we can offer them. That they do not consider Christianity should cause us discomfort if not shame.

Through Adam, we have the original creation care mandate, yet we in the Christian

church are allowing others to take the lead in our birthright area. As this writer did prior to Christian conversion, they recognize the spiritual aspects of creation and are looking for ways to express their values in communities they can relate to. The Christian church has an incredible opportunity, but we have far too few examples of why they should consider our life, much less our God. Instead, they are often turning to Deep Ecology, Earth worship, Buddhism, Taoism, and even Wicca.

One article by Barlow illustrates the potential power of Christians acting on our beliefs. In it she refers to evangelical Christians who are acting on their beliefs by becoming involved in creation care. Some evangelicals "are willing to back their preservationist views with the gutsiest of all reasons: because it is my religion. [They say that] we must end the assault on Earth and the diversity of life because ... we have a responsibility to God's creation." She quotes Dr. Calvin DeWitt, the Au Sable Institute's first director: "God made it clear to Noah that he cared so much for the creatures He had created, that he wanted each one of them to be saved from impending extinction ... Concerns about time or money apparently were not raised by Noah. Neither were questions about the significance or worthiness of each species. Noah

did as the Lord commanded him.” Barlow follows with the most significant part, in her opinion. “... DeWitt then recounts the tragedy of today’s human-caused wave of species extinctions, and concludes his essay with an impassioned plea. ‘The great gallery of the Creator is being trashed. The great treasury of the creation is being converted to ash. Where are the Noahs?’” Barlow writes that DeWitt and other Christian environmentalists have special power because of their rationale: “Because it is my religion.” She agrees that this is the ultimate argument for environmental and species protection. “This argument,” she says, “is as American, unpointyheaded, and unprivileged as apple pie. Because it is my religion.”¹²

Those in the world are not only watching us, but in some cases they are even admiring us because of our environmental values and actions. We have the unique, unprecedented opportunity to bring them into fellowship with the living God because of simply living what we know in our minds and believe in our hearts to be true. Care for God’s creation is of critical importance. We who understand this can relate to them initially through our stewardship activities, and then have the credibility to explain to them our values and beliefs. This ready-made disciple-making

opportunity will result from acting on what we already know to be true—that caring for God’s creation is a way to glorify and to serve our Creator.

It seems inescapable that we consider creation care as an essential part of our Christian life. It is mandated by God, as shown by his statements to Adam, to Noah, through Ezekiel, and in Revelation where God speaks of having a time for “destroying those who destroy the Earth”(11:18). As we do what is no less than our responsibility, we can influence others in the church to do likewise. And we can also fulfill the Great Commission by practicing Earthkeeping. We can get the attention, and even the respectful consideration, of non-Christian environmental activists by doing what is right while explaining our powerful rationale: *Because it is our religion.*

Endnotes

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After growing up (without television) in Northern Michigan, shooting lamprey eels, driving through snowdrifts, and sailing a 12-foot boat on Lake Huron, Chris Newhouse moved to Southern Michigan for his education and his ideal career. His academic interests include environmental science, biology of health concerns, and sharing his fascination with the wonders of Creation. In addition to his campus courses, he has (with his wife, Cathey) taught SAU biology classes on the beaches of Florida, in the mountains of Colorado, and in the forests of Northern Michigan.

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The Concept
and
Genetics

Michael Buratovich, Ph.D.

The Concept and Genetics

In 1865 an Augustinian monk named Gregor Mendel published a landmark paper titled *Versuche über Pflanzen Hybriden* (*Experiments in Plant Hybridization*).¹ His humble, understated work described the rules that govern the inheritance of physical traits in plants and animals and birthed the field of genetics, the science of heredity.²

For approximately 34 years, Mendel's work was ignored, untested and unapplied. In 1900, 16 years after his death, Erich von Tschermak, Hugo de Vries and Carl Correns rediscovered and

acknowledged Mendel's fundamental contribution to biology. By the first decade of the 20th century, investigators had invented and were using many of the terms geneticists fluently use today, such as phenotype, homozygote, genotype, heterozygote, gene and genetics. In a sense, the scientific community had actually caught up to Mendel.³

The discovery of the structure of DNA by James Watson, Francis Crick, Maurice Wilkins and Rosalind Franklin in 1953 elucidated the molecule responsible for the storage, transmission and encoding of inherited traits.⁴ This monumental discovery ushered in the molecular biology era, and the secrets and complexities of the gene were plumbed in sometimes agonizing detail. Armed with the ability to manipulate DNA (and therefore heredity), while building upon the foundational ideas of Mendel, it took less than a century for genetics to become a central discipline of biology whose conceptual framework and techniques influenced fields as divergent as immunology, ecology, medicine and agriculture.

With the power of genetic analysis comes a great potential to elucidate the exact nature of genetic diseases, diagnose them even before birth, and even cure them. However, the two-edged sword of genetic technology has also brought forth

sober ethical questions about the manipulation and modification of the human species, and about how far we should go to learn about or cure human disease. To these serious questions no trite or trivial answer will do, but only one born of a keen assessment of the issues and what God says to us in His Word. To this end, the Spring Arbor University Concept is a clear and abiding lamp to illumine these serious questions.

A Community of Learners

In order to continue pushing back the frontiers of human knowledge, genetics is highly dependent upon continuing research. Since the Concept specifies that we are a “community of learners,” we are steadfastly and unashamedly pro-research. Indeed, God is the author of all truth, be it theological, philosophical, historical or scientific. As we continue to learn about nature and ourselves, we are thinking God’s thoughts after Him and discovering His actions after the fact. The director of the Human Genome Project, Francis Collins, a devout Christian, illustrated this pointedly when he stated that viewing newly acquired sequences of the human genome caused him to “experience a feeling of awe at the realization that humanity now knows something only God knew before.”⁵

Likewise, Christian philosopher Arthur Holmes eloquently summarized this sentiment as well:

The theist who believes that God is omniscient thereby affirms that God knows all the truth about everything and knows it perfectly. As creator of all he is the ultimate source of all our knowledge, so that our attempts to know truth are dependent on him and bear tacit witness to him. As his love and justice are the source of the norm for human love and justice, so his knowledge is the source and norm for ours. All truth is God's truth, no matter where it is found.⁶

Totally Committed to Jesus Christ

Does, however, the Concept imply that any and all avenues of research are legitimate or moral? To this the answer must be no. First of all, whenever possible, genetic research should avoid hurting or harming people, who are made in the image of God. Secondly, it should never lessen the witness of Creation by degrading, exploiting or polluting the Earth's resources.

How then should we conduct research? Our

guide is the person of Jesus Christ as revealed to us through His Word and the indwelling Holy Spirit. If a total commitment to Jesus is our perspective for learning, then we should always ask ourselves, “Would Jesus endorse or participate in such research?” Our task is to know the mind of Christ and discern the criteria He might use for such an evaluation.

Scripture affirms that the acquisition of knowledge is a good thing.⁷ However, Scripture also makes it clear that “Knowledge puffs up, but love builds up.”⁸ In other words, even though learning is a good thing, it is not enough. We learn in order to glorify God. Learning is not an aimless process, but one that empowers us to more effectively serve God and those made in His Image.

Critically Participating in the Contemporary World

What would genetics look like under the guidance of the Concept? We have proposed some general implications of the Concept regarding genetics, but any proposed principles do not honor God unless they are undergirded by an overriding concern for people. In the words of the noted Reformed theologian R. C. Sproul, “If we care for

rules without caring for people, we have missed the goal of righteousness.”⁹ With this in mind, let us consider some conclusions drawn from the Concept.

First of all we support those who use animal models to illuminate the functions of genes or the pathology of genetic diseases. Such a use of animals is in keeping with the stewardship of God’s Creation, since such research can greatly alleviate human and animal suffering and enhance God’s creation. However, such research should not cause laboratory animals undue suffering or be wastefully repetitive. A robust, humane concern for animals certainly does not in any way weaken humanity, but ennobles us. If humans are the only creatures made by God in His image (Genesis 1:27), then it dishonors and defaces this quality of image-bearing to torture or wantonly abuse those creatures that God has placed at our mercy.¹⁰ In the same way we would reject research that harms animals when appropriate alternatives are available, since this would be wasteful and immoral. The Concept, therefore, stands against the animal rights movement, which seeks to place human beings and animals on the same moral plane in direct contradiction to the declarations of Scripture that humans are special among God’s

creation because they bear the image of God. However, the Concept also strongly supports the precepts of the animal welfare movement that seek to refine the treatment of animals used in research and reduce their numbers by promoting viable alternatives where such technologies are available.

Secondly, research on humans is necessary to provide cures for human maladies. Jesus said that one of the characteristics of those who would share His inheritance in the world to come was their care for the sick (Matthew 25:36). Part of this care includes drugs, surgical care and anything that modern medical technology has to offer to improve the health of those who need it, including genetic therapies. Such research on patients is permitted only when it does no harm or does predictably less relative harm than the condition that afflicts the patient. For example, Huntington Disease (HD) is an inherited, progressive neurological disorder that usually leads to death approximately twenty years after the onset of symptoms. People with HD usually first show either involuntary movements such as a piano-playing motion of the fingers or facial grimaces, or behavioral changes such as increased irritability, moodiness, or antisocial behavior. Those who develop HD by the time they

are aged 35 often become bedridden within 15 years. A family with a history of HD might choose to volunteer for pedigree analysis experiments, which attempt to map the gene that causes the disease in order to molecularly characterize it. In this case, the procedures require little more than answering a questionnaire and having some blood drawn.

However, should a person showing some of the signs of HD volunteer for a gene therapy trial? Or, even more troubling, should a mother who carries the gene for HD submit to gene therapy for her unborn child who also has been diagnosed with the gene? In the first case, the HD patient should not be forced into treatment with an experimental protocol, since the freedom not to partake of a particular medical service is a basic expression of human free will. Secondly, the nature of the treatment greatly affects the decision. What efficacy has it shown in animal studies? What are the inherent dangers of the treatment? Are the potential dangers greater than those represented by the typical progression of the disease? What relief from the disease can the patient expect from this treatment? If the potential benefits outweigh the risks then it makes sense to participate in the study. In the case of the unborn child, the issues are not

nearly so clear-cut. Childhood cases of HD are rare but prevalent, and delaying treatment in such cases can exacerbate the patient's condition.¹¹ However, in most cases, HD occurs much later and treatment, which has its own set of dangers, might hasten the baby's death. Therefore, the previously addressed questions would also affect the decision whether or not to engage in treating an unborn child with an experimental treatment.

A more basic question we have yet to address is whether modifying the human genome, as in the case of gene therapy, is a legitimate means of treatment. Opponents of gene therapy have tended to equate any tinkering with the genome of human beings with playing God. Some have even likened gene therapy to the Nazi-sponsored eugenics programs used in pre-World War II Germany.¹² Since modern gene therapy is directed against human beings with life-threatening diseases, such a comparison is both wildly unconvincing and insulting to those involved in such therapies. Proponents of gene therapy have pointed out that not only are some genetic diseases curable only with gene therapy, but also that gene therapy offers a true cure and not simply a palliative or symptomatic treatment. And germline gene therapy, whereby new genes

are actually introduced into the reproductive cells of the patient's offspring, can actually prevent the transmission of disease genes, thus obviating the expense and risk of somatic-cell therapy for multiple generations.¹³ Since the goal of gene therapy is to heal sick people, a ministry Jesus gave to His people, we should view gene therapy as another part of our toolkit for healing.

The Concept and Stem Cells

Research on stem cells is intimately associated with genetics, since the goal of some therapeutic studies requires the genetic manipulation of stem cells.¹⁴ What does the Concept recommend concerning treatments with stem cells? This depends entirely on what kind of stem cell is indicated. Stem cells have the ability to divide and replenish other cells for as long as the person or animal is still alive. They can develop into many different cell types in the body and serve as a bodily repair system. When a stem cell divides, its offspring have the potential to either remain as stem cells or become specialized cells.

There are two main types of stem cells: embryonic stem cells and adult stem cells. Adult stem cells are undifferentiated cells found within tissues or organs that can renew themselves; they

differentiate to yield the major specialized cell types of the tissue or organ where they reside. The primary role of adult stem cells in a living organism is to maintain and repair the tissue where they reside.¹⁵ These fascinating cells can be isolated from the body of a patient, grown and differentiated in the laboratory, and used in cell-based therapies. Cell-based therapies use stem cells that have been differentiated into specific cell types to repair damaged or depleted adult cell populations or tissues. Adult stem cells have successfully treated several clinical maladies that range from stroke,¹⁶ cancer,¹⁷ inherited metabolic disorders,¹⁸ anemias,¹⁹ immunodeficiency and autoimmune diseases;²⁰ they have been used to repair failing hearts,²¹ regrow bones and reconstruct aberrant corneas.²² Questions about their efficacy remain, but on the whole, adult stem cells are a clinical dream-come-true. Furthermore, isolation of adult stem cells from patients is not life-threatening and treatments with them involve very few risks. Thus the SAU Concept enthusiastically endorses adult stem cells.

The second category of stem cells is embryonic stem (ES) cells. The main source for these cells is the inner cell mass of human blastocyst-stage embryos, and retrieving these

cells requires the destruction of the developing embryo. ES cells have shown some ability to treat Parkinson's disease and diabetes, and to improve acute, but not chronic, spinal cord damage in several animal model systems.²³ Nevertheless, the ability of ES cells to form tumors upon implantation and the rejection of implanted ES cells by the patient's immune system remains a perennial barrier to the clinical usefulness of these cells.²⁴ Likewise, reports from a Korean researcher who claimed to have produced patient-specific ES cell lines have been proven fraudulent.²⁵

Whatever hopes ES cells might offer and shortcomings they might have, the greatest problem with ES cell research is that the harvesting of these cells ends a developing human life. Stem researchers commonly disregard early human embryos as entities deserving protection. For example, stem cell researcher Norman Frost gives the following reasons why a young embryo is not a human person:

An embryo doesn't look like a person
... Nor does it experience suffering,
which is part of why we care about
what a person is. And even the most
ardent advocates of an embryo-as-

person don't ask that embryos be counted in the census; they don't ask that they be included in the tax code deductions; they don't ask that they be covered by health insurance, and they don't ask that they have funerals.²⁶

These remarks display a mode of thinking called functionalism, which defines persons by their behavior or functioning. It fails to distinguish between what someone does and who someone is. One must be a person in order to function as a person, but one can be a person and not function as one. If we defined people functionally then it would be more permissible to kill a five-year old, who does not have a developed reproductive system or many of her communication and educational skills, than a 27 year old, which is clearly absurd. Even though the early embryo does not have a nervous system that allows it to experience suffering, it has what will grow into a central and peripheral nervous system. Functionalist thinking fails to perceive that one must actually be a human being in order to grow a human nervous system, brain and all.²⁷ In light of these objections it seems undeniable that human embryos are a developing form of human life that deserves respect, and the

hope represented by ES cells does not justify the destruction of human lives.

Conclusion

The Spring Arbor University Concept is a succinct but far-reaching summary of the influence a Christian worldview can have on higher education. Not surprisingly, it can also guide our thinking in specialties that emerge from our fields of inquiry. Genetic research will continue to expand new boundaries and forge new alliances with other sciences. This new work will undoubtedly generate new questions and raise issues unthought-of in prior times. The Concept, however, will continue to fire the spirit and direction of our thinking as we tackle these brave new worlds head on.

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It was there at Gilgal that Joshua piled up the twelve stones taken from the Jordan River. Then Joshua said to the Israelites, "In the future, your children will ask, 'What do these stones mean?' Then you can tell them, 'This is where the Israelites crossed the Jordan on dry ground.' For the Lord your God dried up the river right before your eyes, and kept it dry until you were all across, just as he did at the Red Sea when he dried it up until we had all crossed over. He did this so that all nations of the earth might know the power of the Lord, and that you might fear the Lord your God forever."

— Joshua 4:20-24 (NLT)

The Concept
and
Geology

Frederick D. Trexler, Ph.D.

From antiquity to the present age, large stones have been used to construct memorials that should prompt our children to ask, “What do these stones mean?” In the case of Joshua’s memorial at Gilgal, the 12 stones selected from the middle of the river bed were a reminder that the Lord God had dried up the Jordan at flood stage until all the Israelites had crossed. Using this question as the theme for “Introduction to Earth Science” (geology), students start thinking about the story a stone might tell about its formation and travels until it arrived at the spot where they collected it.

In today's world, monumental rock landmarks exist at various locations such as Ayers Rock in Australia, the Rock of Gibraltar, Table Rock of South Africa, and Percé Rock on Quebec's Gaspé Peninsula. These are immobile, yet the Bible mentions using large stones for a pillow and a pillar (Genesis 28:11), a heap of witness (Genesis 31:45-48), building altars (Exodus 20:25, Deuteronomy 27:5), boundary markers (Deuteronomy 27:17), building stones (1 Kings 7:10, Isaiah 54:11, Luke 21:5), and paving stones (Esther 1:6). Small precious stones were used in the priests' garments (Exodus 39:16), in the king's crown (2 Samuel 12:30), as gifts (1 Kings 10:2), and as building stones in the New Jerusalem (Revelation 21:18-20).

Some of the gem stones mentioned in the Bible are ones we value and use for contemporary jewelry such as rubies, sapphires, emeralds, and amethysts. The beauty of these stones is precisely what draws many thousands of rock hounds to join clubs.

Large stones add beauty to the Spring Arbor University campus. Beginning geology students take a tour of the boulders, placed by Phil Chapman of the maintenance staff, and learn how to identify the variety of igneous, sedimentary,

and metamorphic rocks. These samples of God's creation are a witness that Earth has a history.

Among the various interpretations of the Genesis account of Creation, one Hebrew translation of Genesis 1:1-3 describing Earth's origins states:

In a beginning [God had already created the universe and He had also created the Earth. But the Earth had become unlivable, and darkness was upon the face of the deep, and the Spirit of God was earnestly grieving over the face of the waters.] . . . God said, "Let it begin to be light." And then it began to be light.¹

This translation indicates, within the parenthesis, the background for this "beginning" that God chose to tell us about—Earth had already been created. When God separated the dry land from the seas, the rocks already existed, since the flooded condition occurred relatively late in Earth's history and required a special miracle of God to transform the creation to a condition habitable by people. Students learn early, when studying geology, that the layered structure of

Earth provides evidence that it was once molten. A long cooling time was required to allow liquid water to form oceans. Even now the outer core is still liquid iron and the crust and solid upper mantle, which together comprise the lithospheric plates, “float” on the semi-liquid asthenosphere. This molten outer core is part of God’s provision for life on Earth, since the magnetic field generated provides protection from high-energy charged particles from the sun. In contrast, Mars, with half the diameter of Earth, cooled more rapidly so that it has no liquid core, no protective global magnetic field, and no plate tectonic system.² Earth is unique in the solar system.

In studying Earth, students of geology realize they are part of a **community of learners** spanning centuries. For instance, it took more than 100 years of geological investigation to discover that the Appalachians of eastern North America developed into a “mosaic of folded, thrust, and metamorphosed provinces.”³ The sequence of mountain-building events can be explained with the theory of plate tectonics, proposed in the 1960s after a decade of deep-sea exploration revealed rift zones and mountain ranges in the ocean crust.

Seldom does one person figure out the geology of a whole region, a feat accomplished

by Michigan's first state geologist, Douglass Houghton, when he explored the Lower Peninsula from 1837-1840.⁴ He found that rock outcrops all slope toward the center of a large basin and indicate by fossils and rock types that the area was once covered by a shallow sea. During field trips to the Cooper Street overpass at I-94 in Jackson, Mich., Jude's Quarry in Napoleon, Mich., and the Grand River gorge in Grand Ledge, Mich., Spring Arbor University students examine sandstone strata deposited under that sea.

Through **studying and applying the liberal arts** in conjunction with rock history and analysis, students discover geology is interdisciplinary. Chemistry aids in learning to identify minerals by properties which result from the bonding of atoms. Rocks are mineral composites that can change when subjected to heat, pressure, and hot fluids. The physics of rock folding during metamorphism is revealed in the gneiss boulders at various locations on campus. Geologic mapping uses mathematics, as does calculating stream gradients and erosion rates. Biological and botanical discoveries continue to open new vistas of understanding concerning how the Earth works, changes and evolves.

Scientists, using several mathematical

models, have developed a variety of calculations of the age of Earth based on salt content of the oceans. For example, one model uses the rate of salt addition from rivers balanced by salt deposition, which is evidenced by the extensive Salina Formation underlying Detroit.⁵ Location of deserts and the formation of sand dunes are understood by studying global wind patterns using atmospheric science. Oceanography helps us understand present day coasts and interpret sedimentary rock formations that exhibit ancient wave action and deposition. Civil engineers require a knowledge of planes of weakness in metamorphic schists before they construct dams. Emergency management leaders working in areas near subducting plates or fault zones need to understand the geology of volcanoes and earthquakes. Even poetry, music, sculpture, and painting are influenced by geology as mountains, rivers, and rocks inspire creativity.

Considering the vast field of geology with **Jesus Christ as the perspective for learning**, students learn there is no contradiction between God's Word and God's world when both are viewed correctly. In many Old Testament Scriptures God appeals to our knowledge of geology to show that He is the only God and there is no other. "For this is what the LORD says—he who created the

heavens, he is God; he who fashioned and made the Earth, ... 'I am the LORD, and there is no other'" (Isaiah 45:18 NIV). The language used in Job 38:4-7 indicates that the Earth was carefully designed: "Where were you when I laid the earth's foundation? ... Who marked off its dimensions? ... Who stretched a measuring line across it? On what were its footings set, or who laid its cornerstone ... ?"

John 1:3 (NIV) affirms that God, with Jesus, created the world: "Through him all things were made; without him nothing was made that has been made." He created the universe, Earth, and people, but the Bible does not spell out specifically when the separate parts of creation were formed. Some Christian scientists take the seven day account of creation as found in Genesis 1 to mean seven, literal 24-hour days. Other Christian scientists interpret the account as being more poetic, and believe the seven "days" to be more accurately seven "eons," or periods of time. Either way, in Genesis 1:1 we are assured that matter, energy, space, and time have not always existed and did have a beginning. Physicists have come to the same conclusion since the discovery of the cosmic microwave background radiation by Penzias and Wilson in 1965.⁶

The Bible is silent about the geologic time scale that students encounter with its eras, periods, and epochs. Except for the Holocene epoch which includes the last 10,000 years, the other epochs occurred before the “beginning” of Genesis 1. Hugh Paine’s “Gap-Flood theory”⁷ approaches geology from the perspective that the earth is old, as revealed by geologic research, but Adam’s descendants are young on it. Paine’s theory is that the Genesis 1 flood is the gap between the old life forms revealed in the fossil record of sedimentary rocks and the recent life forms existing today.

Geological research using sedimentary strata indicates a very old Earth,⁸ and radiometric dating of igneous rocks and meteorites has given consistent results for the age of Earth between 4.5 and 4.6 billion years.⁹ There is a precedent for using scientific information to help interpret Scripture with changes in the solar system theory. Craig Rusbult¹⁰ points out that in 1500 both the theology and the science of an Earth-centered system were in harmony, but in error. He goes on to say that in 1620 some scientists and theologians agreed with Galileo’s interpretation of a Sun-centered solar system. Galileo would later write that Scripture “teaches us how to go to heaven, not how the heavens go.” Others opposed him because

the Bible says the Sun rises and sets and the Earth cannot be moved (Ecclesiastes 1:5, Psalm 19:6, Psalm 93:1). In 1700, after Kepler and Newton had shown the mathematical and physical basis for the Sun-centered theory, theologians agreed with science and realized that the Scriptures used a reference frame fixed on the surface of a rotating Earth, a concept previously introduced by Copernicus. In a similar way geology students consider scientific explanations for rock units with features that mark them as hundreds of thousands to millions of years old.

Moving from past to future developments, the study of geology helps students prepare for **critical participation in the contemporary world**. When they learn how to closely examine rocks for evidence of formation, and compare and combine it with evidence contributed by the biological and genetic branches of science, they are acquiring the skills necessary to analyze the origins of issues and physical developments on Earth today. Students learn how to identify geological settings for landslide hazards, earthquakes, and explosive volcanic eruptions. Knowledge of the conditions that cause tsunamis can help them in disaster planning and relief efforts. As one student has said, "With a knowledge of geology, you can


help people.”

The science of geology, so fundamental to the universe, can also strengthen contemporary faith in God the Creator because of the patterns of His design at work in the rocks. He set processes like plate tectonics in motion, which have resulted in the creation of continents that rise above the ocean. Colliding continents have pushed up mountains like the Himalayas and the Appalachians. Volcanism from subducting oceanic plates has created great mountain chains like the Andes and the Cascades. Erosion of the mountains has filled ocean basins with sediments, forming the sedimentary rocks. Weathering of rocks has formed soil for growing food.

During most of Earth’s history God has formed the land through processes that can be understood by studying geology. As Spring Arbor geology students travel the world, it is my hope that they will know “what these stones mean (Joshua 4:21),” recognize the rocks and the geologic movements that formed them, and give praise to Jesus, the living Stone (I Peter 2:4 NIV), our Lord and Creator.


Endnotes

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The love of God, as it is the sovereign remedy of all miseries, so in particular it effectually prevents all the bodily disorders the passions introduce, by keeping the passions themselves within due bounds. And by the unspeakable joy and perfect calm, serenity, and tranquility it gives the mind, it becomes the most powerful of all the means of health and long life.

—John Wesley
London
June 11, 1747

The Concept
and
Health and Fitness

Craig D. Hayward, Ed.D.

Spring Arbor University is identified by its Concept. Out of the Concept a curriculum has evolved by which graduates of the University can also be uniquely identified. This is confirmed by the statement from the *Undergraduate Catalog 2004-2006*, "The faculty has defined the ideal Spring Arbor University graduate as one who embodies the Spring Arbor University Concept."¹ One of those unique identifiers relates to the realm of health and physical fitness, for the catalog indicates the ideal Spring Arbor University graduate "has learned the value of physical fitness as part of total fitness, and accepts personal

responsibility for developing and maintaining optimal health and fitness.”² Why is this statement included in the catalog list of characteristics that define the ideal Spring Arbor University graduate? How do the realms of health and physical fitness connect with the traditional liberal arts and the Spring Arbor University Concept? What does it mean to have Jesus Christ as the perspective for learning when it comes to issues related to health and fitness?

Community of Learners

As a student at Spring Arbor College in the late 1960s, I remember being required to take a physical education course as part of my general education curriculum. To my surprise it was not a traditional physical education course. Rather we were taught in a classroom instead of a gymnasium, with a focus on issues related to health and fitness. Though that course and the one that has since evolved—known as “Personal Fitness”—are not of the traditional liberal arts, a connection to the first plank of the Spring Arbor University Concept exists. As former Spring Arbor University President Gayle Beebe expressed in his chapter of the book *A Concept to Keep*:

Under the tutelage of Jesus Christ and the teaching of Scripture, God defines each one of us by the broader network of social relationships. We exist not simply as individuals, but as members of families, citizens of towns, and active members of communities.³

Beebe continued by elaborating on the idea that community living means sharing an understanding to provide context for human life and seeing the world around us.

In the realms of health and physical fitness there is a tremendous need for framing context in society. Choices we make in our daily living are not done in isolation. Similarly, the price we pay for these decisions, in both human suffering and dollars and cents, are not felt in isolation either. The price in human suffering caused by heart attacks, strokes, and cancer in America is immeasurable. However, we all bear the brunt of the measurable and rapidly escalating health-care costs that are the result of poor lifestyle choices. In the 50 years from 1950 to 2000, health-care expenditures rose from \$12 billion to \$1.3 trillion, the latter representing 13.1 percent of the gross national product. Yearly health-care costs per

capita are expected to reach about \$9,000 per year by 2010 and will represent around 16 percent of the GNP.⁴

The long-term prognosis is not good either. America is in the midst of an obesity epidemic with our youth, which is beginning to demonstrate itself with an unprecedented escalation of diabetes in adolescent children. A recent article notes:

Unless current trends reverse, it seems likely that one third of all children born today—and even higher proportions of Hispanic and Black children—will develop type 2 diabetes during their lifetime and can expect shorten life expectancy because of it.⁵

Not only will life-spans be shortened, but the medical costs of this epidemic will exponentially add to the current burden of health-care costs.

The personal fitness class offered in our general education curriculum provides an opportunity to address such health issues head-on and to make our students aware of the choices they can make to prevent such problems from occurring with them and their families now, as well as after they leave Spring Arbor University. Thus, this

course helps provide the shared understanding and context mentioned by Beebe through helping a “community of learners” become aware of and, perhaps, begin to deal with real health and fitness issues that will affect our society both physically (individually) and economically (collectively) for years to come.

Study of the Liberal Arts

Given that health and fitness is not part of the classic study of the liberal arts, a logical question that results is: How did Spring Arbor University arrive at the point of including health and fitness as a required component of its curriculum? To understand the rationale behind this approach one needs to understand philosophical perspectives that led to a movement during the 19th century called “muscular Christianity.” According to Mathison:

The term “muscular Christianity” probably originated in 1857 in an English book review. Charles Kingsley and Thomas Hughes were authors of popular-level novels that incorporated their ideas about how sport and athletic participation in the British public

schools could be a means of inculcating morals and ethics.⁶

Kingsley and Hughes were seen as giving a Christian perspective to the Greek ideal of a sound mind in a sound body. The label “muscular Christianity” implied a mix of sports and values, a concept that gained momentum. Campbell affirms this perspective, indicating that in both Britain and the United States the first half of the 19th century saw a movement away from Puritanism toward positive attitudes about physical activity.⁷ After tracing the roots of this movement back to the 19th century and through its various iterations, Mathison leaped ahead 100 years to the mid-1900s, outlining how modern Christian organizations, such as Sports Ambassadors, Fellowship of Christian Athletes, and Athletes in Action, had as their foundations the same underpinnings as the muscular Christianity movement of the mid-1800s. Mathison concluded his work by pointing to both the strengths and weaknesses of the movement. Mathison’s focus was on the role of sport and athletics in both society in general and in the church. Taking Campbell’s words relative to the church’s willingness to embrace more positive attitudes about physical activity in general it is

possible to see how the concept of the muscular Christian found its way into mid-20th century acceptance.

Concurrently, concerns expressed by the military about the poor physical condition of World War II and Korean War draftees; President Eisenhower's establishment of the President's Council on Youth Fitness in July, 1956; and President Kennedy's post-election article in *Sports Illustrated* on "The Soft American," led to the idea that the physical fitness of Americans was the business of the federal government.⁸ From this emphasis educators picked up on the need for better fitness habits. Presumably, the muscular Christianity movement had made it acceptable for Christians to embrace the idea, as it fit with the concept of educating the whole person: mind, spirit, and body. Thus, Spring Arbor University added a required physical fitness course, becoming, not part of the "study of the liberal arts" as such, but a necessary general education requirement as it remains today.

Total Commitment to Jesus Christ as a Perspective for Learning

A number of years ago I was asked to do a presentation for a men's church group on faith and

fitness. After the session one individual approached me and told me he appreciated my view, but felt I had overemphasized the physical to the detriment of our real Christian responsibility of spiritual maturity and growth. I did not try to argue my point, for I understood this individual subscribed to a “dichotomized view of life” spoken of by Williams in his discourse on “The Incarnation of the Flesh.”⁹ As stated by Williams, many in the evangelical community “denigrate the body and its propensity to deterioration to the secular realm while honoring the mind and soul as the eternal essence of the person.”¹⁰ According to Williams this is consistent with the Greek dualism and the tension that exists between the body being evil and the spirit good. But what about the incarnate Christ?

My personal perspective on this issue has been shaped by thought and consideration about the way Christ lived during his 35 years on earth. It has led me to think about questions such as, how would Christ live if he were on this earth today? Would he workout with a daily walk? Would he be concerned about his dietary regiment? What would be his view on how stress should be managed in today’s society? We may get a glimpse at answers to some of these questions by noticing how he

managed his daily life and experiences.

By today's standards Jesus was probably a physically fit individual. Consider his 40-days in the wilderness (Mathew 4:1-11). He fasted for those 40 days while staying mentally and spiritually focused on denying Satan. In fact, Satan's first temptation was to prey on Jesus' physically needy state. "After forty days and forty nights, he was hungry" (Mathew 4:2). He would have been in a severely weakened condition that would have only been exacerbated had he not been physically fit and healthy enough to survive. To not consider the weakened state his body would have been experiencing would seem to underestimate the incarnation of a loving God who came to earth in human form to experience what we experience. Remember, Satan offered Christ everything, yet he stood fast (Matthew 4:4), despite the debilitation he must have felt from every aspect of his being: spiritually, mentally, and, yes, even physically.

Another perspective I have come to appreciate is how Christ seemed to manage the physical rigors of his daily routine. Perhaps his profession as a carpenter (Mark 6:3) helped to prepare him for rigors of his final years of ministry. During that era the job of working with wood would have been very physically demanding, requiring significant

muscular strength and endurance to accomplish the task at hand. Moving forward in his life, consider the rigor of his daily schedule and travel during his earthy ministry. Reading through Scripture it is apparent that he traveled a great deal, and most of his travel had to have been by foot. He walked. Thus, he apparently had a substantially high fitness level in order to accomplish his ministry.

Finally, think of his suffering leading up to and including his crucifixion on the cross. A less fit individual could not possibly have endured the experience as long as he did. For him to have carried his cross after being tortured and dehydrated speaks of an exceptionally strong and physically capable individual.

As Williams ends his essay he offers the following premise, "The incarnation helps us to accept our physical dimension and life as a physical being as significant."¹¹ Concluding, "We should not denigrate the physical as second class or unimportant but should care for it as we care for the intellectual, social, and spiritual aspects of our being."¹² If our goal on this earth is to become more like Christ, perhaps we are overlooking a significant component of the experience if we ignore the example of "Jesus Christ as the perspective for learning" about the role of health

and fitness in our Christian journey.

Critical Participation in the Contemporary World

The preface of the book *A Concept to Keep* stated that a primary purpose of the monograph series on the Spring Arbor University Concept was “an opportunity to place the Concept within the broader context of our Wesleyan heritage.”¹³ The book introduces the reader to John Wesley’s theological understanding of life known as the “Wesleyan Quadrilateral.” This Wesleyan theology is the foundation upon which the Free Methodist Church and Spring Arbor University is based. Unknown to most in the Wesleyan community, John Wesley also had a unique perspective on the human body as compared to others of his time, making him a critical participant in his contemporary world. Wesley was a self-trained physician and wrote a work titled, *Primitive Physic or an Easy and Natural Method of Curing Most Diseases*; originally published in 1747 and reprinted many times thereafter. In the preface to the 1960 text, A. Wesley Hill gave credit to Wesley’s *Primitive Physic* as playing a vital part in the reforming work Wesley did during the 18th century. Wesley was well qualified for this work.

In fact, according to Hill, “There were few better qualified.”¹⁴

It was not uncommon for physicians of the time to be individuals of ordinary education. Wesley distrusted the physicians and hospitals, so he took matters into his own hands whenever opportunity presented. Thus, Wesley, being an ardent reader of the medical literature, found himself in circumstances where he often practiced what he read, which eventually led to him becoming an expert in both diagnosis and treatment.

Even though much of what Wesley and other physicians of the time practiced would “have little or no therapeutic value today” his writings do cast “an important light on eighteenth-century medicine and the part Wesley played in it.”¹⁵ Significant portions of what Wesley wrote eerily sounds as if it could have been written today. The preface of the original text gives a unique glimpse of Wesley’s perspective; ending with 31 rules on retaining health. In today’s terms those rules covered health issues such as the environment; airborne disease, hygiene, sanitation, diet; rest and sleep, exercise, emotions and stress. For example, he stated about exercise, “A due degree of *exercise* is indispensably necessary to health and a long

life.” Specifically, he said, “Walking is the best exercise for those who are able to bear it.” And, “We may strengthen any weak part of the body by constant exercise.” Wesley pointed to the merits of a properly hydrated body and advocated, “Water is the wholesomest of all drinks; quickens the appetite, and strengthens the digestion most.”¹⁶ Throughout his text numerous other “rules” are given, many of which bear learning and application even today.

Not only was Wesley a man of God whose spiritual ministry had an immeasurable effect on the world, he also stands as an example of one who was a critical participant in the contemporary affairs of the world around him in the realm of health and fitness. It leads one to wonder: what would Wesley have to say if he were living in our 21st century American society—a society that has the most remarkable medical system in the history of mankind, and a society according to current projections that can expect to see life expectancy decline for the first time in two centuries.¹⁷ Given the current health trends, for the first time in the history of America the generation of today’s young people will not outlive their parents when it comes to life expectancy. The rise in obesity and diabetes, with associated health complications,

does not bode well for these young people.¹⁸ “If left unchecked, the rising prevalence of obesity that has already occurred in the past 30 years is expected to lead to an elevated risk of a range of fatal and nonfatal conditions for these cohorts as they age.”¹⁹

Just as in Wesley’s time and with his involvement in the affairs of his contemporary world, it is evident there is much work to be done today when it comes to our citizens’ health and fitness. The challenge for individuals involved in the profession is daunting and the issues impact all of society. John Wesley was a change-maker. We can learn from his example. Events of his time allowed him to touch the lives of those around him both physically and spiritually. Of course, Wesley had an example around which he patterned his life. He modeled what he saw in Scripture. Christ generally ministered to the physical needs of the people he came in contact with as a means to meet their spiritual needs. Likewise, issues of health and fitness are not just secular in nature. Rather when we, as “critical participants in the contemporary world,” work toward wellness of the whole person, we can stand firmly on a Scriptural perspective, the example of Christ, and our Wesleyan heritage, as well as on the best modern research and experience available.

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M.A., University of Maryland

Ed.D., State University of New York at Buffalo

Spring Arbor, 1991-



*I bind unto myself today
the power of God to hold and lead,
his eye to watch, his might to stay,
his ear to hearken to my need;
the wisdom of my God to teach,
his hand to guide, his shield to ward;
the word of God to give me speech,
his heavenly host to be my guard.*

*Christ be with me, Christ within me,
Christ behind me, Christ before me,
Christ beside me, Christ to win me,
Christ to comfort and restore me,
Christ beneath me, Christ above me,
Christ in quiet, Christ in danger,
Christ in hearts of all that love me,
Christ in mouth of friend and stranger.*

*I bind unto myself the Name,
the strong Name of the Trinity,
by invocation of the same,
the Three in One, and One in Three.
Of whom all nature hath creation,
eternal Father; Spirit, Word:
praise to the Lord of my salvation,
salvation is of Christ the Lord.*

—Patrick of Ireland

The Concept
and
Physics and
Astronomy

Frederick D. Trexler, Ph.D.

The image of warfare between Christianity and science at universities ignores the roots of modern science. In the development of classical physics, it was more often a debate among Christians over the best way to understand God's role in the world. Christian higher education in physics, earth science and astronomy should provide the opportunity for young people to expand their knowledge base and ask hard questions about their purpose in life. As a community of learners

studying and applying the liberal arts, faculty need to provide the kind of guidance and support that leads them to put their trust in God as they are developing their own set of values. The Christian university will differ from the secular university by offering a balanced presentation of the issues, integrating faith and learning.

Scientific thinking, with its emphasis on experiment and mathematical formulation, is not a natural result of a civilization coming of age. It was invented in Christianized Western Europe during the Middle Ages.¹ Science historians have discovered that a Christian worldview provided an intellectual environment that led to the development of the scientific method. While other cultures, such as the people of Chinese and Arabic descent, had developed technology, the source for scientific thinking was a set of assumptions about the world that had been growing for centuries in Christianized Europe. The “lawfulness of nature” came from the Christian belief that God created the world. Hinduism teaches that material objects of this world are illusions. Genesis 1 teaches that earth, dry land, seas, sun, moon, stars, animals, and humans are all created with a real existence. Since God pronounced them good, nature is of great value and worthy of study. As the late S. Hugh

Paine, scientist and Bible scholar, has written, "God has chosen to reveal himself through His works. Rather than being an intrusion, exploration and study of God's works is man's obligation. The reality of this truth cannot be urged too strongly!"²

Physics, which is an empirical science, could not have developed among a people who believed that the material world was evil (Greeks) or inhabited by spirits (pantheists or animists) who would cause capricious results. In contrast, our Creator God reveals himself as trustworthy and dependable, so that his creation is likewise dependable (Psalm 111:7-8). Physics experiments done one day may be repeated the next with the same result.

A number of great physicists were Christians. Men like Kepler (1571-1630), Newton (1642-1727), and Pascal (1623-1662) pursued their work in science for the glory of God and the benefit of humankind. Nicolaus Copernicus (1473-1543) searched for a better cosmology than Aristotle and Ptolemy. He knew the universe was "wrought for us by a supremely good and orderly creator." His sun-centered solar system would "uphold the regularity, uniformity, and symmetry that befitteth the work of God."³

Johannes Kepler felt called by God to work as an astronomer. His scientific notebook often contained praises and prayers to God like this spontaneous expression: "I give you thanks, Creator and God, that you have given me this joy in thy creation, and I rejoice in the works of your hands. See I have now completed the work to which I was called. In it I have used all the talents you have lent to my spirit."⁴

Jesus Christ as the Perspective

It is in the spirit of these great Christians in science that faculty try to show students how the laws of physics are a testimony of the faithfulness of God. They look for ways to relate physics to spiritual life. The late Donald Gray Barnhouse, Philadelphia pastor and evangelical Christian scholar, said that we should look for sermons in the snow. Seeing the first snow of the winter always reminds us of God's promise that though our sins are red, they can be made as white as snow (Isaiah 1:8). There is cleansing in the blood of Jesus; we can be made new and clean (1 John 1:7).

Another example of how we have been challenged to see sermons in physics and earth science relates to Einstein's theory of special relativity, which says that space and time are

relative so there is no absolute reference frame. Our culture has adopted the theory so well that it has made morally relative. However, we need to take this theory as a whole. God has not left himself without a witness, for there is an “absolute” in the theory of relativity—the speed of light. Every observer will measure the speed of light in a vacuum as 299,792,458 m/s. In morality there is a parallel absolute base, and that is the standard of God’s spoken commands in the Bible. Through them our Creator provides an absolute standard for living, teaching us to live holy lives in a crooked and perverse generation (2 Peter 3:11).

A paradigm of our lifetime struggles is found in our classroom study of relativity, using space-time diagrams to plot the path of a particle from the past into the future. The world-line shows us how the particle moves in time and in space. Seeing the whole line on our diagram helps us to understand how God can look at our lives and see the end from the beginning. He views the world-line of our lives, looking forward and backward in time. Does this not give more meaning to the name that He revealed to Moses? He is the “I AM” (Exodus 3:14) and the God who is “from everlasting to everlasting” (Psalm 90:2). We can trust our lives to God who sees the future.

Serving as a counterpart to the scientific model of God's dependability is the way electrons, by their very nature, can represent the dual nature of Jesus as the God-Man (Luke 1:35). In cathode rays and in scattering experiments, the electron behaves as a charged particle with mass and momentum. However, electron beams can be diffracted by graphite crystals and metal foils, showing the wave nature of those "particles." We accept the dual nature of the electron. Should we find it difficult to accept both the divine and the human natures of Jesus, the One who made all electrons?

God's creation further reveals through the study of astronomy and geology that the heavy elements making up the rocks and our bodies must have come from the dust of exploded stars. Evidence comes from the observation that nuclear fusion in young stars only produces helium from hydrogen. The small amounts of light elements from lithium through carbon could not account for 92 varieties of elements identified on Earth. One model for formation of elements necessary for life is nuclear fusion in a supernova explosion at the end of life for an old massive star with an iron core.⁵ Out of the death of a star came the elements for the birth of a solar system and life on Earth.

Death and resurrection in astronomy reminds us that from the death of Jesus on the cross came our life as Christians now and in eternity (Gal. 2:20).

The cited examples are some of the “sermons” from physics and astronomy that faculty share with students to inspire them to look for God’s imprint in the science laboratory of the created world. Commitment to Jesus Christ as the perspective for learning enables us to appreciate the mechanisms (physics) God used to make intelligent life possible on Earth. A Christian worldview thus developed gives us insights necessary to help solve critical problems of the contemporary world.

Critical Participation

Critical participation in the world of physics for faculty has involved membership in the American Physical Society (APS), presenting new teaching ideas at the American Association of Physics Teachers conference, taking students twice a year to professional meetings of the New York and Ohio Sections of the APS, and serving for several years on the APS executive committee. Students who prepare to teach secondary school physics are scientifically-trained Christians, who provide an answer to the critical need for teachers.

Further, as students training to be future engineers learn to apply physics and mathematics to create new devices and processes, they help to bring Christian integrity and problem-solving skills to business and industry for the benefit of society.

Science and Community

In the same way, the Christian university must function as a community trusting one another to complete tasks with integrity. Laboratory experiences require teamwork to make measurements. A “community of learners” experiment involves measuring the wavelength of eight colors of light in the helium spectrum. One student looks through a diffraction grating and guides another to mark the image position on paper fastened to the blackboard. The class takes turns sighting and marking until all the lines are recorded. A tape measure is used to find distances from the central helium tube, and these are converted to angles and then to wavelengths using mathematical formulas. Finally, an energy level diagram for helium is constructed. The correct result depends on everyone cooperating to make honest measurements and calculations.

Direct measurement using our own senses is one “way of knowing” in science. In physics

we use meter sticks, calipers, stop watches, and optical diffraction gratings. In astronomy we use our eyes and two telescopes. Students say, "I like how the labs are combined with class time. It makes the class lectures more interesting and easier to follow when we know we will have some time to spend outside." In geology we use the rock hammer and hand lens. More sophisticated experiments require indirect measurements using instruments that give us data that we have to interpret. For example, voltmeters, oscilloscopes, orbiting gamma-ray telescopes, and seismographs require mathematical models and theories to make sense of the data. We find ourselves having to trust the experimentation and interpretation of other scientists, for we cannot repeat all their work for ourselves.

One particular physics discovery that reinforced a Christian worldview was the detection of cosmic microwave background radiation by Arno Penzias and Robert Wilson at Bell Labs in 1965. Their measurements agreed with theoretical predictions of the remnants of energy from the creation of the universe. Recent measurements by astronomers have confirmed and refined the theory that the universe had a beginning.⁶ From Colossians 1:16, we understand that all things

were created by Jesus Christ. Since the Bible does not tell us when the beginning of the universe was, we are free to trust these findings.

As we apply the Spring Arbor University Concept to physics, earth science and astronomy as part of the liberal arts, with Jesus Christ as the perspective for our learning, we need not fear that our faith will be shaken by the findings of honest science. The world that God has made will not contradict the Word that he has spoken. At Spring Arbor University, classroom study helps us understand and interpret both science and the Bible in a new light, an intellectual pursuit that will equip us as Christians for lifelong critical participation in the contemporary world.

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Part Two:

Social Sciences

There is no such thing as a neutral educational process, especially not in the social sciences. It either functions to teach conformity to or freedom from the world. As we seek to integrate the social sciences and the Christian worldview, to better grasp the sum and substance of the human social experience, we must remind ourselves of the need to recommit daily to God's truth.

—Antonio A. Chiareli

The Concept
and
Social Sciences

Terry Darling, Ed.D.

To explain how integration takes place in the social sciences is a daunting task for several reasons. First, different social scientists have differing ideas about what aspects of our Christian faith we should be integrating. Are we integrating our disciplines with the Bible? With Christian theology? With specific church doctrine? With our own faith experience?

An additional complication is that the area of “social science” is so broad and encompassing. It is defined as the branch of science that studies society and the relationships of individuals within a society that results in a huge conglomerate

of disciplines. At Spring Arbor University this includes the areas of psychology, sociology, social work, political science and history. Scholars in this area often have disagreements over which topics to study and the methods used to study them. These differences of opinion occur not only *among* disciplines that are covered under the umbrella of “social sciences” but also often even *within* disciplines.

Because of these barriers, speaking for all social scientists is impossible. Therefore, what follows are examples of how some different departments under the social science umbrella attempt to integrate the Spring Arbor University Concept within their disciplines.

Community of Learners

Developing and nurturing a community of learners should be the ideal of any college or university department. It is important that we make the classroom a hospitable environment where students are invited in to learn.¹ Bringing together those with the common goals of learning more about our world—and our place in—is an ideal that all who teach in the social sciences at the University affirm.

Talking about and making connections

with other disciplines helps to nurture this sense of community. For example, the course in physiological psychology is team-taught by a member of the psychology department and a member of the biology department because of the clear overlap between these two fields. The course in religion and the behavioral sciences is team-taught by a sociologist and psychologist as they attempt to study religion through the lenses of sociology and psychology. This course is also cross-listed in psychology, sociology and religion, so students from all of these academic areas are in the class. Our course in marriage and family is team-taught by a social worker and a communications professor with a background in marriage counseling. These team-teaching efforts help students to see that even though we often make arbitrary dividing lines between various academic subjects, God's world is not divided so neatly.

Another way we nurture this learning community is to conduct collaborative research with other departments. For example, recently three researchers from Spring Arbor University went to the world's largest twins convention. One member of this research team was from the psychology department, one was from the

communication department and one was from the religion department. The three colleagues asked different research questions and used different research methods (both quantitative and qualitative) to try to learn more about the differences in religious development of identical versus fraternal twins, but all worked together to better understand one aspect of God's creation.

Lifelong Study of the Liberal Arts

In a world of rapid change and an explosion of information, it simplifies learning to compartmentalize it. To help students fight this tendency and see the importance of lifelong learning, we try to model that behavior as professors through our continuing study and integrative research. Our passion for lifelong learning—both within our discipline and outside of it—can help to light a flame within our students. Every year we have students in the social sciences conduct honors research in close collaboration with a senior scholar in one of our departments. These collaborative efforts enable students to learn some of the skills of research, and many times they discover that answering one research question results in dozens of other questions that should also be asked, allowing them to embark

on a lifelong task.

Even more fundamental to developing lifelong learners are our efforts to relate the social science content to students' individual lives. Helping students to see that the information they are being asked to learn is not merely an unrelated jumble of facts and figures is one of our challenges. In the fields of psychology and sociology, many courses are easily related to student experiences. For example, in our abnormal psychology course students write a paper as if they have a family member who has been diagnosed with a particular mental disorder and has been prescribed a particular treatment. The student's job is to research as much as possible about that particular disorder, determine the best treatment for it and make a recommendation. This type of application assignment closely mirrors what some (or even many) of our students will do during their lives as they interact with people who may struggle with various psychological conditions. Making a real-world application helps students realize their classroom study is not simply an exercise in abstraction.

Relating the social sciences to "lifelong involvement in the study and application of the liberal arts" also involves helping students

to have a balanced perspective regarding their academic discipline. There is a certain degree of arrogance and self-importance that can creep into scholarship in the social sciences that results in a phenomenon called “nothing-buttery.”² For example, a secularized psychological view of prayer may involve seeing prayer as *nothing but* an effort to meet one’s psychological need for feelings of safety and security in a frightening world. A secularized sociological perspective of prayer might explain the purpose of public prayer to be a powerful method of group control.

This reductionistic approach sometimes taken by secular scholars may lead some to conclude that the social sciences have no usefulness for Christians. The attitude that we are trying to cultivate in our students, however, is that the social sciences offer a limited but useful perspective in helping us to understand human behavior.³ It is reckless to reduce religious behavior to psychological or sociological principles, but also it is dangerous to assume that these disciplines have no value in helping us understand the complexity of human behavior.

One useful model that we give to our students to help them understand the various disciplines and their ability to explain various phenomena is the

“levels of explanation” perspective.⁴ Physics and chemistry, for example, look at some of the most basic of nature’s building blocks, while theology and philosophy enjoin a far more integrative level of analysis. Social science areas like sociology, psychology and political science inhabit levels that are in between the extremes of physics and theology.

Positing explanations at one level does not negate levels of explanation at another. For example, using the aforementioned example of prayer, from a psychological perspective it is quite likely that prayer does help to reduce an individual’s anxiety. It is also likely that public forms of prayer can serve as a form of group control. Identifying these factors, however, should never be the end of the story. The supernatural dimension of whether, during prayer, we are actually communing with our Creator cannot be evaluated using the methods of inquiry used by social scientists. Social scientists who conclude that the only reason we pray is to serve some psychological or sociological function are falling into the “nothing buttery” trap.

Another useful analogy is of a lens. As people age, they deal with some peculiar changes in their visual acuity. They may have several

different pairs of glasses for different functions (e.g., driving, reading). Looking through one particular lens is useful and appropriate for certain tasks. That lens can be spectacularly unhelpful for different kinds of tasks. The way in which this relates to the social sciences is important to note. Psychologists, for example, can often identify the psychological functions that are met through religious behavior with the research tools available to them. Their “lens” may work quite well for identifying these phenomena. The lens is useless, however, for answering questions like: Does God exist and can we communicate with God?⁵ Helping students to recognize how these various disciplines differ in scope provides students with a framework for organizing their learning as they seriously involve themselves in the study of the liberal arts.

Integration involves seeing that the various social science areas each only offer one “lens” or level of analysis. The goals of a Christian social scientist should be to identify truth. This will involve recognizing how our “lens” affects our “science,” and knowing that even though we may use scientific tools of inquiry and analysis, we are still a “soft” science. We cannot isolate and measure variables with the same precision

as, say, a chemist when we are studying most aspects of human behavior. This recognition of our “softness” helps us to maintain humility as social scientists.

Total Commitment to Jesus Christ

The various religious activities that occur on our campus provide numerous opportunities for students to grow in love for God and others, the two greatest commandments. One way we, in the social sciences, attempt to assist in this process is to help students learn how to love Jesus with their minds. Because all truth is God’s truth, our students need not be afraid to learn more about God’s creation through the social sciences. In the sociology department we teach a course titled “Spirituality, Faith and Justice,” in which students juxtapose biblical teaching with issues of social injustice. By relating Jesus’ principles of justice, righteousness and love to the wide array of social issues confronting humanity around the world, we help students see how their faith interacts with their topics of study. Several years ago the psychology department created a course called “Integration of Psychology and Christianity.” This course helps students develop their own sense of how to fully join their faith with their

study of human behavior and their profession. In this course students observe two professors who may at times come to different conclusions as to how to integrate their faith with their discipline, yet they both attempt to do so in a God-honoring way. This helps to reinforce the point that there is not always just one way to faithfully integrate God's Word with God's world.

As part of this course students are required to develop a theoretical framework for their integration efforts. We discuss how to use "Jesus Christ as the perspective for learning" and how this can be translated into actual integration efforts. One way we attempt to accomplish this is to actually study some of the different ways in which Jesus interacted with people. Although always operating out of love, how Jesus dealt with people depended on the situation. He could be directive and confrontational. Notable examples of this were when He spoke harshly to the Pharisees or drove the money changers out of the temple. At other times, He demonstrated listening, mediating and forgiving in His encounters with others.⁶ Understanding that Jesus had a varied approach can help future professionals in the people-helping professions recognize the importance of using Jesus' approach as a model for their professional

style.

Students are also given areas where there appear to be contradictions between biblical passages and psychological research. For example, “spare the rod and spoil the child”⁷ is contrasted with some studies that have identified how children who are physically punished are more likely to have poorer grades and have less satisfying relationships with their parents.⁸ To adequately do this kind of integrative task, students must develop the ability to recognize the limitations of various social science research methods, as well as use hermeneutic principles in their interpretation of biblical passages.

Critical Participation

Integration is not just a cognitive activity. It is the “integration of Word and world in the mind of the Christian into a unified perspective and approach to all life.”⁹

It is for this reason that students in the social sciences are at the very least strongly encouraged (and often required) to involve themselves in the life of the community beyond Spring Arbor University. The Psychology Club regularly identifies community needs and responds to them (e.g., visiting area nursing homes and holding food

drives for the needy). This type of involvement helps prepare students to be critical participants in the world by expanding their ideas of possible vocations. Recently a sociology professor and a psychology professor took several students to Chicago. All of these students had indicated an interest in using their psychology major to work with needy people in large urban areas. We visited several agencies, most of them faith-based, to find out how our students could best prepare for this kind of work. Students came back with a better understanding of how they can integrate what they have learned about psychology with a possible vocation.

Several majors in the social sciences also require a practicum or internship experience. Students majoring in sociology, social work, and psychology are placed in various locations for these practical experiences. In the past year students have worked with homeless adolescents in San Diego, street kids in Niagara Falls, various youth camps, the Olive Branch Mission in Chicago, Catholic charities, Hospice and many other settings that involve critical participation in the world.

Even more heartening is that several students continue these types of activities after graduation.

For example, one recent psychology graduate had a one-year missionary assignment in Oakland, Calif. After witnessing the many needs in that area, she has chosen to stay there and continue to minister to the people in that community. In addition, after graduation a group of sociology majors moved to the inner city of Jackson, Mich., and integrated themselves into the fabric of that troubled community.

Integrating the Concept with the social sciences is a lifelong endeavor. This effort should not be, as Carter says, a trivialized hobby such as building model airplanes.¹⁰ It should be faith-informed scholarship that involves our earnest and whole-hearted attempts to view the findings of social scientists in light of the truth of scripture.¹¹

As we continue to humbly seek a greater understanding of God's world—and as students keep us grounded in this task through their energy and earnestness—we remember the following challenge:

An ideal, a dream, an impossible task some would say upon hearing about the Spring Arbor University Concept. An ideal? Of course, for we

shall never reach it in its entirety. A dream? Definitely, but a dream that can take, and indeed is taking, on form and substance. An impossible task? Perhaps, but we are reminded that nothing is impossible with God. Working together as a faculty, drawing upon the wisdom that comes from above, we can become effective integrators and fulfill to a significant extent our purposes as an evangelical Christian liberal arts college.¹²

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Spring Arbor, 1980-



*The Concept
and
Cultural
Anthropology*

Michael Jindra, Ph. D.

“Culture” talk is in the air. “Multiculturalism,” “culture wars,” “cross-cultural,” “popular culture,” and other terms are commonplace. How do we help our students understand the myriad ways that this term is understood, and the different ways it is used? How do we understand the crucial relationship of Christianity and culture? Spring Arbor University has shown its commitment to these important issues in its curriculum, including courses such as CORE 200, the cross-

cultural class, an experience every student is required to undertake. “Critical participation in the contemporary world” cannot happen unless a student understands both their own culture and the cultures of others.

So where does one begin? Students know their own culture best, but they frequently do not understand it as a particular culture. It is simply “normal” and everyone else is different. Particularly in an age of “global Christianity,” one must understand the particularity of one’s own culture. People are different, and these differences have consequences. Juxtaposing different cultures is done not only in the classroom readings, films and exercises (the *Ba Fa Ba Fa* exercise in Core 200 is classic), but in experiences such as the Chicago trip and the three-week cross-cultural experience. Students quickly come to a realization that things are different elsewhere. Of course two opposite reactions may set in: “My way is right” or “whatever they do is fine with me.” Before we get to this point, however, should we focus simply on understanding our culture and others, and put the natural human tendency to judge on hold? But the inevitable ethical questions are lurking there, and they cannot be put off for long. How do we give students the tools to answer them? How do we

introduce them to the various critics and critiques of culture, and understand what “commitment to Jesus Christ” means in the context of national and international diversity?

Stories

Cultures are generally founded upon stories. Who are we? Where do we come from? Where are we going? These stories and myths give humans meaning and purpose in life. For millennia, people have been sitting around the fire, listening to the stories of elders about ancestors (mythic or not) and the origin of cultural practices or taboos.

But storytelling is not only prevalent in “traditional” or tribal societies. Stories define our culture just as much as traditional ones. In fact, in our pluralistic society many stories circulate, often contradictory ones. Many of us learned stories in church and Sunday School as we grew up. Assuming we are still active in church, we still hear these stories. But we also heard many different stories, in school and on TV and in the movies, and now in many more places, even video games. As I write this, the 2006 Winter Olympics are in full swing, and many competitions are prefaced by the “stories” of the competitors, giving meaning to their performances, and indirectly to

similar situations in our own lives.

Some of these stories are found at local events, such as celebrations of Memorial Day, which tell of patriotic heroes, or commemorations of people, such as Martin Luther King. We find some of our most powerful stories in the constant barrage of movies, many of which become highly successful, such as *Star Wars* or *Titanic*. Fantasy novels such as *The Chronicles of Narnia* and *The Lord of the Rings* have proved enduring and led to major motion pictures. On a daily basis, soap operas, crime and medical dramas, comedies and other television shows have demonstrated the power of good stories over decades. We attach ourselves to celebrities and follow their ups and downs on entertainment programs and in magazines, and we watch the ongoing parade of stories on Oprah and other human interest or therapy-oriented programs. Some of these stories are “deeper” than others, but Christian authors have frequently pointed out the religious and transcendent themes in even the most secular movies.¹

Which stories will we tell? Which stories will influence us? Ones that mislead, heighten bias or manipulate emotion to teach the wrong lessons? Many of the stories in circulation are

formulas produced by media corporations in order to make a profit. At the same time and for the same reason, they try to be as responsive as possible to public trends and interests. This results in a tremendous mix of programming, from the violent, misogynistic, and sexual, to dynamic stories of reconciliation, heroism, and salvation. How do these stories compare to other stories we have learned? How do these stories compare with The Story—the one, of course, that recounts how God created us and later came to us after we fell away from Him.

Many of these stories are variations of The Story. In other words, themes in these stories are often echoes of The Story, but distorted in some way. Love gets distorted into lust, or simply self-love. Love of community, or *koinonia*, becomes twisted toward nationalistic ends, as in the Nazi films of Leni Riefenstahl. Justice gets twisted into revenge. Productions can serve as wonderful emotional outlets, which make them potentially dangerous.

In the first volume of this *Concept* series, Gayle Beebe referred to the “contemporary crisis” that involves the loss of any “meaningful vision of the nature and destiny of human life.”² This crisis is largely because we have “lost our story” in the

words of theologian Robert Jenson.³ This central Story has been replaced by numerous ones, but the most popular narrative revolves around some notion of “progress.” The particular definition and practice of the idea varies, but notions of increased wealth, science and technology, along with individual and social progress, are normally involved.

The model for the hope in progress was the “biblical hope in God as the Coming One, the Eschatos.”⁴ Much of contemporary culture is a seeking after hope, expressed in promises. We have expectations of hope in our relationships, in our work, in our government. And when these hopes are dashed, as they frequently are, we often attempt to escape. We find hope in the repetitive stories of popular culture, from film, to novels to music and video games. Some of this is simply an expression of hopelessness, as in “rage rock” or certain forms of rap. Others persuade us to buy things. Media advertising has perfected 30-second stories that prey on hopes and dreams. Many of the images and sounds of the entertainment industries, from music to film, are meant to help us build an attractive identity for our peers, whether youth, neighbors or co-workers. In a fast-paced mobile world of rather rootless individuals, the search for belonging

depends on fashioning an appealing identity for oneself. Deeper, more ethical notions of self based on “character” lose appeal. Indeed, social historians have tracked how, as the 20th century wore on, we began stressing “personality” rather than “character” in our language and practice.⁵ Unless our students were actively socialized to resist these trends, many of them enter SAU as a product of this cultural milieu. Amidst this profusion of stories, messages, and images, what is the role of the SAU “community of learners” in forming “lifelong learners” who “critically participate in the contemporary world”?

Culture and the Academy

As Christian academics, we must find a way to negotiate the relationship between two “cities”: Jerusalem, exemplifying faith, represented in the Church, and Athens, that icon of human learning, based in the contemporary university.⁶ In some sense, SAU finds itself having to navigate competing yet sometimes overlapping stories. The Christian Story is one that the contemporary secular university has largely left behind, though echoes of the Christian story lurk in the most popular stories of the academy. As in the overall culture, the vision of progress animates much of

the activity.⁷

What do we make of this? The notion of progress has been secularized in the university, and the Tower of Babel story comes back to haunt us, as repeated attempts to establish earthly utopias show. Humanity has repeatedly been tempted to put itself in the place of God, and the academy, the paragon of human reason (expressed especially in science, technology, and resulting forms of social engineering) is the prime place for this to happen. Christian academics have a responsibility to remind the public of the limitations of our human condition, and warn us against overreaching ourselves, ever more important in an age where computers and biotechnology increasingly give us more power to decimate ourselves. Over the 20th century, academics have consistently overestimated the power of humans to remake their world for the better, often with disastrous and deadly results.

At the same time as the notion of progress motivates much academic work, there is also a strong sense of relativism in higher education. There is a refusal to judge some behaviors as wrong, or at least a very distinct selectivity about doing so. We feel entitled to our “rights,” but neglect our “responsibilities.”⁸ We blame

institutions such as governments and corporations for our troubles. The rights tradition, of course, was influenced significantly by the Christian tradition, with its focus on human dignity and worth in God's creation, but it can tend to neglect human sin and responsibility. Biblically, we should see problems in institutions and people. The biblical writers did not hesitate to note either the behavior of irresponsible and oppressive leaders and the institutions they control, or the individual failures of irresponsible people.

The Bible argues that these institutions are established by God as an order of creation⁹ and also that humans are created in the image of God. But the contemporary academy acknowledges only some of this. It has dumped the concept of original sin, seeing sin mostly in economic and political structures, an impulse that goes back to Rousseau in the 18th century. This secular tradition anticipates a world where structural barriers of oppression are removed, which will enable people (assumed to be largely good) to attain their full potential.¹⁰

There are also other problematic approaches, such as the economics-derived "rational choice theory," or the sociobiological theories that are popular in the press. Both end up assuming that

humans are always striving for their own self-interest, and practices such as altruism or religion in general are simply viewed as functional for human survival.¹¹ Also found in the academy are notions that erase any distinction between humanity and the rest of God's creation, such as animals, paving the way for biotechnology without ethical concerns, and rather extreme forms of the animal rights movement, as found in the philosophy of Peter Singer.

Christians and Culture

Learning to critique culture, whether broadly or in the academy, is one of the most important things we do here at Spring Arbor. Stories float all around, in popular and media culture, and academia. Ethnic cultures tell stories about what is important to them, such as the importance of sociality. It is important to understand cultures and subcultures, such as international, ethnic and popular. We will find things we resonate with and learn from, beliefs and practices that will confuse us, and things we may strongly oppose. Differing ideas and practices exist for our own

benefit, as alternative practices with which we can evaluate our own cultures, and avoid falling into an unthinking defense of our own way of life. This kind of knowledge gives Christians the ability to examine different cultural forms in order to enable us to find “balanced Christian living in different cultural systems.”¹²

The twin errors of ethnocentrism and relativism are commonplace in our culture, or any culture. The temptation to venerate our way of life is matched by the temptation to say that one cannot judge them at all. Both are mistakes. The Bible has clear statements of morals and laws such as humility and hospitality, and opposition to idolatry and selfishness, but it also allows for variability in practice. Christians have recognized *adiaphora*, a Greek term that was adopted by Christian theologians to allow for practices that are “neither commanded nor forbidden in the Word of God.” The New Testament Church emerged out of a particularistic Jewish culture and had to learn to adapt to a situation where many of the Jewish laws did not apply. Even Apostles such as Peter had problems with this, as described in Acts 10-11. In I Corinthians 9-10, Paul discusses becoming all things to all people, which of course is not an argument for relativism, but an expression of the

Christian virtues of self-sacrifice and of love for neighbor to serve the higher purpose of loving God.

The Christian life is a balancing act. On the one hand, we are tempted to conflate culture and Christianity, and on the other to chalk up all differences to culture and to forget the universal standards God has laid down. The Rock of Christ gives us a solid standpoint that has stood the test of time, one that reveals the weaknesses of human culture, both our own and others, and one that enables critical participation in the contemporary world.

Critical participation requires a keen cultural awareness, both of our own culture and other cultures. And we cannot do this simply as individuals, but as a community of learners that winnow and sift the cultural currents. Our witness cannot only be intellectual, but also one of practice. The mission of SAU here is critical, amidst a culture that now has the technological capability to produce powerful, attractive stories without limit, and to disseminate them throughout the land. Which stories will guide us?

Endnotes

¹ Johnston, R. K. (2000). *Reel spirituality: Theology and film in dialogue*. Grand Rapids, MI: Baker.

² Beebe, G. (2003). The concept considered (p. 167). In G. D. Beebe & J. S. Kulaga (Eds.), *A concept to keep*. Spring Arbor, MI: Spring Arbor University Press.

³ Jenson, R. (1993, October). How the world lost its story. *First Things*, 19-24.

⁴ Ibid.

⁵ Susman, W. (1984). *Culture as history: The transformation of American society in the twentieth century*. New York: Pantheon Books.

⁶ Nuechterlein, J. (1988). Athens and Jerusalem in Indiana. *American Scholar*, 57, 353-368.

⁷ Smith, C. (2003). *Moral, believing animals: Human personhood and culture* (chapter 4). New York: Oxford University Press. See also K. Löwith (1949). *Meaning in history*. Chicago: University of Chicago Press.

⁸ Etzioni, A. (1993). *The spirit of community: Rights, responsibilities and the communitarian agenda*. New York: Crown. See also works by Christopher Lasch or Mary Ann Glendon.

⁹ Stackhouse, M. L. (2000). *God and globalization*. Harrisburg, PA: Trinity Press International, 2000. See especially volumes 1 and 2.

¹⁰ Perkins, R. (1987). *Looking both ways: Exploring the interface between Christianity and sociology* (p. 149). Grand Rapids, MI: Baker. See also R. Niebuhr (1948). *Nature and destiny of man*. (vol. 1, especially chapter 4). New York: Charles Scribner's.

¹¹ Smith, *Moral*.

¹² Meneses, E. H., & Stapleford, J. (2000). Defeating the Baals: Balanced Christian living in different cultural systems. *Christian Scholar's Review*, 30(1), 83-106.

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All humankind is bound together ever more closely in the bundle of life and the disorders of one segment affect the whole. Yet the efforts to combat these disorders mount and more and more make themselves felt throughout the earth. Increasingly, they have a major source in Jesus, and what Christians have believed about his birth, his death and his resurrection. Here is one of the strongest reasons for confidence in the accuracy of the Christian view of history.

—Kenneth Scott Latourette

The Concept and History

By Stephen R. Smiley, Ph. D.

The liberal arts, including history, have a history. That is, the idea of a liberal arts education and each of the subjects now included in the liberal arts have developed from ancient beliefs about the knowledge and skills an educated person should possess. The knowledge and arts worthy of a free person (*libri*, in Latin) were *artes liberales* (liberal arts) as distinct from those attributable to a slave (the servile arts). During the early Middle Ages the liberal arts became codified as the *trivium* of grammar, rhetoric and dialectic and the *quadrivium* of arithmetic, geometry, music and astronomy. The universities of the high Middle Ages added

theology as “the queen of the sciences.”¹ During the Italian Renaissance the curriculum was further expanded to include a special emphasis on mastery of the classical languages, Latin and Greek. The Renaissance also modified the meaning of “liberal arts” to stress the liberating qualities of education, which could free human minds from superstition and prejudice. The rise of natural science in the 17th century further expanded the range of the arts worthy of a free person.² Yet from ancient times through the early modern period, the possibility of an extensive education was limited to a small elite of people with the wealth and leisure to pursue learning that did not lead to a specific career.

The American experience broadened the opportunities for formal education. The Protestant emphasis on the capacity of all children, including girls, to read the Word of God expanded the numbers of literate persons who could benefit from higher education.

All of the colleges and universities founded during the colonial period were avowedly Christian institutions, dedicated to the training of ministers, but open to those who felt called to other professions. After American independence was achieved in 1783 and states beyond the Appalachians joined the union, a remarkable

number of grade schools, high schools and colleges, founded by states, visionary individuals and religious denominations sprang forth.³ Among these was Spring Arbor Seminary, founded by Reverend Edward Payson Hart of the Free Methodist Church in 1873 on the site of two previous colleges in the village of Spring Arbor, Mich. The preamble to the Articles of Association of the first board of trustees quoted the Northwest Ordinance of 1787, "... Religion, Morality, and Knowledge, are essential to good Government and the real happiness of mankind," and established the school as "an institution of learning wherein young persons may be ... instructed in the various branches of learning which tend to fit and qualify them to properly discharge in the future the multifarious duties of good citizenship."⁴ One can discern here in embryo the future Spring Arbor University Concept.

The Concept has also had a history. Adopted in 1961, it has undergone a few minor amendments, but has remained the lodestar for Spring Arbor University as it has expanded, adapted and updated its curriculum in order to fulfill its mission in each generation.⁵ Thus, in the nearly half century since its origin, it has inspired the administration, faculty and staff to maintain it as a living reality,

rather than as a mere “heritage” or “tradition” to be invoked and subsequently ignored.⁶ The history faculty has sought to make history a vital part of the Concept in all its parts.

A Community of Learners

History has been defined as “the study of the extant record of the human past.”⁷ As the great French historian, Marc Bloch more pithily expressed, “The historian is like the giant of the fairy tale. Wherever he catches the scent of human flesh, there his quarry lies.”⁸ Yet that scent is never of an individual in isolation from the social group. Even the biographer of an individual who has shaped and shaken the world recognizes the obligation to study that person within the context of a social and religious community. The Bible records God’s call to individuals like Abraham, Isaac and Jacob in order to create a people of faith and obedience. Jesus Christ lived for 30 years within the community of the Jewish faith until his baptism by John and commission from his heavenly Father. Then he declared that he had come to “build my Church and the gates of hell shall not prevail against it” (Matthew 16:18). A community of learners called a college or university also receives a commission to engage

in learning, studying, teaching and researching as a group of senior scholars (faculty) and junior scholars (students). Spring Arbor University has a particular part to play in the Kingdom of God, not identical to the church or the state, but related to them and enhancing their respective missions. The community of Spring Arbor is shaped by caring for the individuals who make up the community, sharing common concerns and values, yet generously honoring a diversity of race, gender, political commitment, and Christian expression. The historian recognizes that like all human institutions, the university will experience significant changes but can hold fast to enduring values as well.

The Study and Application of the Liberal Arts

Historians contend that historical study is the most liberating of the arts of the free person. Because all the other arts and sciences have evolved in time and place, students majoring in other fields can benefit from historical study of the development of their respective disciplines. The study of the human past can liberate people from the narrow parochialism of time and place. It can develop sympathy and respect for people

throughout the world with very different ways of life and understanding. It can foster a healthy patriotism, yet aid the student to understand that the heroes of the national past were finite and fallible, just like today's leaders, and faced the daunting issues of their day with greater or lesser success. In this regard, the Bible provides excellent examples, for among the records of the heroes of our faith such as Abraham, Sarah, Moses, David, Peter and Paul there are frequent references to human frailty and sinfulness.

A Christian perspective in history is shaped by a biblical view of human nature, which begins with the affirmation that humans are created in the image of God, and therefore share in his creativity. Humans have the ability to shape nature for their use, to create fundamental institutions such as the state, the school and the economy. Yet Christianity also declares that human nature has been marred by sin since The Fall, and hence all human institutions bear the taint of sin; humans as individuals and in groups have a strong tendency to abuse the good gifts of God and to engage in strife, envy, pride and anger toward Him, toward creation and toward their fellows. No one has better expressed the paradox of human nature, "the grandeur and misery of man" better than the

17th-century scientist and philosopher, Blaise Pascal, who wrote:

What a chimera then is man! What a novelty! What a monster, what a chaos, what a contradiction, what a prodigy! Judge of all things, imbecile worm of the earth; depositary of truth, a sink of uncertainty and error; the pride and refuse of the universe!

For in fact, if man had never been corrupt, he would enjoy in his innocence both truth and happiness with assurance; and if man had always been corrupt, he would have no idea of truth or bliss. But, wretched as we are, and more so than if there were no greatness in our condition, we have an idea of happiness, and cannot reach it ... Incapable of absolute ignorance and of certain knowledge, we have thus been manifestly in a degree of perfection from which we have unhappily fallen.⁹

Yet the Christian faith has always proclaimed the Gospel, the good news, that God has not left us

in our sin and misery, but has intervened in specific historical times and identifiable places to redeem humanity and to restore the divine image. Through the call of Abraham, the covenant with the people of Israel, their deliverance from slavery in Egypt, in the testimony of the law and the prophets, God has acted to preserve a way of salvation from sin, death, and hell. Ultimately, salvation has come through the birth, death and resurrection of Jesus, the Christ so that “whosoever believeth in him should not perish but have everlasting life” (John 3:16). Thus, the living Word of God (John 1:1, 2) completes the written word of God, the Bible.

Christianity promotes a linear rather than a cyclical view of history unlike the religions of Asia or the beliefs of the ancient Greeks. In their understanding, history revolves in endless circles, with little change across the eons of time. Ancient India preserved few historical records, because the events of a few generations could hold little interest compared to the vast ages before and after. The Jewish and Christian understandings emphasized that history is moving toward an ultimate goal, toward a new heaven and a new earth where God will draw all things unto himself, beyond time and history.¹⁰

The question naturally arises whether

historians practicing their craft in the ways taught in all graduate departments of history in research universities can develop specifically Christian ways of doing history. For a long time, as allegedly scientific methods of history were developed in the 19th century, graduate training was based on the goal of writing “objective” history, “as it actually happened” in the words of an eminent German historian. This required the patient collection of as many primary sources as possible, that is, documents produced by those with first-hand knowledge of events; then the evaluation of the documents’ authenticity and possible bias; the attempt to reconcile apparent contradictions in the record; and finally, the production of a dispassionate narrative of a significant historical event. Although this method continues to be taught and practiced by all historians with graduate degrees (and many without), few would now contend that an objective history can or should be written. Open-minded confrontation with the primary sources is still required and honest reportage of the facts as nearly as the historian can discern them. However, the historical profession generally acknowledges that every historian brings a set of values to his or her task and that these will invariably affect the way history is written.¹¹ Thus, there is no need to

apologize for approaching history from a Christian perspective, and a number of eminent historians respected throughout the profession have published Christian understandings of history.¹²

Total Commitment to Jesus Christ as the Perspective for Learning

Virtually all students of history will affirm that a man named Jesus lived in the eastern Roman province of Palestine during the reigns of the emperors Augustus and Tiberius. Many would further admit with the eminent historian of Christian doctrine, Jaroslav Pelikan, that "Regardless of what anyone may personally think or believe about him, Jesus of Nazareth has been the dominant figure in the history of Western culture for almost twenty centuries. It is from his birth that most of the human race dates its calendars, it is by his name that millions curse and in his name that millions pray." Pelikan continues with the arresting question, "If it were possible, with some sort of super-magnet, to pull up out of that history every scrap of metal bearing at least a trace of his name, how much would be left?"¹³ For the devoted Christian historian the cultural influence of Jesus Christ on Western culture and indeed on world culture is a source of inspiration

and wonderment, but is far from adequate. In study, teaching and living, the Christian historian recognizes Christ as the Lord of life and history, but also as the divine Savior from sin, who demands one's love with all one's heart, soul, *mind*, and strength. Thus, the total commitment to Jesus Christ begins with one's very being, and the perspective for learning should follow when one accepts the call to discipleship.

All Christians affirm with the author of the book of Hebrews that "Jesus Christ is the same, yesterday, and today and forever" (Hebrews 13:8). However, a study of Christian perspectives on Jesus Christ throughout the 2,000 years since his earthly existence reveals that believers in different ages have chosen to emphasize different aspects of his character and teachings. Whether as "The Turning Point of History," "The Light of the Gentiles," "The King of Kings," "The Bridegroom of the Soul," "The Prince of Peace," or "The Liberator" among many other images, each age has sought to understand the meaning of Christ for its time.¹⁴ No single age, certainly not our own, can comprehend the totality of Christ in his own time or in any subsequent age. Yet attempts to understand how other ages have perceived him can deepen one's sense of "the communion

of saints” beyond the constraints of time and place. A lengthy study of the Scriptures and of subsequent Christian history allows the scholar to catch glimpses of Christ’s meaning for culture and society. The call to total commitment to Jesus Christ as the perspective for learning is a call to a lifetime of effort to grasp his meaning for our lives and the life of the world.

Even if we cannot know all the influence of Jesus upon history, a short list of some of the positive movements in his name can be presented. Christianity has been the impulse for the reduction of more languages to writing than all other influences combined. The protection of Native Americans from the exploitation of the Spanish conquerors was the work of Catholic priests. Most of the efforts to end the slave trade and eventually slavery were inspired by the Christian conscience. Christian missions throughout the world have fostered improved medical care, public health measures and educational opportunities. Christianity has promoted the dignity of women.¹⁵ A tribute to Christian influence in Western civilization comes from an unexpected source. On the eve of World War II, the unbelieving historian of the French Revolution, Georges Lefebvre, wrote:

Through the course of centuries our western world, formed by Christianity ... has directed its effort through a thousand vicissitudes toward the liberation of the human person. The Church upheld the freedom of the individual so that he might work in peace for his salvation and entrance into heaven. From the sixteenth to the eighteenth centuries philosophers proposed that man also throw off the fetters that held down his rise on earth; ... Different though such doctrine seemed from that of the Church, the two were at one in recognizing the eminent dignity of the human person and commanding respect for it ...

The West, inspired by the same masters, continued also to acknowledge the unity of mankind. The Church promised salvation to all without distinction of race, language or nation. To this universalism the new thinkers remained faithful. They secularized the idea of the Christian community, but they kept it alive.¹⁶

These views of human liberty and dignity combined with the linear view of history promoted by Christianity gave rise in the 18th century to the secularized faith in progress, which has profoundly influenced the modern world. At times the faith in progress has stimulated marked improvements in human well being. At other times, divorcing itself from concern for the liberty and dignity of individuals, it has promoted utopian visions of ultimate happiness on earth for a “chosen race” as in Nazi Germany, the “toiling masses” under communism, or indeed the French nation in the Reign of Terror during Lefebvre’s beloved French Revolution. Those visions have inevitably produced nightmares in which masses of people have been sacrificed to the achievement of unattainable goals. A proper Christian understanding of history reflects the Christian virtue of humility. We should be careful of the identification of any human institution or program with the perfect will of God or the consummation of history. The Christian faith affirms that all human institutions, like all individuals, are tainted with sin and limited by our finiteness as humans bound by time and space. This caution, however, does not require us to adopt a policy of passivity in the face of evils. A critical participation in the contemporary world calls for

efforts to improve the human condition while recognizing that social ills can be ameliorated but rarely definitively solved.

Critical Participation in the Contemporary World

Historical study is necessary for *critical* participation in the contemporary world. Critical, of course, does not mean negative, but rather *discerning*. Every present-day problem has historical roots, and knowledge of its history can reveal why it stubbornly remains, and may provide some clues to its solution. History provides the long view, a valuable perspective on the contemporary world. The great Spanish-born philosopher George Santayana is often quoted: "Those who cannot remember the past are condemned to repeat it." Few historians today would quote this sentence without serious qualification. Every historical moment, like every human being, is unique, so no exact repetition of the past is possible. Nor is remembrance of the past a guarantee against errors similar to those committed in the past. Yet, there is indeed a measure of truth in Santayana's aphorism. History does teach us how previous generations faced their problems and attempted to solve them despite limited knowledge and

resources. It can teach us that ideas and actions have consequences, and that certain past decisions have foreclosed other possibilities. It can inspire us with the recognition that some of those decisions have helped to produce a better life for today's generation, while others require renewed effort to undo the bad decisions of the past. The "lessons of history" are always ambiguous and teach different things to different people. Yet if memory of past experience is absolutely necessary for individuals, an understanding of the human past is equally vital to individuals and societies.

A Christian understanding of history gives some guidance to critical participation today. It is based on the value of every human being of whatever class, race, nationality, or condition as a unique individual, created in the image of God. Therefore, it calls us to the task of protecting human life and dignity; to ministering to the spiritual and material needs of all people, especially, to "the least of these my brethren," for in feeding, clothing and ministering to them, we minister to Christ himself. Yet Christianity provides a powerful safeguard against the utopian temptation to identify any human scheme or dream with the Kingdom of God or its secular version, most notably in the 20th century in the appeal of communism. A profound

sense of human sinfulness and pride must temper all reform movements claiming to advance the righteousness of God or human perfection. Thus, a Christian understanding is a call to humility, but not to passivity. As the theologian and social theorist Reinhold Niebuhr remarked, "Man's capacity for justice makes democracy possible; but man's inclination to injustice makes democracy necessary."¹⁷ Critical participation in American democracy, then, demands a commitment to voting for all Christian citizens and for some, seeking elective and appointive office; contributing to the local and wider communities through participation in churches and civic organizations; and making Christian voices heard through writings, petition drives and contribution of taxes and voluntary gifts for the common good.

Christian perspective and historical understanding together promote the long view for a university with a unique concept. The founders of Spring Arbor Seminary in 1873 could not envision the university of today with its expanded curriculum and multiple programs throughout the state, and indeed the world. Although like every great institution the purposes of Spring Arbor University could not be fulfilled in one generation, the vision and sacrifice of its founders can inspire

us to minister to students in our own generation and bequeath our mission into the unforeseen future. Only God can see the end from the beginning, but we must undertake our vocation in the words of one of the spiritual ancestors of Spring Arbor University, Charles Wesley:

To serve the present age, our calling
to fulfill;
O may it all our powers engage to do
our Master's Will.

Endnotes

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² Ibid., pp. 126-127, 175.

³ Ringenberg, W. C. (1984). *The Christian college: a history of Protestant higher education in America* (pp. 56-60). Grand Rapids, MI: Christian University Press and William B. Eerdmans.

⁴ Snyder, H. A. (1973). *One hundred years at Spring Arbor: A history of Spring Arbor College, 1873-1973* (pp. 14-15). Spring Arbor, MI: Spring Arbor College Press.

⁵ Smiley, S. R. (1998). The Spring Arbor College concept: A history. *Concept: A Journal of Christian perspectives in the liberal arts*, 1(2), 2-13.

⁶ Burtchaell, J. T. (1998). *The dying of the light: The disengagement of colleges and universities from their Christian churches*. Grand Rapids, MI: William B. Eerdmans.

⁷ There are numerous definitions of "history," but all agree that its province is the human past, and that it can only be studied through the records left by people in the past. Several good guides to the study of history are available for the novice student. A short one is Lukacs, J. (2000). *A student's guide to the study of history*. Wilmington, DE: Intercollegiate Studies Institute; two that present a specifically evangelical Christian approach are Swanstrom, R. (1978). *History in the making: An introduction to the study of the past*. Downers Grove, IL: InterVarsity Press, and Wells, R. (1989). *History through the eyes of faith: Western civilization and the kingdom of God*. San Francisco: Harper & Row.

⁸ Bloch, M. (1953). *The historian's craft* (p. 26). (P. Putnam, Trans.). New York: Vintage Books.

⁹ Pascal, B. (1941). *Pensées*. (no. 434). (M. F. Trotter, Trans.) New York: The Modern Library.

¹⁰ Latourette, K. S. (1977). The Christian understanding of history (pp. 48-49). In C. T. McIntire (Ed.), *God, history, and historians: An anthology of modern Christian views of history*. New York: Oxford University Press.

¹¹ Novick, P. (1988). *That noble dream: the "objectivity question" and the American historical profession*. Cambridge: Cambridge University Press.

¹² Cf. Butterfield, H. (1949). *Christianity and history*. New York: Scribner's ; McIntire, C. T. (Ed.). (1977). *God, history, and historians: an anthology of modern Christian views of history*, New York: Oxford University Press.


¹³ Pelikan, J. (1985). *Jesus through the centuries: His place in the history of culture* (p. 1). New Haven, CT: Yale University Press.

¹⁴ These are among the chapter titles in Pelikan.

¹⁵ Latourette, K. S. (1977). The Christian understanding of history (pp. 63-64). In C. T. McIntire (Ed.), *God, history, and historians: An anthology of modern Christian views of history*. New York: Oxford University Press. Latourette was acutely aware that not all the influences of Christians through the ages have been benign and he does cite a number of examples of pernicious activities.

¹⁶ Lefebvre, G. (1947). *The coming of the French revolution* (pp. 182-183). (R. Palmer, Trans.). New York: Vintage Books.

¹⁷ Niebuhr, R. (1944). *The children of light and the children of darkness: A vindication of democracy and a critique of its traditional defense* (p. xiii). New York: Scribner's.




Stephen Smiley recently retired after 37 years as professor of history at Spring Arbor University. Before joining the faculty, he studied for a year in Paris on a Fulbright Fellowship. He served as chair of the social science division, and the Department of History, Geography and Political Economy.

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Spring Arbor, 1969-2006



The Concept
and
Political Science

David Rawson, Ph.D.

*Jesus shall reign where-e'er the sun,
Doth his successive journeys run;
His kingdom spread from shore to shore,
Till suns shall rise and set no more.*

How does the Spring Arbor Concept inform the study of politics at Spring Arbor University? To answer that question we must first be agreed on a contentious point:

What is politics?

The ancients believed that the human

personality could flourish only in the political arena. Socrates (or his interpreter, Plato) claimed that “a city (*polis*) comes to be because none of us is self-sufficient.” The purpose of political action within the city was “to contrive to spread happiness throughout the city by bringing the citizens into harmony with each other.”¹ Aristotle held that politics is the coming together in community for the good of all and for pursuit of the greatest good.² The great Roman statesman and philosopher, Cicero, saw politics as the affair of the people, founded on their consent about right law and an agreement as to common welfare.³ For all of them, the object of political reflection was to identify the good and virtuous in communal life and to exercise wisdom in pursuing it.

In the modern era, analysts have followed Machiavelli in seeing politics as self-assertion and competition.⁴ Harold Lasswell, a theorist of the last generation, claimed that politics is who gets what, when and how; the study of politics was “the study of influence and the influential.”⁵ Hans Morgenthau, progenitor of the realist school, argued that a political policy, “seeks either to keep power, to increase power or to demonstrate power.”⁶ Joseph Nye, former Dean of the Kennedy School at Harvard, refines that notion: power,

controlling others and the environment, is relative and changing, depending on “what is happening at home, and more so, what is happening outside.”⁷ In a simple version of competitive politics, the German philosopher Carl Schmidt argued that politics is determining who is my friend and who is my enemy.⁸ For modern thinkers, the essence of political analysis is to understand how people use power in defense of their interests in human society.

Whether we see politics as community building or competition, pursuit of wisdom or power, we cannot escape political action. Most theorists and practitioners would agree with Hannah Arendt that all politics stems from our life together in the public arena, that part of the world where we gather around what is common to all of us. There we encounter others different from ourselves, each one unique, with private ties and personal aspirations. This human condition of plurality “is the condition . . . of all political life.”⁹ Our contemporary life is caught up in the dynamics of politics, plurality in the public arena, whether here or abroad. Inevitably, we must decide what to render unto Caesar and what to render unto God. This is where the Spring Arbor University Concept comes in.

How does the Concept inform reflection on politics?

A Community of Learners. Implicitly, the Concept would seem to support the communitarian and collaborative mode of politics over the instrumental and competitive perspective favored by modern analysis. Yet, there are qualifiers. As long as we are talking about learners, we are talking about individuals, each with his background, skill sets and hopes for the future. That individuality must be respected and empowered if real learning is to take place. As Plato remarked, "No free person should learn anything like a slave."¹⁰ Our ultimate goal as scholars and educators in this community has a uniquely individual objective: to "redirect the sight of the soul."¹¹

Moreover, we see ourselves as one community among others in a world of competing interests. We are not here building a theoretical utopia to be run by the philosopher kings with Spring Arbor "B.A.s," nor are we promoting particular policy options. A community of learners assumes divergence of political opinion and variety of analytical methods. We merely must, as the writer of Hebrews insists, "spur one another on to love and good deeds," while seeking, as Augustine urged, "the enjoyment of God and of one another in God."¹²

Lifelong involvement in liberal arts. The systematic study of politics can be a liberating exercise, a disciplined process of developing skills and understandings befitting a “freeman.” This does not come through pursuit of scientific certainty. Tetlock has recently pointed out that the parsimonious, simple solutions of science can be a liability in the complex world of human affairs.¹³ Nor, in our analysis of human behavior, are we looking for the predictive force of deterministic models. Arendt has argued that the process of contemporary science leads to actions “whose outcome remains uncertain and unpredictable, whether they are let loose in the human or natural realm.” The effect, especially in the modern age, is that “uncertainty becomes the decisive character of human affairs.”¹⁴

“Is uncertainty what I am paying for?” prospective students might ask. The answer is that one is paying for the liberating freedom of encountering plurality and reality in the political world, “for the joy of inhabiting together with others a world whose reality is guaranteed for each by the presence of all.”¹⁵ At Spring Arbor, cross-cultural trips, semesters abroad and internships introduce students to new environments and different people. These are always transforming experiences. That should be no surprise, for

Augustine reminds us that, "The heavenly city... while it sojourns here on earth, calls citizens out of all nations and gathers together a society of pilgrims of all languages ... it even preserves and adapts [diversities]."16

At Spring Arbor, students of politics are further freed by grappling with ancient philosophers over dilemmas of individuality in community. They are inculcated into the crafts of liberty by studying the heritage and structures of American politics or working out implications of constitutional cases. Studies in comparative governance reveal the variety of human institutions that structure communal life around the globe; international relations or third-world economics unveils the realities that confront human society. The entire curriculum, and especially senior courses like "Christianity and Politics" or "Spirituality, Faith and Justice" point students toward a life-long political pilgrimage that sets Christ as its goal and guide.

Total Commitment to Jesus Christ. Along this pilgrimage, students of politics at Spring Arbor University are not surprised to find that, in the modern world, "neither the senses, nor common sense, nor reason can be trusted."¹⁷ Long ago, Augustine derided the philosophers who

“with a marvelous shallowness, sought to find their blessedness in this life and in themselves.”¹⁸ Students might agree with Pascal that, “Those two principles of truth, reason and the senses, beyond that they each lack genuineness, deceive each other in turn.”¹⁹ They might discover Paul quoting Isaiah’s polemic against the international politics of Hezekiah’s day, “I will destroy the [political] wisdom of the wise; and the [analytical] intelligence of the intelligent I will frustrate.” But in language resonate with political implications, Paul lauds Christ crucified: the power of God (subsuming modern definitions of competitive politics) and the wisdom of God (transcending ancient notions of virtuous community).²⁰

Political learning and living centered in Christ forces us to recognize that we share the cognitive limits of methodologies based on human capacities. On this earth, we can only “know in part and prophesy (predict) in part.”²¹ But our quest for political insight need not end in contemporary cynicism. The Wisdom from above is objectively revealed in the natural and social universe He created.²² Through Scripture and the Holy Spirit, He illumines our reflections on the nature of man, the obligations of community, and the path of well-ordered concord. James urges

us to show our relation to that wisdom by our “good life, by deeds done in the humility that comes from wisdom.”²³ So, we “direct all prudent observations, manly actions, virtuous self restraint and just arrangements to that end in which God shall be all and all, in a secure eternity and perfect peace.”²⁴

Critical participation in the contemporary world. In taking the good news of Christ—the power of God and the wisdom of God—into the contemporary world, we are immediately thrust into a pluralistic world governed by its own institutions and dynamics. Two dimensions of modern political systems particularly deserve our attention: the “nation state” buttressed by the principles of **sovereignty, territoriality and bureaucracy**; and “globalization,” transforming **culture, commerce, and communications** across national boundaries.

The nation-state. In 1583, an astute jurist, Jean Bodin, thinking his way through the maze of Roman, canon and medieval law, concluded that, “Sovereignty is the absolute and perpetual power of a commonwealth.” The person or persons who represent **sovereignty**, “must be able to give the law to subjects.”²⁵ Someone must have the final right to make rules for the commonwealth.

Competition for that right of sovereignty tore Central Europe apart in the Thirty Years War, 1618-1648. Crowned heads of Europe, meeting in Westphalia, adopted Bodin's principle that within the boundaries of the realm, the sovereign "must not be subject in anyway to the commands of someone else."²⁶ They thus established the **territorial state** as the juridical division of Europe and as the model for colonial states around the world. Today the untrammelled rights of state sovereignty within established territories circumscribe politics anywhere in the world, be it Darfur or Detroit.²⁷

Royal courts have had their courtiers since earliest days, but **bureaucratic authority** is "fully developed...only in the modern state."²⁸ Whether historically in colonial territories where hierarchical, rational administration allowed one viceroy to control vast domains, or, today in emerging democracies where the demand for equality before the law required "abstract regularity" in provision of services, bureaucracy has become the management mode of political authority.

How does a Christian student of politics address these claims to authority, territory and administration? According to Peter, we are to

“submit to the king as supreme authority or to governors who are sent by him.” Today that means working within the constituent elements of a sovereign state.²⁹ But we have in our back pocket a passport listing us as “Citizen of the Heavenly City, Ambassador for Christ.” This gives us a different perspective on the earth-bound prerogatives of the state. Does someone claim territory? God says, “Every animal of the forest is mine and the cattle on a thousand hills...for the world is mine and all that is in it.” Does someone claim sovereignty? Paul told the Romans that the Emperor was not a self-made man. God had established him to uphold the good and punish the wrongdoer and presides over his destiny.³⁰ Paul told Timothy that we are to pray for all those in authority [rulers and bureaucrats], so that, “we may live peaceful and quiet lives in all godliness and holiness.” Our prayer focuses on the authority’s ability to establish security and tranquility. As critical participants in contemporary society, we have an obligation to remind authorities of the source and intent of their mandate and to point them to the power paradigm that Jesus gave: “If anyone wants to be first, he must be the very last, and the servant of all.”³¹

Globalization. The Spanish and Portuguese

opened the first age of globalization with their explorations in the 1400s. Globalization picked up speed in the 1800s as Britain turned the world into a free trade zone. Today globalization has flattened barriers between nations and speeded economic integration.³² But globalization's ramifications are broader than economic reach. A shared world-view of unprecedented power to shape human behavior is emerging as a **global culture**. Although echoing historic Christian notions of individual equality, political responsibility and economic endeavor, this individualistic, democratic and capitalist view discounts the God, putting its faith in natural evolution and social development, all within a mechanistically-determined material universe.³³

Technology, the cumulative application of science to transform our conditions of life, has led us through three great revolutions: high production in agriculture, industrial manufacture of goods, and construction of **global communications**.³⁴ We can reach halfway around the world in an instant, but "significance and perspective" escape us. We find that these instrumental techniques designed to improve life have profoundly transformed our existence. Social scientists looking at technological revolutions have identified three effects:

1. “Anomie,” modern man’s loss of purpose and social meaning, says Durkeim;
2. “Alienation,” of man from his work and social environment, cries Marx;
3. “Anonymity,” the condition of mass man of totalitarian societies, notes Arendt.³⁵

The revolution in communications has promoted a revolution in **global commerce**. Trade is booming; financial markets spin out denominated value at the push of a button. Yet, we have seen a challenge to this process as union workers, environmentalists and social activists protest the onward march of the global market. Many of these are “alternative globalists,” who want to substitute a world order of their design for the one they see as threatening. Other thoughtful analysts like Hochschild ponder the profound effect of interdependence on local autonomy and personal faith.³⁶

To critically engage globalization on the **cultural front**, Spring Arbor scholars must understand the force of global trends and the

counter-availing power of clan and custom in the cultural conflicts of our age. Then we can effectively become ambassadors of reconciliation, bringing relief to human need and rehabilitation to human spirits ravaged by the demands of cultural cohesion and the depredations of cultural conflict.³⁷

Communication breakthroughs are but discoveries of God's creative gifts to mankind, the "fullness of the Lord's earth." In our political studies at Spring Arbor, we seek to gauge technology's potential and its impacts, "worshipping the Creator" rather than the creature. We also recognize that technology is not a substitute for the liberating vitality of the public arena. We are called into the world to meet people face-to-face, being to those persons "a physical sign of the gracious presence of the Triune God."³⁸

In the wide world of **global commerce**, we encourage students to find their niche and exercise their calling, "the beginning and foundation of well-being." We recognize with John Calvin that global markets are a gift from God, "vehicles for human beings to serve one another in true solidarity."³⁹ But our opposites in these transactions are not clients or commodities; they are people for whom Christ died. In the secular

world of produced things we can empower people and affirm values. Faced with the wide road of commodious options, we can choose the narrow path of service.

At the beginning of what is euphemistically called “the common era,” Jesus told a motley group of Galileans to go into the world and make disciples of all nations.⁴⁰ That was an extraordinary and global commission. But mission was to the nations (ethnic groups) where the disciples were to reach individuals, teaching them all that Jesus had commanded. Today, as then, the commission for all who study politics at Spring Arbor is global; our mission is always local.

In political reflection at Spring Arbor University, we learn together about the dynamics of cooperation and competition in a pluralistic world. We are building a community in which individuals flourish and learning liberates. While we master the paradigms of power and prudence, it is the Wisdom from above that we seek, even “through a glass darkly.” We prepare for humble service in a world where our Sovereign Lord judges national authority and global integration. And to Him we daily pray, “Thy Kingdom come, thy Will be done on earth, as it is in Heaven!”

Endnotes

¹ Plato. (2003). *The Republic* (Bk. II, 396c; Bk. VII, 519d.) (P. Shorey, Trans.). Cambridge: Harvard University Press.

² Aristotle. (1977). *Politics*. (Bk. I, 1 and 9.) (H. Rackham, Trans.). Cambridge: Harvard University Press.

³ Cicero. (1977). *The Republic*. (65.) (C. W. Keyes, Trans.). Cambridge: Harvard University Press.

⁴ Machiavelli, N. (1979). *The Prince*. (esp. chapters 6-8). In P. Bondanella & M. Musa (Eds. and trans.), *The Portable Machiavelli*. New York: Penguin.

⁵ Lasswell, H. D. (1950). *Politics: Who gets what, when and how*. (p. 28). New York: Peter Smith.

⁶ Morgenthau, H. (1948). *Politics among nations: The struggle for power and peace*. (p. 36). New York: Alfred A. Knopf.

⁷ Nye, J. S. (1990). *Bound to lead: The changing nature of American power*. (pp. 15, 26). New York: Basic Books.

⁸ Schmitt, C. (1996). *The concept of the political*. (p. 26). (G. Schwab, Trans.). Chicago: University of Chicago Press.

⁹ Arendt, H. (1958). *The human condition*. (pp. 50, 52, 7). Chicago: University of Chicago Press.

¹⁰ Plato, *Republic*, Bk. VII, 536e.

¹¹ Plato, *Republic*, Bk. VII, 518d.

¹² Hebrews 10: 24, and Augustine, *The city of God* (1993). (Bk. XIX, Ch. 17). (M. Dods, Trans.). New York: Modern Library.

¹³ Cf. Tetlock, P. E. (2005). *Expert judgment: How good is it? how can we know?* Princeton: Princeton University Press.

¹⁴ Arendt, *Human condition*, 231-232.

¹⁵ Ibid., 244.

¹⁶ Augustine, *City of God*, Bk. IX, Ch. 17.

¹⁷ Arendt, *Human condition*, 277.

¹⁸ Augustine, *City of God*, Book XIX, Ch. 4.

¹⁹ Pascal, B. (1961). *Pensées*. (no. 83, author's translation). (Brunschvicg ed.). Paris: Garnier Freres.

²⁰ I Corinthians 1: 24.

²¹ I Corinthians 13: 9, 12.

²² Romans 1: 20.

²³ James 3:13.

²⁴ Augustine, *City of God*, Bk. XIX, Chs. 4, 20.

²⁵ Bodin, J. (1992). *On sovereignty: Four chapters from the six books of the commonwealth*. (Bk. I, Chs. 8, 345, 358. (J. H. Franklin, Ed. and Trans.). New York: Cambridge University Press. Bodin recognized constitutional limits on sovereignty as well as limits from contractual obligations of the sovereign. But he was arguing, in a Europe emerging from the feudal system, for the final right to make the rules, the "right to decide on the exception." Cf. C. Schmitt, (1985). *Political theology*. (G. Schwab, Trans.). Cambridge: MIT Press. Arendt (*Human condition*, 234) sees that, at the fundamental human level, "sovereignty, the ideal of uncompromising self-sufficiency and mastership, is contradictory to the very condition of plurality." Bertrand de Jouvenel shows how the abstract notion of sovereignty emerged out of the limited seigniorial rights of the Middle Ages. Jouvenel, B. (1998). *Sovereignty: An inquiry into the political good*. (part III). (J. F. Huntington, Trans.). Indianapolis, IN: Liberty Fund.

²⁶ Bodin, *Six Books*, Bk. I, Chs. 8, 358.

²⁷ Alternative models (the city league, the city state, the empire) could also have been used as the model for reorganizing Europe, but the territorial state's advance in Spain, France and England made it a dominant formula. Cf. Spruyt, H. (1994). *The sovereign state and its competitors*. (1994). Princeton, NJ: Princeton University Press. Today, all over the world, post-colonial states, regardless of the suitability of the local geography, have adopted the territorial state as way of organizing political authority. Cf. Bartelson, J. (1995). *A genealogy of sovereignty*. Cambridge: Cambridge University Press, for a deconstruction of the "epistemic underpinnings" of sovereignty and how that mutated into notions of territory-bound states, especially chapter five, "How Policy Became Foreign" and chapter six, "Reorganizing Reality."

²⁸ Weber, M. (1958). Bureaucracy. (p. 196). In H. H. Gerth & C. W. Mills (Eds.), *From Max Weber: Essays in sociology*. New York: Oxford University Press. Weber sees that the development of a money economy, specialization of administrative tasks, expansion of administrative scope and technological innovations in communications and records keeping

have allowed hired functionaries (bureaucrats) to take over a large part of state operations (pp. 204-216).

²⁹ See I Peter 2: 13-17.

³⁰ See II Corinthians 5:16-23; Psalm 50:10; Romans 13:1-7

³¹ See I Timothy 2:1-2; Mark 10:43-44.

³² Friedman, T. L. (2005). *The world is flat*. (pp. 9-11). New York: Farrar, Straus and Giroux. Friedman calls these periods Globalization I, Globalization II and Globalization III. Wolf, M. (2004). *Why globalization works*. (p. 14). New Haven, CT: Yale University Press, argues that the, "the integration of economic activities, across borders, through markets...drives almost everything else." Bhagwati adds that the current wave of globalization differs from previous ones in the degree of governments' involvement, in the speedy movement of services and capital by information technologies and in new dimensions of economic vulnerability. Competitive pressures and intensified interdependence constrain states' abilities to provide for the welfare of their citizens. Bhagwati, J. (2004). *In defense of globalization*. (pp. 11-13). New York: Oxford University Press.

³³ Cf. Schumpeter, J. A. (1950). *Capitalism, socialism and democracy*. (Chapter 9, "The Civilization of Capitalism."). New York: Harper.

³⁴ I am using here the notion of technology elaborated by Fukuyama, F. (1992). *The end of history and the last man*. (pp. 72-81). New York: Avon.

³⁵ Durkeim, E. (1957). *Professional ethics and civic morals*. (pp. 7, 11-12). (C. Brookfield, Trans.). London: Routledge; Marx, K. (1978). Economic and philosophic manuscripts of 1844. (p. 96). In R. C. Tucker (Ed.), *The Marx-Engels reader*. New York: Norton.; Arendt, H. (1968). *Totalitarianism*. (pp. 164-168). New York: Harcourt, Brace & World.

³⁶ Hochschild, J. P. (2006). "Globalization: Ancient and modern," *The Intercollegiate Review*, 41, 40-48.

³⁷ 2 Corinthians 5: 18-22

³⁸ Bonhoeffer, D. (1954). *Life together*. (p. 20). New York: Harper and Row. Cf. Ebersole, S. E. & Woods, R., (2001). Virtual community: Koinonia or compromise?: Theological implications of community in cyberspace. *Christian Scholar's Review*, 31(2), 185-216.

³⁹ Calvin, J. (1960). *Institutes of the Christian religion*. (pp. 720, 724). Philadelphia, PA: Westminster Press.

⁴⁰ Matthew 28:18-20; Mark 16:15; Luke 24:47-48; Acts 1:7-8.

Currently Professor of Political Economy at Spring Arbor University and Distinguished Visiting Professor of Political Science at Hillsdale College, David Rawson has been United States Ambassador to the Republic of Mali from 1996-1999 and to the Republic of Rwanda from 1993 to 1996. He joined the U.S. Foreign Service in 1971, serving in Rwanda, Mali, Senegal, Madagascar and Somalia, as well as various postings in the United States. A graduate of Malone College and American University, Ambassador Rawson is a longtime student and practitioner of international affairs. Under a grant from the United States Institute for Peace, he is now exploring the Rwandan case in international humanitarian intervention. He has chaired the UN Advisory Group on the West African arms moratorium and served as consultant to the Partnership to Cut Hunger and Poverty in Africa. Ambassador Rawson and his wife, Sandra, reside on a family farm in Rollin Township, Mich.

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Spring Arbor, 1999-

Vocatus atque vocatus, Deus aderit.

—Erasmus (1466-1536)

[Bidden or not bidden, God is present]

This quote is often attributed to Carl Jung, as he inscribed it over the doorway to his house and upon his tomb.

The Concept
and
Psychology

Jan Yeaman, Ph.D.

Psychology. What just popped into your head when you read that word? Was it an image of someone lying on a couch with a bearded therapist sitting at the end of it? When people find out you teach psychology, the standard response is, “Oh, no—you’ll analyze everything” or “Boy, she’s (he’s) crazy. See if you can figure her out.” Psychology, however, serves the world in so many more ways than just the counseling stereotype.

The science of psychology has its beginnings in philosophy and biology. It has grown from Wilhelm Wundt’s establishing the first lab in Leipzig in 1879 to a comprehensive science of

behavior and mental processes.¹ The American Psychological Association, the national and international governance body for psychology, is currently made up of 55 divisions, each focusing on different areas of human thought and behavior. These range from specializations in addictions (division 50), developmental (division 7), community research and action (division 27), the psychology of men (51) or of women (35), the study of peace, conflict, and violence (48), and yes, even for counseling (17) and therapy (29).

My training and background has been in a number of these different areas such as clinical and counseling psychology, but I primarily utilize my training in the area of health psychology (division 38). Health psychology takes traditional psychology and combines it with the study of the human body. For example, it looks not only at a topic such as schizophrenia from the social-behavioral aspects but also from the perspective of the structures and functions within the brain. It is from this frame of reference that the Concept and how it applies to psychology will be explored.

Background

Many think that psychology is hostile toward a faith perspective, and this is not without some

foundation. It is typical of people to think about Sigmund Freud (1856-1939) when they first hear the word “psychology.” Freud, a pioneering psychoanalyst, made numerous contributions to our understanding of human behavior. However, a significant part of his legacy is the antagonism he held for the spiritual and religious. In his publication *The Future of an Illusion*, Freud made statements such as “religion is comparable to a childhood neurosis ... [and he, Freud,] is optimistic enough to assume that mankind will overcome this neurotic phase, just as so many children grow out of their similar neuroses.”²

Freud’s perspective however did not go uncontested. Jung, initially Freud’s protégé and later his rival, split over the issue of religion and spirituality. Unlike Freud, Jung “emphasized the role of spiritual quests in personal development” in his theories.³ It should be noted in fairness to Freud, that he was an ethnic Jew living in Vienna at a time when there was strong anti-Semitism under the guise of building a “Christian” nation. His reaction against religion may have actually have been more political than spiritual. Those who continue to cite his anti-religious sentiments often overlook that aspect.

Another major influence in the perception of psychology was the 20th-century movement

called behaviorism. Theorists like John B. Watson (1878-1958) and B. F. Skinner (1904-1990) “argued vigorously that there was no such thing as the interior” reality or mental states in a person’s life.⁴ The behaviorists, in the industrial scientific passion of the times, pursued the study of *only* those behaviors that were observable. As a consequence, the value of a faith perspective was disregarded. For example, this “secularized psychological [atmosphere] ... involved seeing prayer as *nothing but* an effort to meet one’s safety and security in a frightening world ... the purpose of public prayer to be a powerful method of group control.”⁵ What could not be observed and quantified was ignored or ridiculed.

Is it possible that having a faith perspective is a crutch for the weak or the opium for the masses as Marx or Freud suggested? Is psychology the antithesis of faith commitment? Is faith commitment a sign of the presence of a psychological disorder? Even as recently as the 1980s Larson, Lyons, and Sherrill noted that “religion” was considered the “R-word” in academia—research in this area meant you would not be granted tenure.⁶ Due to the pioneering work of people like David Larson, Dale Mathews, Alan Bergin, and Harold Koenig this is no longer the case. To date, at least eleven

major academic journals in psychology, sociology, and medicine have devoted entire issues to the topic of spirituality and health. So mainstream is this now that the Oxford University Press has published a compendium of over 1200 reviews of studies exploring the relationship between faith and various biopsychosocial variables.⁷

A Review of the Literature

This present chapter will explore whether the secularized perspectives of psychology are supported by the upsurge of research that has been generated in two fields: abnormal psychology and health psychology. This whole-person approach provides insight into issues of both mental and physical health. These areas will be treated separately, but it is important to note that mental health impacts physical health and vice versa. For each of these areas we will look first at an overview of concerns and then look at the related research on faith.

Abnormal Psychology—This branch of psychology is likely the stereotype most people have of psychology. It focuses on mental and emotional health, particularly the absence of such health. Illnesses such as schizophrenia, anxiety disorders, and bipolar would be dealt with in this

field. This section will look at only one of the many disorders listed in the *Diagnostic and Statistical Manual-IV* (DSM-IV) and how faith commitment or religiosity impacts them: depression.

Depression, a type of mood disorder, is often referred to as the ‘common cold’ of mental health care. According to the National Institute of Mental Health, in any given year about 1 in 10 Americans experiences clinical levels of depression, although this ratio is not equally distributed across the lifespan. Larson and Larson note that “depression afflicts only 1% of older adults but rises among the medically ill.”⁸ When in a depressed state, a person finds little to be joyful about and may also have changes in their eating and/or sleeping patterns. The National Institute of Mental Health describes depression as a comprehensive “illness that involves the body, mood, and thoughts.”

Studies have repeatedly demonstrated a significant inverse relationship between faith and depression: as religiosity increases, reported depression decreases. This outcome persists across the lifespan—with college students⁹ and with nursing home residents.¹⁰ A study of almost 3,000 adults (average age, 43 years) found that church attendance and frequency of devotional activities was inversely associated with depression

for Caucasians and even more so for African-Americans.¹¹ Baetz, Larson, Marcoux, Bowen, and Griffin¹² found that the worship attendance of hospitalized psychiatric patients predicted less severe depressive symptoms, shorter hospital stays, higher satisfaction with life, and less alcohol abuse.

Reading the research findings could lead one to conclude that faith is all you need to free yourself of depression. This perspective, however, would be too simplistic. Depression is a complex, multi-faceted condition; it is an interplay of both nurture and nature. While an insulator rather than an inoculation, research indicates that faith appears to play a relevant role in depression.

Health Psychology—As mentioned previously, health psychology looks at mental and physical health together. It is a study of the connection between the mind and body. As with psychology in general, health psychology is a multifaceted field of study. We will briefly look at several of the major focuses: stress and coping, morbidity (how healthy are we), and mortality (how long are we healthy). Any one of these could be an independent chapter; however, we will explore some of the connections between these issues and faith.

The topic of stress and coping is highly visible in our modern-day society. It is a frequent lead story in magazines, newspapers, and television reports. Here we can look at the impact of faith perspective on effective coping. Landis found that spiritual well-being was inversely correlated with uncertainty and psychosocial distress.¹³ Thus, the greater your sense of spiritual strength, the more likely you will effectively cope with stress in your life. Religious coping also plays an important role in one appraising critical life events as “survivable.”¹⁴ The Web site for the National Institute on Aging notes that some 4.5 million people in the U.S. suffers from Alzheimer’s. As might be expected, caregivers to the elderly with dementia report lower levels of general well-being than the general population. However, when those caregivers’ spiritual needs are met and they are able to attend worship regularly, they report lower levels of stress and higher levels of well-being than caregivers whose spiritual needs are not addressed.¹⁵

Again this sounds as if faith is the complete solution—but we are fearfully and wonderfully and complexly made. Hathaway and Pargament’s study of intrinsic religious coping found that when individuals combine dependence on God with

active coping strategies that this is health enhancing and socially effective.¹⁶ However, when people's religious coping strategy is to passively wait for God to do all the work, it is health-hindering and associated with social incompetence.

The last area we want to look at is morbidity and mortality. Sounds like a mouthful but it simply refers to how long we will live and with what quality of life. The body of data on the role of faith in physical health is substantial. High religious involvement has been shown to be significantly associated with lower mortality rates compared to those with low religious involvement by numerous, rigorous studies. One of the more significant of these is McCullough, Hoyt, Larson, Koenig, and Thoresen's meta-analysis¹⁷ of data on 126,000 subjects that found that active religious involvement increased longevity by 29 percent. Of all of the variables looked at, only lack of obesity came near to the same shielding effect. Again, exercise caution in interpreting the data. These findings do not mean that having a faith commitment makes your body immortal. It means that those with a faith commitment live longer, on average, than those without a faith commitment.

The effective integration of faith and living also appears to play a role in insulating against

many diseases. It has been associated in a decrease in blood pressure among African Americans.¹⁸ Koenig, George, Hays, Larson, Cohen and Blazer found that of nearly 4,000 adults over the age of 65, those who were religiously active were 40 percent less likely to be experiencing hypertension.¹⁹ A study of Israeli males showed that religious orthodoxy was a predictor of lower mortality from coronary heart disease, even when other factors such as smoking and blood pressure are controlled.²⁰ A consecutive sample of 196 patients admitted to Duke University with congestive heart failure (CHF) or chronic pulmonary disease (CPD) found an inverse relationship between the severity of physical illness and functional disability with religious activities, especially religious attendance (Koenig, 2002).²¹ Thus, of those with heart problems, those who had higher religious attendance had fewer complications.

Where Do We Go from Here?

While the data paints an encouraging picture, there are some cautionary notes. When initial studies reported longer life spans for those with a high faith commitment, the rebuttal was that people who go to church are less likely to drink or smoke. Indeed, faith may breed a respect for

the body that encourages individuals to engage in health-promoting behaviors. Some studies, however, have controlled for this and still appear to support the positive effect of faith on morbidity and mortality. Others have said that the research outcomes are due not so much to faith but to all of the social support that is derived from being part of a body of believers. While this is reasonable observation, it does not tell the whole story. A longitudinal study of 1,177 healthy individuals over the age of 64 found that even after controlling for health behaviors and for social support, those with a lack of private religious activity were at a 47 percent greater risk of dying.²² Again, this is not saying faith grants you physical immortality but it does show that the “faith factor” is more than social affiliation when it comes to longevity.

Another key issue when reviewing the literature on the integration of faith and fields of psychology is to be aware of the nature of the research findings. The research cited in this chapter is based on groups of people. The outcomes are about “people in general” not about specific predictions for specific individuals. Despite the strong empirical evidence presented here, it is entirely possible for someone of faith to experience profound depression or coronary heart disease or

to die prematurely; those who do not engage in health behaviors or faith activity may also live to be one hundred. You can not use research to predict a specific outcome for a specific individual.

Research strongly supports that the integration of faith into our living does make a difference to our mental, emotional, and physical health. As the nation struggles to cut health-care costs, perhaps we need to prescribe more faith activity.

Endnotes

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*The Concept
and
Social Work*

Patricia Bailey, Ph.D.

*And what does the Lord require of
you? To act justly and to love mercy
and to walk humbly with your God.
—Micah 6:8*

*Speak up for those who cannot speak
for themselves, for the rights of all
who are destitute. Speak up and
judge fairly; defend the rights of the
poor and needy. —Proverbs 31:8*

The values that guide social work curriculum
and education, and lead to practice at both the

bachelor's and master's levels in social work, include service, social and economic justice, dignity and worth of the person, importance of human relationships, and integrity and competence in practice.¹ On the surface there appears to be considerable congruence between Christian values and social work values. However, when we scratch the surface we find that many social workers are not accepting of Christianity nor have all Christians felt they could function within the liberal value system of the social work profession.

There are a lot of social workers who are practicing Christians, in fact the field of social work draws Christians who want to answer Christ's call to help the needy, the poor, and the afflicted. Unfortunately their education in secular, state-funded social work programs and the secular policies of agencies have frequently led to a need to separate faith and practice. This is evident in the difficulty devout Christian social workers have when they attempt to move from social work practice to teaching social work in a faith-based university that believes in integration of faith and learning/practice. In spite of social work's origins in Christian volunteerism, there are reasons for this anti-Christian stance that was very strong from the 1960s through the 1980s and continues in some

public institutions in spite of a recognition of the importance of faith in the lives of the people the profession serves.

There are several reasons for this separation of faith and profession and a thorough discussion of these is beyond the scope of this chapter. An early one involved Freud's influence on the profession and his belief that religious faith is a personality weakness or method of escape from real problems. The social work profession has also taken issue with Christianity's² views of sin that includes our inclination to view those sins that we do not struggle with as being worse than those that we are guilty of and in turn result in a judgmental attitude towards those "sinners." Christianity has also been attacked for distorted beliefs about wealth and poverty, stemming from the Puritan view that poverty was a moral problem and continuing with those Christians that believe that God has especially blessed those who are wealthy, which leads to the conclusion that those who are poor must not be blessed by God because of their own failures.

The current conflicts between the social work profession and Christianity involve differences in acceptance of homosexuality and the resulting beliefs about how to respond to individuals who

are homosexual, differing levels of acceptance of diverse forms of the family unit, and differing weight placed on the rights of the unborn and the rights of women to make reproduction choices. Christians who teach, learn, and practice social work need to grapple with these and other serious social, family, and personal problems. We also need to learn how to practice both Christianity and social work in ways that are pleasing to God and bring about healing and justice. The Concept provides a structure for learning how to integrate our Christian belief with our profession and how to use research-based best practices of the helping relationship to improve how we witness our Christianity.

Community of Learners

People who teach, learn and practice social work know the importance of being a community of learners. Social work is primarily about the restorative potential of relationships as we reach out to empower those who are in need and to use relationships to facilitate learning of new behaviors. We believe that it is through relationships we can alleviate, distress, and facilitate the accomplishment of life goals.

The greatest commandment in the Bible

involves the importance of relationships. We are called by God to be in a right relationship with Him, with each other, and with ourselves. Jesus called His disciples to learn and work with Him as a group. Both our campus and adult studies curriculum are structured to create a cohort of students who take courses together over a period of two years. Students are encouraged to share knowledge and experiences with each other, to study together in small groups, and complete projects in groups so that diverse skills and learning styles are recognized and appreciated. Social work practice involves working and learning in teams with other professionals and leading treatment groups.

As we are learning, teaching, or practicing social work in communities we also have to remember that God's greatest commandment is to be in a relationship with Him. Thus, an important role of a community of learners is to make sure that we as individuals and as a group are open to the Spirit so God can be working with us and through us to discover greater truths and grapple with difficult human issues, such as just distribution of resources, alternative sexual lifestyles, abortion and a woman's reproductive choice, and diverse family makeup, all of which

can be divisive in Christian communities. Being in a right relationship with ourselves is a matter of integrity that means a Christian community must include ways of relating that honors each individual as God's child, requires behavior that reflects the fruits of the Spirit, and involves communication that is honest and builds trust. These are lofty goals for us as sinners, so our community of learners also requires grace, forgiveness, and forbearance. A community of learners is one who prays together.

Lifelong Study and Application of the Liberal Arts

The social work curriculum builds on a foundation in the liberal arts because the liberal arts attempts to discover and inform us about who we are as God's children and how people have chosen to live in God's world. The humanities, including literature, religion, history, art, music and philosophy, are created or experienced by humans and are thus a record of human experiences and concerns.³ Understanding human experiences of pain, joy, cruelty, caring, frustration, struggles, and accomplishments give us a better understanding of our own experience and the experience of those we are called to help. They also help us to understand

how cultural values are formed and how they impact how people live and relate to each other. The learning from the humanities can even fuel our dreams for a better world.

The natural and social sciences complement the humanities because they give us the answers to some questions and method of finding the solutions to new questions. David Johnson identified five ways the study of science contributes to the learning of the liberal arts.⁴ Two of these reasons are particularly important for social workers. Johnson states that current research in biology and chemistry “influences society and culture in profound ways and in so doing raises ethical questions that only society as a whole can answer.”⁵ Social workers need to understand current issues raised by stem cell research, human genetics and reproductive rights, end of life care and euthanasia, and advanced health care that is too expensive for large segments of the population to afford. These are difficult ethical issues that affect the people social workers serve. Johnson also believes the natural sciences are an important part of liberal arts because policy makers who are not scientists make decisions affecting science. Social workers are interested in impacting policy decisions because we know governmental policy

at all levels impact on quality of life for both the wealthy and the poor. Consequently the natural sciences need to be combined with knowledge of social, political, and economic sciences so we can be informed advocates to “*Speak up for those who cannot speak for themselves, for the rights of all who are destitute*” (Proverbs 31:8).

The practice of social work also requires biological and psychological knowledge of human functioning as a part of the liberal arts studies. Many of the problems in functioning that were believed to be a matter of will, are now recognized to have a biological component. We are able to recognize when depression is primarily a malfunction of brain chemistry and when depression is a normal response to loss and grief. In addition, the physical and social sciences provide us with knowledge of research methods in order to advance knowledge and to be wise consumers of research studies. Studying the liberal arts gives social workers both knowledge of the issues and the thinking ability to analyze difficult problems.

Social worker students are trained to be lifelong learners because our world is continually changing. When I first studied social work, AIDS was not an issue, we studied crisis intervention but not to help victims of terrorists attacks, we learned

about poverty that comes from unemployment not about the working poor, and we learned to help young women go to “homes for unwed mothers” instead of helping teen mothers figure out how to finish high school. Social workers in the future will need to continue to educate themselves as they experience increased globalization, changing demographics that include greater diversity, different types of immigrants and an aging population, the impact of technology on social work practice, and serious economic issues surrounding the high cost of health care and the widening gap between the wealthy and poor.⁶

Total Commitment to Jesus Christ as the Perspective for Learning

This is at our core as a Christian university and social work program. I have experienced this plank of the Concept impacting on teaching and learning in two different ways. First, we engage with our subject matter in a way that attempts to be consistent with God’s truth, as being biblical. Second, we approach teaching and learning in a way that is pleasing to Christ.

Gayle Beebe stated that “learning is the process of overcoming distortion and seeing reality accurately.”⁷ All truth is God’s truth but

distinguishing between what is true and what is false can be, at best, difficult. I tell my students that one way they can work to better ascertain God's truth is to learn empirical research methods. This gives them one method to discern the truth about individual and social behavior. Another way is to learn how to discern biblical truths. All Christian learners need to humble themselves before the Word of God, because God does not give a straightforward procedure manual for living. The fact that Jesus taught using parables is indication that He requires us to analyze and think in order to "hear" His truths. Consequently we encourage social workers to use analytical skills as they learn and practice their profession. We encourage students to be open to all possible explanations and to weigh the consequences of all choices before deciding on the best option. We teach that, just as biblical interpretation is done by multiple educated minds, so too must social workers analyze and interpret information, questions and problems within a community that seeks truth.

As a community of learners we must also approach learning in a way that is pleasing to God. Faculty, students, and practitioners must all take personal responsibility for their learning, actively looking for information that broadens

their knowledge base and using that information with integrity and responsibility. All new learning must also involve an integration and potential reevaluation of Christian beliefs because without active integration of faith and learning, we run a greater risk of learning and practice that will potentially be flawed and harmful to those we want to serve. Learning needs to be transformational so that what we learn becomes a part of who we are, it becomes a part of our identity.

To the extent that faith is separated from social work practice, we would logically have problems with integrity. Parker Palmer believes that “*identity* lies in the intersection of the diverse forces that make up [our] life, and *integrity* lies in relating to those forces in ways that bring... wholeness and life rather than fragmentation and death.”⁸ If we translate that to faith and social work practice, our identity comes from all formal and informal previous learning, faith learning, and professional learning. Parker’s *integrity* would seem to be the extent to which we integrate what we have learned in a way that is congruent and produces a sense of self that is characterized by wholeness and life. When we forget to take our faith into the classroom or our professional work, we run the risk of disintegration and lack of integrity.

Parker goes on to say, “*Re-membering* involves putting ourselves back together, recovering identity and integrity, reclaiming the wholeness of our lives. When we forget who we are we do not merely drop some data. We *dis-member* ourselves, with unhappy consequences for our politics, our work, our hearts.”⁹ New faculty who have been trained to lead two public but separate lives, their professional self and their separate Christian self, find it very difficult to integrate the two in the SAU classroom in a subject that lends itself very easily to an integration of faith and learning. Once this wholeness is accomplished, faculty find a new energy and excitement.

Critical Participation in the Contemporary World

The newly adopted motto of our social work program is “Social Work: Faith in Action.” This motto reflects what faith based social work education is all about and also reflects how this last plank of the Concept influences and is fulfilled by our curriculum. In the classroom we explore how theories and research-based best practices guide our responses to people who are distressed and in need. Students also frequently tell us of their passion and calling to serve Christ by ministering

to those who society shuns and abandons. The learning of theory and best practices provides our students with the judgment needed to help in a way that changes lives and does no harm. This is how we prepare students for “critical participation in the contemporary world” as professional social workers.

The Council on Social Work Education views social justice as a core value of social work, and content on social justice is mandated in the curriculum of programs at both the baccalaureate and masters levels. This last plank of the Concept provides a special challenge to Christian social workers. The profession of social work has its foundation in charitable work.¹⁰ Mary Richmond developed the Charitable Organization Society in New York in the early 1900s, which enlisted women from churches to visit and provide assistance to the poor. This focus on helping families evolved into casework as early “social workers” began to professionalize social work through formal graduate education and other activities that distinguish a profession.¹¹ A second foundation was simultaneously taking place with the Settlement House movement under the leadership of Jane Addams in Chicago. This movement focused on helping immigrants who were providing

the labor for the industrial revolution. Addams believed the people who lived in the vicinity of Hull House could best be helped by empowering them to organize cooperatives to meet their needs and improve the horrible conditions under which they lived and worked (Addams, 1910).¹² This Settlement House movement can be traced to the current social work focus on community development and political advocacy to create social institutions that distribute social resources in a way that demonstrates justice and mercy.

Students come into the social work program wanting to learn in order to fulfill a calling to help people and change the world. Social work curriculum at the undergraduate level provides students with opportunities for graduate school and to be critical participants in our contemporary world. Social workers who have graduated from SAU are making a difference in many parts of the world. We have had students who have completed internships locally in children's protective services, in a woman's abuse shelter, as probation officers, with the fair housing commission, and multiple other agencies that serve children, adolescents, adults and the elderly. Students have also completed internships in the Governor's Office, in Chicago, in Hungary and Yugoslavia.

Our graduates are running an orphanage in Uganda, working with inner-city youth in Los Angeles, helping welfare recipients become employed, working with Laotian immigrants, working in hospitals, schools, youth centers, nursing homes, the Children's Ombudsman Office, as substance abuse therapists, in foster care and in multiple other ways are participating and making a difference in our world. Over half have gone on to graduate school and our graduates are impacting on current students by acting as field instructors, doing guest speaking in our classes, and returning to SAU as faculty.

Endnotes

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² Although I recognize that there are a broad spectrum of beliefs among devout Christians based on study and interpretation of the Bible, I am using Christianity in a way that is stereotypical and used by those who take issue with the beliefs of some but don't have the knowledge or understanding to be able to acknowledge this diversity of beliefs and expressions of faith.

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*The Concept
and
Sociology*

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“What does God require? ...He has shown you what is good. Do justice, love tenderly, and walk humbly with your God.” –Micah 6:8

Theologian Karl Barth once said that preachers should prepare their sermons with a Bible in one hand and a newspaper in the other. If we, as faithful Christians, are committed to not just preaching the Word, but also living the Word, Barth’s advice is good not only for preparing sermons, but also as a means of preparing for life. The newspaper, at least theoretically, shows us the world as it is. Scripture invites us to see the world

as it should be, to embrace what Verna Dozier calls “the dream of God.” This dream of God is invoked in churches around the world on a regular basis when we pray “thy kingdom come, thy will be done on earth as it is in heaven.”

Some time ago I was in London waiting for a train in London’s subway system. As I waited, I heard a voice from the heavens saying over and over again, “mind the gap.” Actually, I pretty quickly realized that the voice was coming from the loudspeaker system and was referring to the gap between the platform and the train. But minding the gap is a pretty good motto for those of us who live between Eden and the New Jerusalem.

Sociology can play an important role in helping us understand the gap. Because sociology is an empirical science it cannot help us answer the question of what the world should be. These are value questions that are, by definition, outside of the realm of sociology as science. Sociology can help us understand the world as it is, and even more importantly, offer insights into why the world is as it is.

In his influential book *The Sociological Imagination*, C. Wright Mills writes “the sociological imagination enables us to grasp

history and biography and the relations between the two within society.”¹ By asking why things are the way they are, we can better understand the impact of social roles, culture, economic forces, and even what the apostle Paul referred to as “principalities and powers.” From microsociological concepts such as self-concept and self-esteem to macrosociological concepts such as social structure and the global economy, sociology can help us understand humanity and the social world we inhabit.

Walter Brueggemann, professor of Old Testament at Columbia Theological Seminary, suggests that a different kind of imagination allows us to go beyond seeing the world as it is, and to proclaim the world as it should be. In his book *The Prophetic Imagination*, he argues that the task of prophetic ministry is to proclaim an alternative consciousness, a different way of being in the world.² The Old Testament prophets used prophetic critique and prophetic energizing to encourage the people of faith to move toward the world as it should be. Isaiah 58 provides an excellent example of prophetic imagination.

The people of Israel come before God, asking why God does not listen to them. They have fasted and prayed, but from their perspective

God seems to have ignored them. God, speaking through the prophet Isaiah responds:

‘Why have we fasted,’ they say, and you have not seen it? Why have we humbled ourselves, and you have not noticed?’ “Yet on the day of your fasting, you do as you please and exploit all your workers.

Your fasting ends in quarreling and strife, and in striking each other with wicked fists. You cannot fast as you do today and expect your voice to be heard on high.

Is this the kind of fast I have chosen, only a day for a man to humble himself? Is it only for bowing one’s head like a reed and for lying on sackcloth and ashes? Is that what you call a fast, a day acceptable to the LORD ?

“Is not this the kind of fasting I have chosen: to loose the chains of injustice and untie the cords of the yoke, to set the oppressed free and break every yoke?

Is it not to share your food with the hungry and to provide the poor wanderer with shelter—when you see the naked, to clothe him, and not to turn away from your own flesh and blood? (Isaiah 58:3-8, NIV)

This passage provides an excellent example of what Brueggemann calls “prophetic critique,” essentially criticizing the world as it is. How do we get from here to the world as it should be? Through what Brueggemann calls “prophetic energizing.” The next few verses in Isaiah 58 provide another excellent example:

Then your light will break forth like the dawn, and your healing will quickly appear; then your righteousness will go before you, and the glory of the Lord will be your rear guard.

Then you will call, and the Lord will answer; you will cry for help, and he will say: Here am I. “If you do away with the yoke of oppression, with the pointing finger and malicious talk, and if you spend yourselves in behalf of the hungry and satisfy the needs of

the oppressed, then your light will rise in the darkness, and your night will become like the noonday.

The Lord will guide you always; he will satisfy your needs in a sun-scorched land and will strengthen your frame. You will be like a well-watered garden, like a spring whose waters never fail.

Your people will rebuild the ancient ruins and will raise up the age-old foundations; you will be called Repairer of Broken Walls, Restorer of Streets with Dwellings. (Isaiah 58:9-12, NIV)

Sociology, as one of the liberal arts, can provide important tools and concepts for understanding the world as it is. It cannot provide the values and vision necessary to pull us toward the world as it should be. When we effectively integrate faith and learning our serious study of sociology can help us understand the world as it is, our commitment to Jesus Christ can help us understand the world as it should be, and our

critical participation can move us in the direction of the dream of God.

Sociology and Faith in a Postmodern World

The postmodern turn provides a unique opportunity for institutions of higher education to revisit the question of how we think about integrating faith and learning. Postmodernism is often dismissed as nothing more than cultural relativism at best and nihilism at worst but this is an overly simplistic assessment. Two postmodern themes that impact the question of faith/learning integration are incredulity toward metanarratives and deconstruction.

Decentering is about challenging privileged ways of knowing that result in a grand narrative that will explain everything. The two great grand narratives of the 19th century were religion and science. The challenges posed by Feuerbach, Marx, Nietzsche, Darwin, and Freud were perceived, quite rightly, as a challenge to religion as “the” way of knowing. Self-appointed keepers of the faith fought back and challenged the role of science as the presumptive arbiter of truth. The postmodern project has effectively said “a plague on both your houses” and skepticism toward grand narratives of any kind is an important part

of postmodernism.

This does not mean that religion and science are invalidated as ways of knowing, only that they are “dethroned” and called to humility. For science this means recognizing that empiricism is an important and valuable way of knowing about our world, but not the only way of knowing. Instead of a grand narrative, science becomes a set of rules for truth to be used in addressing particular questions. The humbled scientist is left to say when we are studying things that can be known through empirical observation and analysis we will play by the set of rules known as the scientific method.

Similarly, religion is called to acknowledge that the community of faith does, in fact, see through a glass darkly. Does this mean we must give up the idea of objective truth? Not at all. It does mean we must recognize that the best we can hope for is subjective perceptions of objective truth. The Kantian distinction between *noumenon* and *phenomenon* (the thing as it is and the thing as we perceive it) is an important one, and we are called to recognize that the things we take for granted to be objectively real are deemed so not because we have objective perceptions of objective truth, but because we have reached intersubjective

consensus regarding what is real.

For people of faith, this means adopting a spirit of humility regarding our truth claims. In spite of its claims to have revealed truth, the church has been quite wrong on a number of scientific facts and social issues. From the Crusades to Copernicus, from the Salem Witch Trials to slavery, the church has often misperceived objective truth. Deconstruction is a matter of recognizing that all truth claims are situated in specific sociohistorical contexts and are made by humans whose social locations and political interests affect their subjective perceptions.

Integration of faith and learning in a postmodern era means recognizing the limitations and benefits of various ways of knowing. C. P. Snow once referred to the humanities and the sciences as “two cultures,” each with its own set of rules, each with different starting assumptions, and each with different epistemological frameworks.³ The “third” culture in Christian higher education is faith. Guided by theology, scripture, and experience, the person of faith builds a worldview informed by an ethos and embodied in inspired narrative and master stories. This third culture belongs alongside the other two as a critical way of knowing. Historically, it has been elevated above

the other two, i.e., privileged as a grand narrative, in Christian higher education. This is a mistake, because what is really elevated is not objective, revealed truth but subjective, and often wrong, perceptions of the truth. One of my theology professors constantly reminded us that “every conception of God is a misconception.” Humility demands that we worship our God, always being clear that God is ultimately beyond knowing as object, but knowable as subject through divine revelation.

Deconstruction demands that we acknowledge who we are people with “feet of clay.” That is, my social location (North American middle-aged, white middle-class male) affects my vantage point on truth. I am an acculturated being and cannot be otherwise. Bias and selective perception are inescapable, but by acknowledging and scrutinizing these things I can become more aware of how these forces shape my perceptions of ultimate truth. This is why theology is always best in a dialogical mode where that dialogue occurs in heterogeneous communities.

Once we have recognized the contributions and limitations of our ways of knowing we are ready to integrate by looking at the same subject through multiple vantage points—a kind of

epistemological triangulation. The arts often appeal to intuitive and abstract ways of knowing, the sciences appeal to logic and sensing. Faith has elements of both, but it also involves a spiritual dimension that is not reducible to either of the other ways of knowing.

Perhaps the best way to integrate faith and learning is to integrate all three ways of knowing, all three cultures. Our starting point has to be first assumptions and epistemological foundations. Our ending point must be ethics. We begin with "How do I know?" and end with "What ought I to do?" This is where commitment to Jesus Christ as our perspective for learning becomes so critical. Both the arts and the sciences are poorly positioned to answer the ethical question. Science, by limiting its scope to the empirically knowable, is not in a position to make judgments about questions of ultimate value. The arts can make statements, since all art is political, but they are statements that have no authority base other than the values of the artist. Serious study of the liberal arts should help us develop what Paolo Freire described as "*critical consciousness*."⁴ Commitment to Jesus Christ as our perspective for learning and living provides a foundation from which we can make *critical commitments* that reflect God's desire

for *shalom*, justice, and compassion. Critical consciousness without critical commitment will only lead to despair (as in “I now see the world clearly, and it is clear that all is lost”). Critical commitment provides the faith, hope, and love that are necessary for *critical participation* in the contemporary world.

The first journal of sociology published in America was the *American Journal of Sociology* published at the University of Chicago in 1895. The theme of the first issue of that first journal was “Christian Sociology.” The point of connection between Christian faith and sociology in most of the articles was not our common epistemology or our common worldview but a common concern for social justice. Several years ago, Joseph Feagin, the President of the American Sociological Association, gave an address titled “Bringing Justice Back In.”⁵ About that same time, Richard Foster was making his case for the justice tradition in Christianity in his book *Streams of Living Water*.⁶

The integration of Christian faith and sociology provides an exciting opportunity to address the concern for justice too often neglected by both traditions. The biblical record provides insights into God’s concerns for justice

through the law, the prophets, and the gospels. Sociology can assist us in “doing justice” by giving us tools to better understand the causes and consequences of injustice and by providing us with an understanding of effective means to social change. When Christian sociologists are able to draw from sociological insights *and* Christian faith, they are more fully equipped to do what God requires: “do justice, love tenderly, and walk humbly with our God.”

Endnotes

¹ Mills, C. W. (1959). *The sociological imagination*. New York: Oxford University Press.

² Brueggemann, W. (1978). *The prophetic imagination*. Philadelphia, PA: Fortress.

³ Snow, C. P. (1959). *The two cultures and the scientific revolution*. New York: Cambridge University Press.

⁴ Freire, P. (1973). *Education for critical consciousness*. New York: Seabury.

⁵ Joe Feagin served as the 91st President of the American Sociological Association. His Presidential Address was delivered at the Association's 2000 Annual Meeting in Washington, DC, and was later published in the February 2001 issue of the *American Sociological Review* (Feagin, J. (2001). Social justice and sociology: Agendas for the twenty-first century. *American Sociological Review*, 66(1), 1-20.)

⁶ Foster, R. (1998). *Streams of living water: Celebrating the great traditions of Christian faith*. San Francisco: HarperSanFrancisco.

Paul Nemecek is chair of the Department of Sociology and is very involved in the cross-cultural program, having led trips to Jamaica, Belize, Guatemala, Costa Rica, the Czech Republic and the United Kingdom. Nemecek has been at SAU since 1979 and has served as assistant dean for international education and associate dean for the School of Arts and Sciences. He has received the Teaching Excellence Award and Second Mile Award, and is a three-time recipient of the Faculty Merit Award. In 2007, he was elected to a fourth term as president of Faculty Forum.

B.A., Spring Arbor University
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Spring Arbor, 1982-

Appendix

The Ideal Spring Arbor University Graduate

The faculty has defined the ideal Spring Arbor University graduate as one who embodies the Spring Arbor University Concept. Thus, the goal of the Spring Arbor University experience is the development of a person who:

- Is prepared to be a continuing student, capable of self-education. In a world of exponentially expanding knowledge, the student must be able to sort out relevant knowledge, make wise judgments, and think divergently, critically and productively.
- Has adequately prepared in one or more disciplines to undertake further graduate training, or to fill another productive and rewarding role in our contemporary world.

- Has developed an understanding of heritage, discovered the crux of contemporary social and moral issues, acquired tools of researching, and improved skills of communication.
- Has gone through the process of self-confrontation. As a result of this confrontation, the graduate will understand more fully their personal motivations, aspirations, capabilities and goals in life.
- Has learned the value of physical fitness as a part of total fitness, and accepts personal responsibility for developing and maintaining optimal health and wellness.
- Has encountered the Christian faith, grasped a portion of its demands for our day, and discovered the perspective that life in Christ can give to all learning, vocation and life itself. In this encounter, the graduate will have formed a meaningful relationship with Jesus Christ and fellow human beings.

- Is a person of compassion who cherishes community among all people and expresses compassion by critically participating in the world. The student is sensitive to need, responsive to opportunity and wise in participation.
- Is a well-integrated person who is prepared to live a life pleasing to the Creator, enriching to others and self-rewarding.



Dr. Gayle D. Beebe

Born in Oregon of Quaker parents, Gayle D. Beebe first gained recognition as an all-state football and baseball player. As a student, however, he experienced an "intellectual awakening" that heightened his pursuit for academic excellence, steering

him on the path toward Christian higher education. Pastor, professor, administrator, author and lifelong student, Beebe states that when he first read the Spring Arbor University Concept, it "perfectly expressed that to which I want to devote my professional life" — the life of study and the life of devotion to Jesus Christ. Beebe served as the 27th president of Spring Arbor University.



Dr. Jon S. Kulaga

Born and raised in Michigan, Jon S. Kulaga has spent most of his professional career in Christian higher education. Over the years, Kulaga has directed such diverse areas as institutional advancement, marketing, student affairs and teacher education —

serving in both private and state university settings. An alum of Spring Arbor University, Kulaga is an ordained elder in the Free Methodist Church of North America. Kulaga most recently served as director of the E.P. Hart Honors Program, director of undergraduate teacher education, and was an assistant professor in the School of Education at Spring Arbor University. Kulaga is co-editor, along with Beebe, of the Concept series.

As we introduce the third volume in our Concept series, *The Concept and the Sciences*, we begin a new direction and focus. The first two volumes, *A Concept to Keep* and *Keeping the Concept*, provided a historical context for the origin and development of the University's mission, as well as how it is applied across the entire Spring Arbor University curriculum.

The Concept and the Sciences is the first volume to articulate how the University mission impacts specific departments and majors. It is more narrow in scope, yet deeper in focus. In this work, the faculty of the natural and social sciences communicate how the the Concept impacts and informs the integration of our faith in Jesus Christ with the life of learning within these academic disciplines.



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