Empathy: The Language Link

by Ralph Leverett

An Overview of Language

Language is often described as the “bearer of culture.” Included in that concept is the learning of terms related to who we are, in what context we live, and how we interact with one another. Of the various linguistic categories of language—phonology (sounds), morphology (basic units of meaning), syntax (the rules for constructing phrases and sentences), semantics (the “meaning category”), and pragmatics (social uses)—the latter is most relevant to the development of empathy.

The Comprehensive Nature of Pragmatic Language

Pragmatics consists of both verbal and non-verbal components of language. All other linguistic categories are subsumed under it. Depending upon the message we intend to send, all of the following are within the domain of pragmatics: the words we choose, the relative complexity of the statement, the way in which the message is sent including prosodic elements (pitch, rate, stress ...), the use of facial expressions, body language, and gestures.

Pragmatic language development occurs almost from the time of birth. Although children do not speak their first meaningful word until about ten to twelve months of age, they gather information in words and actions during that period as the basis of the words they will use. Equally important is that they use non-verbal skills such as reaching, pointing, and gesturing to communicate, since they lack the words to interact.

The Importance of Context in Determining Meaning

One of the most important aspects of pragmatics is that it is context-specific. Related to this element is the consideration that what a child does within a particular context generally has communicative intent. In more common terms, these concepts allow the interpretation of non-verbal communication. What might be an isolated gesture in one setting has communicative value in another. For example, a child who extends an empty cup that once contained juice might mean: “I want more juice,” or “Please take my cup,” or “I want to show you that I have finished, but do not take my cup.” The “receiver” of that message considers the recent events and the context in which they and the current action have occurred to interpret the gesture meaningfully.

Empathy Influenced by Pragmatics

Taken within the concepts included in this study on empathy, those unspoken actions such as a comforting or concerned look, a pat on the back, and movement toward a child who appears to need some level of assistance all communicate important ways in which we can interact with a person who is in some degree of distress. These actions constitute pro-social behavior and include sharing, helping, comforting, making reparations, and related acts of kindness.
Exactly how and when pro-social behaviors are learned depends upon the personality of parents and other caregivers and the climate they create. The emergence of these skills is certainly observable by two years of age (Eisenberg, 1982). More certain are those child-rearing practices that promote and inhibit the development of pro-social behaviors such as empathy.

Parents’ Role in the Development of Empathy

Presumably both parents contribute to the formation of pro-social behaviors in children; however, the role of mothers appears to be cited more often. Among the child-rearing practices that promote the development of empathy are the following: attitudes that are responsive, non-punitive, and non-authoritarian; reasoning with children about the effects of their behavior on others; parental modeling of empathic behaviors; explaining why others may experience pain resulting from the behaviors of their child; encouraging their children to discuss their own feelings and problems, including the pain they feel based on their treatment by others (Clarke, 1984).

Parental behaviors that negatively affect empathic feelings include threats and physical punishment, inconsistent care, parental rejection or withdrawal, a father’s physical abuse of the mother, use of extrinsic rewards or “bribes” to improve behavior (Kohn, 1991).

What is apparent in both lists is that they include behaviors that are both verbal and non-verbal. While not stated deliberately in these lists, the role of a “mismatch” between verbal and non-verbal—contradictory behaviors—would by nature send mixed messages to a child in the formative years.

Goleman (1994) relates the reactions of “Hope,” a nine-month-old infant, in response to seeing another baby fall. She crawled to her mother for comfort as tears formed in her own eyes. He goes on to describe the two-stage reactions of “Michael” who, at fifteen months, took his own teddy bear to comfort his young friend who was crying. When that proved insufficient, he found his friend’s security blanket and took it to him. Goleman summarizes these accounts by stating that because very young infants cry when they hear another infant cry, they are demonstrating what may be “the earliest precursor of empathy.” This suggests that what we might call “embryonic empathy” is present or develops concurrently with parental influence. Furthermore, there may exist some intuitive component which is fostered by the “saying and doing” of pragmatic language.

Our own knowledge of the world would lead us to conclude that if this predisposition is apparent in all children, it must be “lost” as some children develop into childhood. If this is true, it must also be nurtured in others who demonstrate it throughout their adult lives.

Attunement and Misattunement

As Stern (1987) recorded a variety of parent-infant interactions, he concluded that some are more critical than others. Among the most critical are those times when children become aware that their own emotions are accepted and met with empathy. He calls the results of these times attunement. He believes that attunement develops informally, the result of a parent and child “connecting.” Although it may develop informally, it does not occur between every parent and child. He compares it to the bond between lovers. Part of it includes a kind of mood matching which brings comfort to the infant. Attunement may develop as much through the prosodic
elements of language (pitch, tone, rhythm) as through words themselves and may begin as early as eight months of age.

The inverse of attunement is misattunement. A child who is denied attunement consistently will begin to avoid expressing empathy and may cease to feel it. The implications of misattunement are potentially detrimental to the social and emotional development of the child and those with whom she interacts. As we consider both attunement and misattunement, both appear to be identified with the non-verbal elements of pragmatic language and conveyed in an almost intuitive sense.

Do Parents Influence the Development of Empathy Through Language?

While we cannot be certain exactly how empathy develops in children, we can be relatively sure that it does not develop fully without a framework of words and actions. Parents and other caregivers influence language development through a pattern often designated as “motherese,” or to use a more contemporary expression, “parentese.” The latter term is more reflective of attempts to recognize the role of fathers in children’s overall development.

Components of Parentese Compared to Adult Language

Parentese is an almost “natural” technique for many, but not all parents. Programs such as “Indirect Language Stimulation” endeavor to provide guidance to those parents for whom the strategy is not automatic. The following are characteristics of “parentese,” a modification of adult language:

Paralinguistic

speech is slower, punctuated by pauses for longer sentences and important (content) words
pitch is generally higher and greater in range
stress and intonation are more dramatic
loudness is varied, including “intimacy” both in loudness and tone
generally smoother, more fluent
fewer words per minute

Lexical (word choices)

smaller, simpler, less sophisticated vocabulary
much more paraphrasing (three times more)
saying the same thing in several ways
more concrete, here and now

Semantic (word meanings)

smaller range of possibilities, not multiple meanings
used within the context (context-specific meanings)
Syntactic

limited number of broken or run-on sentences
less complex, shorter
approximately 60% are questions or imperatives

Conversational

fewer utterances during the conversation
greater number of repetitions, redundancy

Parentese is the primary teaching tool during the first two years of life. During the first year, a parent labels, follows the child’s lead, requests the attention of the child. She points. The child looks. The mother withholds the label until the child looks. As development progresses, the mother requests the label from the child.

By the second year of life, the mother continues to label, but she also requires more labeling from the child (labels for objects, actions, emotions). The language-building of the first and second years includes spoken language and, equally important, non-verbal elements which convey a range of emotions through tone and actions. It would seem, then, that pragmatic language which encompasses essentially all that we do with language would serve an essential role in the development of empathy and other emotions. No less an authority than Martin Hoffman, who has devoted much of his career to studying the development of empathy, supports this concept. He states, “Yes, I agree that pragmatic language and especially prosody (in infancy) may be empathy’s primary vehicle. The way I’d put it is: preverbal language is empathy’s vehicle in infancy; as is semantically meaningful language in adulthood. So, empathy is necessary for pragmatic language which in turn is empathy’s vehicle. Which comes first? Or does it matter?” (Hoffman, 2001).

What remains as a significant question, however, is how children immersed in all of the experiences necessary for the development of empathy somehow fail to develop this crucial human behavior. Equally intriguing is how other children whose families exhibit none of the qualities associated with empathy are able to develop it—a subject for continued research.

References

A Creative Tapestry of Ideas: Religious Sources For Gandhi’s Nonviolent Activism

by John Jaeger

Mohandas Gandhi’s life was one of self-sacrifice and nonviolent activism. He is widely acknowledged as a major factor in India’s attaining independence from British rule in 1947. Much of his life was spent in this struggle for national autonomy and freedom. Yet Gandhi's concerns covered a broader range than the fight for India's freedom. One cannot fully understand the actions Gandhi took without understanding his philosophical and religious perspective.

This article focuses on Gandhi’s religious beliefs and the way they affected his efforts in nonviolent resistance. Gandhi remained a Hindu his entire life, but he learned from such religions as Jainism, Buddhism, Islam, and Christianity. In addressing this subject, two basic areas will be examined. First, I will discuss Gandhi's nonviolent resistance as he practiced it and as he understood it. Then, I will examine the influence various religious traditions played in shaping his views about nonviolence and political activism.

Gandhi’s Nonviolent Activism

Gandhi’s Practice of Nonviolent Activism

Gandhi engaged in protest movements and peaceful political efforts for most of his adult life. He participated in such activities on behalf of his Indian countrymen both during his years in South Africa (1893-1914) and his years in India (1915-1948). Due to his energetic resistance to governmental practices, he spent a total of approximately seven months imprisoned in South Africa and six years imprisoned in India.¹ Below are two significant examples of Gandhi’s active resistance as he practiced it and mobilized others to practice it as well. The first example comes from the period in South Africa. Gandhi wrote of experiencing prejudice soon after his arrival there due to his skin color. He saw this prejudice as a disease and vowed to "try, if possible, to root out the disease and suffer hardship in the process."
² In 1906, Gandhi had his first opportunity for such action in response to the Asiatic Registration Bill. This ordinance, passed into law in July 1907, required all Indians in the Transvaal to register with the governmental Asiatic office and carry a certificate of registration at all times. The ordinance also required all Indians to be fingerprinted. Failure to abide by these rules would result in fines, imprisonment, or deportation. The "slack Act" targeted people of Indian race and indirectly aimed at reducing the Indian population in South Africa.

Gandhi responded to this ordinance in a variety of ways over a two-year period. During this time he also developed his lifelong concept of Satyagraha (truth-force) as a method of peaceful resistance. In August 1907, he spoke at a large gathering of Indians, calling for the bill to be rescinded. In October of that year, Gandhi sailed to London to communicate his concerns with the British government; in November, he spoke with members of Parliament.
After the ordinance became law, he protested by means of picket lines and campaigns to encourage Indians to refuse registration. In January 1908, he was jailed for the first time. After receiving promises that the registration act would be repealed, he voluntarily registered and encouraged others to do the same. But when the repeal never came, he resumed his campaign of nonviolent protest. In August 1908, he and two thousand others gathered in Johannesburg and burned their registration cards. Large numbers were jailed for such actions; Gandhi was one of these. For two months, beginning in October 1908, he stayed in jail. In 1909, he was arrested two more times for failure to produce a registration card. While this form of resistance met with a firm response by the authorities, it did have a positive effect. In time, the "Black Act" was repealed. Also during this period, Gandhi articulated his strategy for activism with the term satyagraha.

A second major nonviolent protest came in 1930, when he was living in India. This campaign, perhaps the most famous of all, regarded the making of salt. The protest movement spoke to a concrete problem, but beyond that, served as a symbolic act. The British, as the imperial power, had a monopoly on the production of salt. Indians paid a significant tax on all the salt they purchased. Yet, by controlling this industry, Britain was economically hurting the Indian people. India had plenty of accessible salt water from the ocean, and salt production would be "a valuable, easy village industry..." Yet the government forbid it. Gandhi also saw this as exploitation in that salt was "a vital necessity." In a land with such a hot climate, people had to use salt as a preservative.

Gandhi began his satyagraha campaign by first writing a letter to the British viceroy in India, protesting the salt tax and calling for Indian freedom to make salt. When this letter proved ineffective, in March 1930 he led his followers on a 241-mile, three-week march to the ocean to make salt. On April 5, he and other participants reached the ocean and began making salt from the salt water. The event was widely publicized and had mass appeal. Soon people all over India began to make salt, in violation of the law. As a result, the government arrested many people, including Gandhi.

Yet the next stage of the satyagraha program had been set prior to Gandhi's arrest and proceeded successfully. A group of 2,500 unarmed members of Congress and others walked in rows toward the government-run Dharasana Saltworks. The plan was to take the business over nonviolently. Opposing them were four hundred policemen bearing five-foot clubs with steel tips. As waves of people neared the saltworks, the policemen beat them onto the ground. Then the wounded were carried off by other participants. After the injured from one row were removed, a new row stepped forward to receive the same beating. This was a powerful example of courageous nonviolent resistance practiced on a large scale.

The British government, embarrassed by this series of nonviolent actions, called for a Round Table Conference in London in 1931. Gandhi participated, along with British officials, and the result was known as the Gandhi-Irwin Pact, or the Delhi Pact. The pact allowed Indians to have freedom to produce some salt. More importantly, the pact openly showed the power Gandhi's efforts had in bringing changes in the British-Indian relationship.
Gandhi's Understanding of Nonviolent Activism

Having discussed Gandhi's practice of nonviolent activism, it is necessary to examine his intellectual and theological understanding of that practice. As stated above, Gandhi defined this practice as satyagraha. Maya Chadda noted that "Satyagraha was not a passive procedure; it was meant to be an active method of resisting injustice through deliberate noncooperation." The method aimed at bringing changes in the relationship between India and the British government without using coercion or following a procedure of violence. Satyagraha literally is translated as "clinging to truth" or "holding fast to truth"; Gandhi used the phrase "truth-force" for it. The concept basically combined three other important terms: truth (satya), nonviolence (ahimsa), and self-suffering (tapasya).

Truth, or satya, was for Gandhi "the sovereign principle which included numerous other principles." Truth served as the overarching concept for describing reality; this included spiritual, social, political, and economic reality. Truth was divine as well: "the Absolute Truth, the Eternal Principle, that is God." Truth served as the ultimate basis for all Gandhi did. His battles were against systems built upon untruth and error. He had confidence in his causes, because they were based on truth and therefore would ultimately prevail.

Asatya, meaning untruth, also means “nonexistent”; and satya, or truth, means “that which is.” If untruth does not so much as exist, victory is out of the question. And truth being “that which can never be destroyed,” Gandhi, on the basis of his philosophical and religious thinking, placed truth at the heart of his satyagraha campaign. He also focused on the idea of nonviolence, or ahimsa. Ahimsa meant "not merely a negative state of harmlessness but a positive state of love, of doing good even to the evildoer." Gandhi described ahimsa in one place as "universal love." Ahimsa bore a close relationship to truth. Nonviolent love was the means used to strive toward the goal of truth. And nonviolence, as the way of God, the ultimate reality, was the way of truth. The world, in its coerciveness and violence (himsa), showed its character as untruth. The use of nonviolence sought to reveal this fact to the coercive party and bring a change in attitude, a kind of conversion. Because of this close tie between satya and ahimsa, Gandhi could describe satyagraha as "love-force" or "soul-force."

Self-suffering, or tapasya, was another key element in satyagraha. This points both to the courageous and the sacrificial character of ahimsa. Gandhi did not advocate a passive, weak form of nonviolence. He even said it was better to use violence than to be passive due to cowardice. His form of nonviolence was a forceful, strong kind. It also involved sacrifice, self-suffering. "The quest for truth involves tapasya--self-suffering, sometimes even unto death. There can be no place in it for even a trace of self-interest." It was this purity of sacrifice and the courageous forcefulness of it that would bring a change in the oppressor.

The method of satyagraha aimed at a specific goal; this goal was swaraj, or self-rule. In Gandhi's thinking, swaraj had the political meaning of national independence. He wanted to be free from British rule, free from corrupting Western influences, and free for healthy village existence. His goal was for the village to be "a complete republic." His vision was for swaraj to mean a society of truth, nonviolence, and spirituality. In striving toward swaraj, three other issues had to be addressed. These were Hindu-Muslin relations, untouchability, and distribution of wealth.
Gandhi as an adult referred to himself as a *sanatani*, or orthodox Hindu. He did so due to his acceptance of Hindu scripture, his belief in *varnasrama* (in the Vedic sense), his belief in cow protection, and his acceptance of idol worship. While it is true that Gandhi drew largely from Hindu ideas, he did so in a unique way. As Rao noted, "Gandhi's view of Hinduism was much deeper and broader than Hinduism as generally understood." For instance, *tapes* in Hinduism often related to suffering from past *karma*. Yet Gandhi took this concept and applied it to his *satyagraha* method of political activism. Likewise, he expanded the idea of *ahimsa* to have broad social and political implications.

In one sense, Gandhi was thoroughly Hindu. His entire life involved striving for *moksha*, or liberation. He believed this liberation from bodily existence and rebirth came through living by self-denial and concern for others. And this liberation would unite him with reality as a whole. He called *moksha* "the final absorption of the Soul in the Infinite Soul that pervades all things." One could view Gandhi's social and political activism as coming out of his efforts to attain *moksha*.

Gandhi held to many of the teachings of Advaita Vedanta, although he did so from a theistic position. The non-dualism appealed to him; this allowed him to acknowledge that much of present reality was in a significant sense unreal. He could draw political implications from this. Gandhi also liked the *advaita* position on the unity of all life. He wrote, "I believe in *advaita*; I believe in the essential unity of mankind, for that matter, of all that lives." From this teaching, Gandhi could argue for the interdependence of all creation. This supported his nonviolence and his vision of an inclusive concept of *swaraj*. He went further, viewing *advaita* doctrine as "excluding totally any idea of superiority" of some humans over others. This idea fed into his embrace of untouchables and his resistance to British control of India.

While Gandhi utilized various Hindu scriptures, he viewed the *Bhagavad Gita* to be the most important one. He once wrote that he had "lived out Hinduism as interpreted in the Gita..." He first encountered the *Gita* while in England, and he noted that "the book struck me as one of priceless worth." Gandhi found this work so useful because he interpreted its contents spiritually. Although the *Bhagavad Gita* dealt with a warrior, Arjuna, interacting with Krishna in a battlefield setting, Gandhi did not see the main theme as that of violence. He wrote that "the overall teaching of the Gita is not violence but nonviolence..." He could write this because he interpreted the battle as an internal one occurring "in the hearts of mankind." The *Bhagavad Gita* taught that one should live by means of selflessness and love.

Four teachings in the *Bhagavad Gita* particularly impressed Gandhi. One was *satya*, or truth. He liked the passage stating that "there is no higher duty than truth," for this could summarize Gandhi's own position. Also, he found the message of nonviolence in the *Gita*. He held that the second chapter, which was the most important, "breathes the pure spirit of *ahimsa*." Third, the *Gita* taught about *yajna*, or sacrifice, in such a way that it applied to his concept of *bread-labor*. One should not eat without doing the sacrifice of work. Finally, the *Gita* taught about *anasaakti*, or selfless action. This tied into both Gandhi's activist life and his understanding of the means to salvation.
Jainism

Another religious tradition from which Gandhi drew was Jainism. In Kathiawar, where he spent much of his childhood, Jainism was very prevalent. In fact, Jain monks would come to his parents’ home, and his father would give food to them. Later, when Gandhi prepared to go to school in London, his mother consulted with a Jain monk, who had him vow to abstain from women, meat, and wine. With this background, it is not surprising that he later held that Jainism, as well as Buddhism, was part of the Hindu religion.

Gandhi found strong support for his nonviolent efforts through a Jain friend, Rajchandra Rajivbhai. Rajchandra served as a supporter and ally for a number of years. Gandhi once wrote that he "captivated my heart in religious matters as no one has till now." He also wrote that "the bedrock of his faith was unquestionably ahimsa." This devout Jain, with his strong self-discipline and moral rectitude, influenced Gandhi in a special way.

J. T. F. Jordens, in "Gandhi and the Bhagavad Gita," argued that Gandhi's way of interpreting the Gita developed from the influence of Raychandra. Raychandra encouraged him to view the Gita as a poetic presentation of the individual striving for the state of non-attachment. This interpretation fit into his own Jain belief system and the life he exhibited as a devout Jain follower. Jordens held that Gandhi read the Gita through the interpretive lens provided by Raychandra. While this argument is somewhat speculative, it does point to the underlying influence Jainism had on Gandhi.

The Jain emphasis on ahimsa certainly made an impact on him, but he interpreted ahimsa in ways that differed significantly from that of the Jains. This was revealed clearly when Gandhi, in 1928, had a suffering, incurably ill calf put to death at his Sabarmati Ashram. This action set off a controversy, especially among the Jains; they considered the killing of the calf as himsa. Gandhi considered mercy killings, of animals or humans, to be acts of ahimsa.

Another element from Jain thought that influenced Gandhi was the understanding of anekantavada, meaning "no one view is to be taken exclusively by itself." Truth was many-sided, and people only understood truth from a particular perspective. This insight seems to have shaped Gandhi's approach to religious pluralism and his tolerance for differing beliefs in general. He once wrote that varied positions of the truth were like "different leaves of the same tree."

Buddhism

Gandhi also came to appreciate Buddhist teachings. When in England, some Theosophist friends encouraged him to read Edwin Arnold's The Light of Asia. This work discussed the life of Buddha. Gandhi later became acquainted with other books on Buddhism as well. Perhaps the example of the Buddha, Gautama, inspired him as much as anything else in Buddhism. Gandhi wrote that "I owe a great deal to the inspiration that I have derived from the life of the Enlightened One." The path Buddha took had some similarities to the one Gandhi himself was taking. Buddha attacked an "arrogant priesthood" but also lived by "gentleness and love" in all his actions. He resisted artificial religion based on animal sacrifices and empty rituals, yet he did so
without violence. Gandhi held that Buddha was a great reformer of Hinduism; in this sense, Gandhi was the spiritual heir of Gautama.

Gandhi referred to Buddha admiringly as "that Great Lord, Master, and Teacher of Mankind." He held that Gautama was not an atheist. He saw the doctrine of nirvana as the negative side of mukti (emancipation). Both aspects were important; from this perspective, Gautama seemed very much Gandhi's spiritual brother. Gandhi also appreciated that Gautama preached racial equality and encouraged outcasts to become a part of his movement. This helped confirm Gandhi's own convictions about these matters.

Mahayana Buddhism's teaching on the bodhisattva ideal also influenced Gandhi. The idea of a person attaining enlightenment but choosing, out of compassionate love, to remain on earth to help others appealed to him. This teaching probably helped shape his understanding of religion as involving service to humanity. The bodhisattva served as a model for the kind of religious life Gandhi sought to represent.

Islam

The example of the Prophet and the early Islamic leaders inspired him as well. Gandhi learned a great deal about Islam through books he read while in London. Thomas Carlyle's Hero and Hero Worship and Washington Irving's Life of Mahomet and his Successors were two of the books he read. He also spent significant time with an Imam from South Africa. According to Charles Andrews, this man was a personal friend and a source of spiritual counsel for Gandhi. Although Muslim-Hindu relations were tense during Gandhi's lifetime, he looked beyond this and saw real value in the Islamic faith.

Gandhi was attracted to Muhammed's faith and practice. He noted the Prophet's "intense devotion to his friends and followers, his intrepidity, his fearlessness, his absolute trust in God and his own mission." Courage and determination were qualities Gandhi especially admired, for his own satyagraha efforts required them in abundance. Also, Muhammed's understanding of God's sovereignty over all life led him to apply his spiritual truth to politics, society, and economics. This viewing of reality from a holistic spiritual perspective appealed to Gandhi; he did the same with his concept of satya. Both religious leaders strove to apply their religious principles to a broad spectrum of life.

Gandhi acknowledged that "the sword is the emblem of Islam." But he believed this was due to the violence of Muhammed's time period. The Prophet, though, "had boundless compassion for mankind." And when people refused to accept his message, he suffered for it. While the sword was used, Gandhi believed Islam grew primarily because of its good and loving message.

He also learned from other early leaders in Islam. The high moral example shown by the early Caliphate impressed him. Also, the examples of Ali, Hassan, and Husain, who suffered in their political struggles, were an inspiration to him. As Andrews noted, Gandhi gained strength from them "for the great conception of suffering injury without retaliation."
Christianity

The Christian religion perhaps affected Gandhi’s thought and action more than any other except Hinduism. Gandhi had important relationships with Christians throughout his adult life. He dealt with missionaries and other Christians; he also studied the New Testament and other Christian literature. The influence of Leo Tolstoy and Henry David Thoreau is significant enough to be dealt with in a separate section.

An area of tension for Gandhi was between the New Testament message he loved and the organized Christian religion he did not love. The latter was closely aligned with the British Empire against which he struggled so energetically. He believed present Christianity was a distortion of the wonderful message of the New Testament in general and of Jesus in particular. Gandhi also had difficulty with certain Christian missionaries who came to evangelize but had little respect for Indian religions or for Indian culture.

Still, Christianity influenced Gandhi deeply. His missionary friend Charles Andrews exemplified love by rendering constant service to others. The example of Jesus Christ also made a big impact on him. He considered Jesus as a high example of a satyagrahi. Gandhi viewed Christ as a courageous religious leader who asserted his message of nonviolent love in a world of religious rigidity and political power. Jesus lived sacrificially, taught the way of love, rebuked the legalistic religious leaders, and died for his cause. Gandhi wrote that "Christ died on the cross with a crown of thorns on his head defying the might of a whole empire." He found the message of nonviolence and non-retaliation compelling. He considered this teaching applicable to corporate entities, such as nations, as well as to individuals. And Gandhi found in the concept of the Kingdom of God an overarching symbol to address both individual and corporate elements. Along the lines of the Sermon, Gandhi was seeking an eternal goal, and the path to that goal consisted of service for humanity. The Sermon on the Mount perhaps had such power for Gandhi because it corresponded to some beliefs he already had. He noted that it "echoed something I had learnt in childhood and something which seemed to be part of my being."

Other New Testament scriptures also had importance for Gandhi. He considered the passage about the cleansing of the temple to show Jesus' forceful expression of nonviolence. This passage helped him interpret Jesus as active rather than passive, strong rather than weak. Also, he understood the Prodigal Son story to teach that "I may not by physical harm compel my son to become good." The method to bring change must be non-coercive if it is to be effective. This fit into the idea of satyagraha quite easily.

Tolstoy and Thoreau

Two Christian intellectuals made a contribution to Gandhi’s thought. One of these, Tolstoy, touched him not only through his books, but also through a mail correspondence. The other, Thoreau, influenced him only through his written works.

Gandhi first encountered Tolstoy by reading his The Kingdom of God is Within You while involved in nonviolent resistance efforts in South Africa. He later wrote that the book
"overwhelmed me. It left an abiding impression on me." This work stressed pacifism, concern for the poor, and commitment to love both in personal and corporate settings. Tolstoy's work helped Gandhi develop a rational basis for his nonviolent practice. The book also led him to study the Sermon on the Mount more seriously. He later read Tolstoy's *The Gospel in Belief* and *What to Do* with similar effect. He said that after reading these books he "began to realize more and more the infinite possibilities of universal love."73

Since Tolstoy was still living, Gandhi began a correspondence with him. In this way, the Russian novelist became a living example for Gandhi. For a period, according to Andrews, Gandhi was a "disciple" of Tolstoy, trying to learn from him and follow in his path.74 Gandhi wrote admiringly that, in the western world, "there is no man so talented, learned, and as ascetic as Count Tolstoy."75 Gandhi's radical decision to return to humble Indian clothes and live the life of a peasant came largely as a result of Tolstoy's influence.76

Gandhi encountered Thoreau, the American Transcendentalist, first through reading his essay, "On the Duty of Civil Disobedience."77 This essay told of Thoreau's period in jail as a result of refusing to pay taxes. It argued for the role of the minority in practicing civil disobedience against an oppressive government. Gandhi considered this an exceptional work, noting that "its incisive logic is unanswerable."78 He respected the work, especially because Thoreau lived out its contents. The essay had "been sanctified by suffering."79 Gandhi went on to read other Thoreau works. He learned from this Transcendentalist the value of the right to dissent, the importance of resisting a tyrannical government, and the honor of suffering for one's beliefs. All these related easily to the theme of *satyagraha*.

Mohandas K. Gandhi served both as a religious leader and a political activist. He was an inspiration to people of various religious faiths, and he was a hero in the effort to bring independence to India. Upon examination, one discovers that Gandhi's activism had its roots in his philosophical and religious thought. This thought developed over a period of time and came about in part through interaction with many different religious traditions. Gandhi learned a great deal from Hinduism, Jainism, Buddhism, Islam, and Christianity.

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4 Ibid.


6 Ibid., pp. 150-51.
8 Ibid.
11 Ibid., p. 43.
12 Ibid., p. 6.
20 Ibid., p. 234.
28 *Young India*, December 22, 1927, quoted in Gandhi, *Gandhi on Christianity*, p. 59.
32 Ibid., p. 15.
33 Ibid.
35 Ibid.
37 Gandhi, The Gandhi Sutras, p. 43.
39 Harijan, October 3, 1936, quoted in Gandhi, Nonviolence in Peace and War, p. 143.
40 Gandhi, Mahatma Gandhi—His Own Story, p. 91.
41 Navajivan, October 11, 1925, quoted in Gandhi, The Moral and Political Writings of Mahatma Gandhi, vol. 1, p. 81.
45 Harijan, September 1, 1940, quoted in Gandhi, Nonviolence in Peace and War, p. 374.
46 Rao, Mahatma Gandhi and Comparative Religions, p. 3.
48 Ibid.
50 Gandhi, Gandhi on Christianity, p. 79.
52 Young India, November 24, 1927, quoted in Gandhi, The Moral and Political Writings of Mahatma Gandhi, vol. 1, p. 492.
53 Young India, May 12, 1920, quoted in Gandhi, Nonviolent Resistance, p. 111.
55 Young India, June 1, 1921, quoted in Gandhi, Nonviolent Resistance, p. 164.
56 Andrews, Mahatma Gandhi's Ideas, p. 163.
58 Rao, Mahatma Gandhi and Comparative Religion, p. 4.
59 Andrews, Mahatma Gandhi's Ideas, p. 63.
60 Young India, September 11, 1924, quoted in Gandhi, The Moral and Political Writings of Mahatma Gandhi, vol. 1, p. 185.
62 Young India, December 30, 1926, quoted in Gandhi, The Essential Gandhi, p. 211.
64 Andrews, Mahatma Gandhi's Ideas, p. 63.
65 Gandhi, Gandhi on Christianity, p. xii.
66 Young India, May 12, 1920, quoted in Gandhi, Nonviolent Resistance, p. 111.
67 Young India, December 8, 1927, quoted in Gandhi, Gandhi on Christianity, p. 19.
69 Young India, December 31, 1931, quoted in Gandhi, Gandhi on Christianity, p. 21.
70 Heikki Raisanen, "Mahatma Gandhi and the Sermon on the Mount," Telemenos 27 (June, 1991), pp. 92-3
72 Gandhi, Mahatma Gandhi--His Own Story, p. 143.
73 Ibid., p. 145.
74 Andrews, Mahatma Gandhi's Ideas, p. 195.
76 Andrews, Mahatma Gandhi's Ideas, p. ix.
77 Indian Opinion, October 26, 1907, quoted in Gandhi, The Moral and Political Writings of Mahatma Gandhi, vol. 3, p. 18.
78 Ibid.
79 Ibid.
Ye shall know the truth, and the truth shall make you free. — John 8:32.

While channel surfing some time ago, I happened to stop on a talk show where Robert Marcarelli was discussing the production of The Omega Code, starring Casper Van Dien, Michael York, and Catherine Oexenberg. The Omega Code is based on the premise that scholars, through the use of computers, have uncovered a secret key to the Bible Code that is hidden in the Torah, the first five books of the Bible. This code is supposed to contain prophecies of all of human history (1). During the course of the movie, the events of the “end times” are played out.

I was intrigued by this movie for several reasons. First of all, it had a Christian theme. Also, it did quite well at the box office, earning $2.4 million during its opening weekend despite some lukewarm reviews and a limited advertising budget (2). This kind of box office success is unusual for a movie with a Christian theme these days, so I watched the movie. I found it interesting and thought-provoking despite some less than stellar acting.

Having seen The Omega Code, my curiosity turned to the book that inspired much of the plot for this movie, The Bible Code by Michael Drosnin (3). In this New York Times bestseller, Michael Drosnin, a reporter who has worked for The Washington Post and The Wall Street Journal, recounts the events surrounding the discovery of the Bible Code and his personal journey from secular skeptic to true believer who tried to warn Yitzhak Rabin that his assassination was predicted by the Bible Code.

As I read this book, I went through a number of emotions. My initial impression was amazement and maybe a little awe. Could events such as the assassination of Yitzhak Rabin, the moon landing, Watergate, and the Kennedy assassination actually be encoded in the Torah? Could, as claimed by Michael Drosnin, the events of all human history be encoded in the Torah? If his claims were true, this would undoubtedly be the most significant discovery of my lifetime.

Next came a feeling of unease. As I read, I began to formulate questions that needed careful consideration. Why were these prophecies placed in the Bible thousands of years ago for revelation to our generation? These prophecies are encoded in such a way that they could only be read after the advent of the computer. No previous generation could have deciphered them. Are we locked into the prophecies and powerless to change our future? Are they warnings of what might happen if we don’t heed the will of God? Drosnin is unclear on this. In much of the book, he makes the claim that the code accurately predicts real events. He gives many examples of actual events that were revealed from searches of the Bible Code, including the use of the atomic bomb, the election of Bill Clinton to the presidency, and the collision of the Shoemaker-Levy comet with Jupiter. In other places, he implies that the Bible Code tells us what might happen, not what will happen. I was particularly concerned by the fact that he seems to come to this conclusion after some of the predictions of the Bible Code did not appear to come true.

I also became concerned by the fact that so many of the examples given of events encoded in the Bible had already occurred prior to their “discovery.” Other than to help convince us that the predictions are real, what great purpose would be served for God to reveal events that have already happened? In addition, when Drosnin and his colleagues tried to actually predict the future from the Bible Code, they met with mixed success. If the Bible Code truly contained a
chronicle of human history, wouldn’t events in the near future be predicted just as reliably as
events in the recent past? Some of the predictions, such as the assassination of Rabin, could have
been made by most anyone, given the climate of the Middle East at the time.

It also seems to me a strange kind of prophecy that requires one to know a great deal about
an event in order to find the prophecy. For example, the prediction Drosnin discovered indicating
that Clinton would become president was found after Clinton had declared his candidacy. He
couldn’t look for who might win the election four years later because he wouldn’t know what
names to use.

I also began to have concerns about the complexity of the coding of information in the
Torah. For all of human history (or at least warnings of upcoming events) to be encoded in the
Torah, layer upon layer of information would have to be built into the Bible. This
encoding had to be hidden within a document that, when read in the normal manner, reveals not
only a history of the world prior to Moses, but also profound insights into the nature of God. It is
utterly beyond human ability to encode information like this, even if we had knowledge of events
that would occur thousands of years in the future. Only an omniscient and omnipotent God could
do this. Certainly, He could do this if He chose to, but wouldn’t the exact version of the Hebrew
Torah have to be preserved in order for the encoding to be maintained? There are many versions
of the Torah in existence today. Which one would be the authentic original text? This type of
encoding would undoubtedly be lost with the translation of the Torah into any other language.

Finally, Drosnin recounts the discovery of the codes in the Torah by Doron Witztum and
Eliyahu Rips. In fact, in the original article published by Witztum and Rips, the presence of
hidden codes is only rigorously tested on the book of Genesis (4). However, later in the book
Drosnin gives examples of Bible codes that were found in other books of the Bible, including the
Book of Daniel. There seems to be some uncertainty as to which parts of the Bible contain the
codes.

Upon completion of Drosnin’s book and considerable deliberation on the subject, my
unwarranted unease turned to real concern. The original report of the discovery of the Bible Code contains a
rigorous mathematical analysis of the likelihood of the discoveries occurring by chance.
Statistical analysis revealed a 0.0000002 % probability that these discoveries could have arisen
by chance events. The paper was subjected to peer review and published in a highly respected
statistical journal. However, could something have been overlooked? Was there another possible
explanation for these apparently miraculous predictions? None of these concerns or questions
was sufficient to dismiss the Bible Code outright. But they were troubling enough to justify a
deeper search into the validity of the Bible Code. I have spent quite a bit of time familiarizing
myself with the discussions (often heated arguments) about the validity of the Bible Code. I am
now convinced that there is another explanation. A summary of what I have learned follows.

The History of the Bible Code

The idea that there are hidden codes in the Bible is not a new one. The belief in these
encrypted messages can be traced to medieval times and the Kabbalah, a form of Jewish
mysticism (1). Sir Isaac Newton wrote of a hidden prophecy of human history in the Bible.
About fifty years ago, H. M. D. Weissmandel, a rabbi, discovered that if he started with the first
letter of a Hebrew version of Genesis, skipped fifty letters, and did this twice more, he spelled
out the Hebrew word “Torah” (3). This same skip sequence revealed the word “Torah” at the
beginning of Exodus, Numbers and Deuteronomy.
The discoverers of the Bible Code, as described by Drosnin, were Doron Witztum and Elyahu Rips, leading experts in group theory, a field of mathematics (3). Witztum and Rips carried out a formal experiment testing the validity of the Bible codes on the book of Genesis. Witztum and Rips searched the book of Genesis for the names of thirty-two rabbis (referred to as “personalities” in the published work) from Biblical to modern times and their dates of birth and death to see if they were encoded in the first book of the Bible. They took the names from The Encyclopedia of Great Men in Israel. As a control, they searched for the same names in a Hebrew version of War and Peace and in two original Hebrew texts. The names and dates were found encoded together in Genesis, but not in the other works. They calculated the probability of this occurring by chance to be one in ten million. The results of their study were published in Statistical Science in August 1994 (4).

Drosnin first heard of the Bible Code in 1992. He arranged to meet with Rips, and they eventually became collaborators. In September 1994, Drosnin had become so convinced of the validity of the Bible Code that he tried to warn Rabin of the prediction of his assassination in the Bible Code. In November 1995, Rabin was shot in the back.

In 1997, The Bible Code by Michael Drosnin was published. Simon & Schuster took out a full-page ad in The New York Times, touting it as one of the few books to have completely changed the way we view the world (5).

What is the Bible Code?

According to Drosnin, the Bible Codes are encoded in Equidistant Letter Sequences (ELS) (3). Witztum and Rips used a computer to look for words whose letters were distributed at equal distances, in terms of letters, throughout the Bible. They used the Textus Receptus, a standard Hebrew language text of Genesis, in their original experiments on the Bible Code. Using a computer, they removed all the spaces between the words, creating a continuous string 304,805 letters long. Some scholars think that this is the original form of the Torah.

To test for a message in the text, Witztum and Rips had to translate a word, name or phrase into Hebrew. For purposes of illustration, let us assume they were looking for the word “water.” They used the computer to search for it in the long string of letters. The computer program starts with the first letter in the text and looks for every possible skip sequence. First, it looks for the word when there is one letter between each letter in the search word. The program skips every other letter, a skip of 1 (p t w n a b t e s r q i). Next, it starts over and looks for the word when with a skip of two (p t y w n p a b z t l r e m b r q i). It repeats this process, increasing the number of letters skipped each time up to the maximum skip, in this case 304,805/5 or 60,961.

Having looked for the word in all possible skip sequences beginning with the first letter of the text, the computer then starts over with the second letter of the text and repeats the process. It continues to repeat this process until it reaches the last letter of the text. A critical assumption of ELS coding is that the same number of letters is skipped between each letter of the search word. At the end of this process, the computer reports any matches it finds. Obviously, this is a process that could only be accomplished with a computer. It would take a lifetime to do even one search by hand.

Rips and Drosnin took the process one step further. After finding a match, they used the computer to rearrange the letters in the text into rows and columns so a grid was formed such that the letters in the search word were aligned vertically. This required breaking up the text into
a large number of possible combinations of rows and columns. After doing so, they used the
computer to look for other words around the search word that might be related to this word and
give clues to the future.

Let me see if I can illustrate how this works with an example. As a biologist, I might be
interested in whether the Bible has any hidden prophecies about science. I would use a computer
to search for the word “science” in the text of the Bible. I am going to use an arbitrary string of
letters for purposes of illustration. Remember, Rips and Drosnin would have first translated
“science” in Hebrew and then searched for it in the Hebrew version of the Bible, using a string of
304,805 letters.

Here is the string of 35 letters that I will search:

\[\text{is s e f t w c a r c a i v j i t e q p h f n z w x c o p b s e h l}\]

I search the string of letters with my computer, and indeed the word “science” is in the text in
ELS coding. It is found by starting with the third letter of the text and using a skip of four.

\[\text{is s e f t w c a r c a i v j i t e q p h f n z w x c o p b s e h l}\]

Now, I instruct the computer to construct a grid such that the letters in the search word are
aligned vertically. In this example, the possible grids would be 1 row x 35 columns, 5 rows x 7
columns, 7 rows x 5 columns and 35 rows x 1 column. The grid that is 7 rows by 5 columns
accomplishes our purpose.

\[
\begin{array}{ccccccc}
\text{i} & \text{s} & \text{s} & \text{e} & \text{f} \\
\text{t} & \text{w} & \text{c} & \text{a} & \text{r} \\
\text{c} & \text{a} & \text{i} & \text{v} & \text{j} \\
\text{i} & \text{t} & \text{e} & \text{q} & \text{p} \\
\text{h} & \text{f} & \text{n} & \text{z} & \text{c} \\
\text{w} & \text{x} & \text{c} & \text{o} & \text{p} \\
\text{b} & \text{s} & \text{e} & \text{h} & \text{l} \\
\end{array}
\]

The word “science” appears in the grid arranged vertically (in bold). Now let us say that I
am interested in whether the Bible has anything encoded about the compatibility of science and
faith. I look to see if the word “faith” is found close to the word “science.” I find it is there,
starting in the upper right-hand corner and going diagonally towards the lower left-hand corner
(in bold italics)!

\[
\begin{array}{ccccccc}
\text{i} & \text{s} & \text{s} & \text{e} & \text{f} \\
\text{t} & \text{w} & \text{c} & \text{a} & \text{r} \\
\text{c} & \text{a} & \text{i} & \text{v} & \text{j} \\
\text{i} & \text{t} & \text{e} & \text{q} & \text{p} \\
\text{h} & \text{f} & \text{n} & \text{z} & \text{c} \\
\text{w} & \text{x} & \text{c} & \text{o} & \text{p} \\
\text{b} & \text{s} & \text{e} & \text{h} & \text{l} \\
\end{array}
\]
The program developed by Witztum and Rips scored the matches between words by how closely they appeared together and by whether the skips in the search words were the shortest in the Bible (3).

Drosnin’s book contains numerous examples of the grids in which they found the search words in the original Hebrew text. They found such pairings as *Yitzhak Rabin* and *Assassin will assassinate*, *Yitzhak Rabin* and *Amir* (his assassin, discovered only after he was killed), *Clinton* and *President* (discovered six months prior to the election), and *Hitler* and *Evil man*.

I will leave it up to the Hebrew scholars among you to determine if the words were translated properly. I have been told by one scholar that some of the words are not spelled properly!

**Problems with the Bible Code**

As mentioned earlier, there is no simple way to disprove the claims of Rips and Drosnin. The original article written by Witztum and Rips went through the peer review process. None of the reviewers, all expert mathematicians, was able to find a flaw in the work. It was approved for publication by the editor of the journal. Thus, this article went through the same quality control process that all scientific publications do.

Although Drosnin makes much of the credence given to the Bible Code because of its publication in the refereed journal *Statistical Science*, Robert Kass, then editor of *Statistical Science*, prefaced the article with the following quote:

> Our referees were baffled: Their prior beliefs made them think the *Book of Genesis* could not possibly contain meaningful references to modern-day individuals . . . The paper is thus offered . . . as a challenging puzzle. (5, 6)

In other words, he put the paper before the mathematical community for its members to find the flaw in the work.

The results of Witztum’s and Rips’ study were eventually challenged by Brendan McKay, an Australian mathematician, and several other scholars. In order to evaluate the validity of Witztum’s and Rips’ claims, scholars had to carefully analyze the statistical tests of the Bible Code in the article published in *Statistical Science*. In order to evaluate the validity of the tests, they had to look at the experimental design to see if there were any hidden flaws that would invalidate the probabilities of the search words appearing in the Torah by chance. Specifically, they had to examine for any bias in the sampling method that would skew the outcome of the calculations. Drosnin claims that the procedures used by Witztum and Rips to test the validity of the Bible Code were carefully designed and examined by independent experts and “could not be rigged” (3).

After careful examination of the procedure used by Witztum and Rips, McKay and his colleagues did not agree with Drosnin’s assessment (5). Witztum and Rips selected their list of rabbis from *The Encyclopedia of Great Men in Israel*. They chose the names of rabbis from the eighth to the nineteenth centuries for whom the encyclopedia devoted at least three columns of text and for whom a date of birth and death were given. They found thirty-four, although they apparently made a mistake with one whose entry was actually too short.
Witztum and Rips then searched for these names and dates in a Hebrew version of Genesis and calculated the probability that they had occurred in the text by chance. The names of some of the rabbis were found in the text close to their birth or death date. However, most of the rabbis’ names were actually closer to some other rabbi’s date (5).

The rabbis were known by many names, and one rabbi had eleven variations on his name. Dates also appear in Hebrew in more than one form. In one case, six forms of date were used. Having multiple forms of names and dates made it much more likely that the names of the rabbis would be found in the text. McKay questions the protocol whereby Witztum and Rips chose the particular names and dates that were in the list used for the statistical tests (5). Their article does not state how these particular forms of the names and dates were chosen for testing. Rips told McKay that there was no protocol for selecting the names. They only reflect the judgment of S. Z. Havlin, who submitted the names. This leaves room for bias in the selection of the names. Experimental bias can have a huge effect on the calculated probabilities of a statistical test.

Closer examination revealed that many of the dates mentioned in the encyclopedia were corrected, deleted, exchanged or altered in other ways (5). The authors apparently made subjective judgments about which dates should be used. Again, this represents an experimental bias in the creation of the list of rabbis for the statistical test.

McKay and his colleagues came to the conclusion that the selection process for the names and dates left room for the “fitting of tests to the data.” In other words, there are such a multitude of forms of the names and dates that one would be likely to find at least one of the forms in the text. McKay concludes that this resulted in a much higher probability of finding the names by chance than was reported in Witztum’s and Rips’ paper.

As a control, McKay and Bar-Natan also looked for the names of the rabbis in a text the length of Genesis (5). They chose the first 78,064 words of a Hebrew version of War and Peace. They selected their list of rabbis using similar criteria to those used by Witztum and Rips. When they applied Witztum’s and Rips’ statistical tests to War and Peace, the non-Biblical text compared favorably. Thus, the names of the rabbis can be found in a non-Biblical work as well as in Genesis.

McKay and his colleagues do not claim to have proven that Witztum and Rips committed intentional fraud (5). McKay gives a list of choices made by Witztum and Rips when selecting the rabbis and their dates of birth and death. Almost all of the choices made would have increased the likelihood of finding the names in Genesis. This leads McKay to go so far as to say that the list was “made to order” for Genesis and that if Witztum’s and Rips’ list was not “cooked,” then they did enjoy an extraordinary streak of luck. Witztum and Rips continue to claim that their list of rabbis was compiled in good faith and was not altered after seeing the results of the statistical tests.

Names of people who have been assassinated have also been found by McKay in other texts, including a Hebrew version of Moby Dick, using a procedure very similar to Witztum’s and Rips’ (5,6). These names include Rabin, Kennedy, Martin Luther King, Jr., Trotsky and even Drosnin, done tongue-in-cheek by McKay (7)! They even found the same prediction of the impact of the Shoemaker-Levy comet with Jupiter, except McKay found the correct date (8). Complex messages have been found in other texts by other investigators as well (9).

Of the four mathematicians who originally endorsed the Bible Code, none is now willing to support the codes. When the Discovery Channel produced a program on the codes, it could not find a single academic willing to defend the codes (6).
Conclusions

*The Bible Code* was an extremely popular book. In fact, it was a *New York Times* bestseller. It was touted as a book that would change the way we think about the world and was the basis of a TV special. At one time, several versions of software programs were available in a local religious bookstore that allowed the users to search for prophecies in the *Bible*. It was even available recently in the discount software section of a major retail chain. The original paper which served as the basis for the book was published in a respected mathematical journal, having gone through the full peer review process.

Yet serious concerns have been raised about the validity of the Bible Codes. After careful analysis, the statistical results of Witztum’s and Rips’ original paper have become suspect. Suspicions have been raised as to whether the data was manipulated to achieve the desired results of the study. This could have resulted from an insufficiently tight data set, making data fitting possible. Though both Witztum and Rips have denied this, they do seem to have gotten results that are almost too good to be true from a statistical standpoint. I personally doubt that intentional fraud was involved. Even Drosnin, a reporter who has made a great deal of money from the book, believed enough in the validity of the Bible Codes to try to warn Rabin of a possible assassination attempt.

The analysis of McKay and others shows us that there is probably nothing particularly remarkable about Genesis or the rest of the *Bible* in terms of hidden codes, at least not ELS encoded words. It seems that words with ELS encoding can be found in any sufficiently long text. Thus, I feel it is safe to conclude that Witztum and Rips have not found any hidden codes in the *Bible*.

So what is the take-home message from all of this? Christians have a responsibility to critically assess the revelatory claims that are being made today. The truth has always been hard to find. Modern science has added a new dimension to the task of sorting out truth from untruth. By intentionally or unintentionally using pseudoscience (flawed science), people can come to amazing, though equally flawed, conclusions and make claims that have the potential to do a great deal of harm to the Christian faith. This type of pseudoscience has become very sophisticated, and the average person does not have the skills to find the flaws in its claims. In some cases, the flaws are so subtle that only experts in a narrow field of science or mathematics have the training to detect them. Several prominent mathematicians failed to find the flaw in the design of the paper published by Witztum and Rips. Unfortunately, the flaws were only discovered some time after the paper was published and after the work was brought to the attention of the public by a popular book. Because of this, a large number of people have been exposed to the idea, and most of them have probably never seen the work that brings it into question.

So what are we to do? First, we must use the Bible as the ultimate test of the validity of a revelatory claim. Talk to your minister or to a theologian about the theological and doctrinal issues involved. As to the validity of the science, you can also consult experts in the field. I must admit I do not have the math skills required to determine the validity of the arguments involved in Witztum’s and Rips’ paper. I went to the Internet for sources of information on the topic. This led me to the original articles published in mathematical journals and to articles written for the general public which addressed the concerns raised about the Bible Codes. Finally, do your own thinking. Don’t let someone else think for you.
Literature Cited

Playing God:
Aylmer's Pursuit of Perfection in Hawthorne's "The Birthmark"

by Melissa Moore

Nathaniel Hawthorne's wonderfully complex short story "The Birthmark" can be interpreted in a variety of ways, from a superficial love story gone awry to a symbolic and allegorical pursuit of the impossible. The focus in this paper will be in line with the latter possibility that Aylmer, in representing all scientists, is attempting to become God, the ultimate Creator, by pursuing beyond all reasonable cost the purification of Georgiana. It is also worth considering, given the outcome of the tale, what Hawthorne's message to the reader might be.

Aylmer is the quintessential scientist. His laboratory, which he entrusts to a hired hand only briefly, is very mechanical and businesslike. The atmosphere, which is "close" and "tainted with gaseous odors which [have] been tormented forth by the processes of science," reveals that discovery itself is a tormenting experience (508). Also present are a furnace, an electrical machine, and a variety of chemical apparatus. The presence of Aylmer, "pale as death, anxious and absorbed," reinforces the bleak imagery (508). Even Aylmer's assistant, Aminadab, scurries around half-humanly, with "vast strength" and "indescribable earthiness" (504). The scientific explorations become, by virtue of their environment, dirty and impersonal rather than beautiful. Aylmer is well-read as a "man of science" (500). His library reflects the best of philosophers from the Middle Ages, "antique naturalists...[who] imagined themselves to have acquired from the investigation of Nature a power above Nature, and from physics a sway over the spiritual world" (507). Aylmer too has studied the ways of Nature, and he is frustrated with his inability to rise above Nature, stumbling over the truth "that our great creative Mother, while she amuses us with apparently working in the broadest sunshine, is yet severely careful to keep her own secrets, and, in spite of her pretended openness, shows us nothing but results. She permits us, indeed, to mar, but seldom to mend, and, like a jealous patentee, on no account to make" (504). As any aggressive and single-minded individual would attest, knowing that a goal may be unattainable does not make the desire to attain it disappear; rather, it rankles the soul. Aylmer's notebook makes it clear that, in spite of his intellectual understanding of this truth, he has continued to pursue incredibly high standards, so that "his most splendid successes [are] almost invariably failures, if compared with the ideal at which he aim[s]" (508).

Indeed, Aylmer worships science, and indirectly the scientist, rather than God. He is, in a sense, a product of his times. This reality does not deny his responsibility but does make his attitude understandable. Hawthorne sets this tale at a time (the end of the eighteenth century) when the multitude of scientific discoveries caused men to value science as equal to all other things and persons: "the higher intellect, the imagination, the spirit, and even the heart might all find their congenial aliment" in scientific pursuit (500). I would point out how closely this mirrors the Biblical commandment to "love the Lord thy God with all thy heart, and with all thy soul, and with all thy mind, and with all thy strength" (Mark 12:30). The ultimate dream of the
eighteenth century man of science is to "make new worlds for himself" (500), which is exactly what Aylmer attempts—a world without sin.

I believe Hawthorne is arguing that the scientific men of Aylmer's generation are tempted to place their love in science rather than God, and that Aylmer succumbs to this temptation. This conclusion is also borne out by Aylmer's remarks to Georgiana—herself the pitiable sacrifice required by this love of science—when he tells her that, once the procedure is a success, she may "worship me if you will. I shall deem myself hardly worthy of it" (508). Georgiana does indeed value his mind and scientific achievements, and she is grateful for his love "so pure and lofty that it would accept nothing less than perfection" (509). But at the same time, she is aware (thanks to finding his notebooks) of his limitations. It is clear that Georgiana goes along with Aylmer's plans with her eyes open, aware of the potential cost of the experiment.

And why all the fuss over a facial blemish which he "thought little or nothing of" before their marriage (501)? To Aylmer, it is the "visible mark of [Georgiana's] earthly imperfection" (500), a reminder of "his wife's liability to sin, sorrow, decay, and death" (501). A holy God certainly cannot abide the presence of sin, yet only a holy God is capable of providing a remedy for that sin. Aylmer, while shocked and horrified by the birthmark, does not have the moral authority to remove that symbol of fallen humanity. Nature has stamped his beautiful Georgiana with "the fatal flaw of humanity" to show that she is "temporary and finite, or that [her] perfection must be wrought by toil and pain" (501). The paradox is that Georgiana is made perfect in the end, through Aylmer's toil and her pain, only to discover that her physical nature is finite once perfection is achieved. This truth verifies Aylmer's belief that the birthmark is sin, sin which affects not only the surface beauty of one's face or character, but is a "stain [which] goes as deep as life itself" (502). A superficial remedy will not work; it must be rooted out completely (507).

The truth that its presence keeps Aylmer from worshipping his wife (502) may indicate precisely why mankind (save Christ the God-man) is not allowed to attain perfection in this life—otherwise, Hawthorne seems to be saying, we would worship one another (or ourselves) rather than our Creator. Aylmer's promise that he will correct "what Nature left imperfect in her fairest work" shows an arrogant pride to which God must respond (503). Hawthorne says that "we know not whether Aylmer possessed . . . faith in man's ultimate control over Nature," but I believe we do know that Aylmer at least believed it possible, for this is precisely his intention (500).

The story's conclusion is ambiguous. Georgiana has indeed been freed from the power of the birthmark, although the sacrifice of life makes one think it was hardly worth it. Has Aylmer succeeded in his purposes? An examination of the closing lines of the story may shed some light. Once Georgiana's "now perfect" spirit has passed into heaven, "a hoarse, chuckling laugh was heard again!" (511). Based on the context, we have to conclude that this is Aylmer. Has he lost it, now that he realizes he has killed his wife, and what we hear the mad laughter of a lunatic? Or, is it a laugh of joy because he has successfully removed the birthmark (which is his top priority)?

I believe it is the latter, yet Hawthorne carefully chooses his words to show that Aylmer believes he has "triumph[ed] over the immortal essence" which in actuality must go to heaven to be made complete, while all he has done is to help Georgiana's essence reach its heavenly goal (512). Thus, all that has been accomplished is the elevation of the scientist in his own eyes, but
not in reality. Hawthorne argues that Aylmer could have had real happiness with Georgiana had he "reached a profounder wisdom" and been able to look beyond the "momentary circumstance" to eternity (512). But because he could not accept that humanity is fallen and imperfect, that not a scientist but only God can give perfection to mankind, he drives himself and Georgiana into their own Tower of Babel. Hawthorne's last words to Aylmer appear to be that science should be used as a means to reveal God's glory in creation, not as a way to play at being God.

Works Cited

The Soul of Scholarship

by Kina S. Mallard

If scholarship had a soul, how would that change the way we value research? The traditional approach to evaluating faculty scholarship has been to count the number of academic publications and presentations while considering the importance of the journal or conference. There is some merit in this quantitative emphasis because a university’s reputation and ability to acquire grants and funding for research is often based on statistical information. While considering the end result of scholarship may be one way to determine a faculty member’s value, it is not the only way. In fact, one could question if this approach has been successful in increasing scholarship productivity.

In a 1989 HERI Survey, over half the faculty surveyed had written nothing professionally in the past two years, and in their overall career, over 30% had never published an article. According to a 1992 editorial in The Chronicle of Higher Education, 55% of faculty have never published a book, 22% have never published in a professional journal, and almost 30% are not engaged in scholarly research leading to publication. The fact is that most faculty are not prolific researchers.

I believe we need a new approach to scholarship—a paradigm shift that focuses not so much on the end product, but on the person and the research process. Professors in the new millennium are looking for balance, community, understanding and acceptance. Colleges and universities need to discover how to meet the professional development and personal needs of future scholars while maintaining high research standards.

This paper seeks to challenge university leaders to maintain their research mandates and increase the number of professors engaged in scholarship by considering scholar-development stages and developing scholar-mentoring programs, with the end goal of creating a community of dialogue. This approach is key in embracing a new value of scholarship—the soul.

Scholar-Development Stages

Scholar-development can be considered in stages such as establishment, advancement, maturation and withdrawal. When administrators understand the motivation of faculty at different stages of their careers, they can help develop challenging yet realistic research expectations.

The Establishment Stage. The establishment stage occurs when faculty members first begin teaching. Unlike most employees, by the time faculty enter academe they are usually in their late 20s to early 30s. Those who have established a professional career before obtaining their advanced degree are even older; therefore, some may be as young as 25 or as old as 50, but many are novices when it comes to the challenges of teaching and scholarship.

The faculty member’s greatest concern during the establishment stage is the need to acclimate quickly to a new environment. Part of acclimation is learning to set priorities and manage time wisely. New faculty are juggling the complex process of understanding academic life, preparing lectures, establishing their place in the department, grading papers and maneuvering numerous other tasks. These tasks compete with, and add pressure to, the
completion of the dissertation for ABD faculty, and also compete with carving out time for writing and research for those with terminal degrees in hand.

In a study conducted in 1992, Boice found that new faculty procrastinated. They relegated research to a specific time period, usually summer vacation, where there would be large blocks of uninterrupted time available to them. Yet at the end of the summer vacation between their first and second years, an average of only 4.32 verified manuscript pages had been produced. By the end of their second year on campus, an average of an additional 4.21 verified manuscript pages had been written (Boice 87-91).

Productive scholars report that their success depends on scheduled amounts of dedicated scholarship time. Devoting one to two hours daily to research and writing seemed to be a better success strategy than hoping for large blocks of time in the summer. Boice found that new faculty who find only an hour per weekday to write generally manage to submit about 1.5 manuscripts per year, an output level consistent with the expectations of tenure and promotion committees on most campuses. His research further reveals that faculty who adopt a schedule of brief daily periods for writing experience less stress during their first few years on campus (171).

The challenge of acclimation and anxiety about new roles calls for a strong mentor. While new faculty need the encouragement of their department chair (and the chair certainly should fill that role), she also can be perceived as intimidating for new faculty. After all, it was the chair who looked over her glasses and said, “Now you’re sure you can have that dissertation finished within your first year at the university?” While the chair may not be the best mentor at this time, senior faculty—those in the maturation and withdrawal stages—make excellent mentors for establishment faculty. In addition to mentors on campus, new professors should seek relationships within their professional organizations. Chairs and department colleagues can encourage new faculty to continue graduate school relationships and become involved in state, regional and national organizations.

Once the dissertation is completed, faculty may need a respite from scholarship, but it is important that the hiatus be temporary. Academic departments are filled with seasoned faculty lamenting their rusty research skills. The post-dissertation period of the establishment stage can be very exciting for the new professor. During the second or third year of teaching, the professor hits a certain stride where things begin to run as smoothly as can be expected in academic life. At this point, the young scholar needs to partner with others in the department or on campus who are interested in the same research ideas or trained in the same methodologies. A writing regimen that is both practical and productive should be established. Boice offers the following rule of balance:

At most, writing deserves to be a moderate priority, one that can be handled in brief daily sessions amid other, more important tasks. When practiced daily, writing stays freely in mind and requires little or no warm-up time. Perfectionism in writing is best indulged in final revisions, not in initial drafts. Productive writing is best undertaken as a leap of faith, before one feels ready. The most productive and cited writers, surprisingly, balance time spent on writing with that for collegiality and teaching. (170-171)

The transition from graduate school or other careers produces frustration as new faculty seek to understand new expectations and a new culture. Adding to this frustration is concern
about how much research and publication will be expected to gain tenure. Each institution has
different standards, both written and assumed. Colleagues, chairs and deans are in the best
position to communicate the expectations as well as alert the new professor to research
resources available on campus.

The novice scholar may not experience success at first, and colleagues should resist the
appearance of arrogance shown by touting only the elite journals and conferences. Sharing the
soul of scholarship involves helping match the scholar with the best scholarship fit. Some
establishment faculty are ready for top journals and national conferences. Others, like my
colleague Steve, need to experience success at the state level before becoming confident
enough to submit work to regional conferences. Many professional disciplines have state
conferences that provide excellent opportunities for new scholars to share research ideas,
deriver papers in a supportive environment and receive advice from more seasoned professors.

The Advancement Stage. Faculty members with a little experience under their belts
have moved into the advancement stage. Advancement usually occurs between year three and
year seven of academic service; however, the advancement period will vary. At this stage,
faculty have reached a certain comfort level in the classroom and are discovering their research
strengths. These faculty members are usually independent contributors and autonomous
performers who are beginning to clarify long-term career options.

Peer relationships become important during advancement, and therefore administrators
are relied on less frequently for guidance. Faculty are developing their own performance goals
in teaching and research. Administrators and faculty need to be on the same page as far as
promotion and tenure requirements. Chairs and senior faculty should help their new colleague
understand the expectations of the department and the university. Most deans and department
chairs will say they are interested in quality, not quantity, but a quick perusal of their
promotion and tenure standards will reveal a quantitative, not qualitative measurement. As
cynics in the academic profession lament, “Our dean can’t read, but he can count.”

Successful scholars look beyond their university’s research expectations and strive to
meet their discipline’s standards as well. Because the definition of publishing productivity
varies from discipline to discipline, chairs, faculty development personnel and colleagues can
help the advancing scholar interpret these standards. For example, the field of journalism and
mass communications is concerned with the number of publications, while accountants limit
their standards to publications in journal articles. Ernest L. Boyer (1990) writes:

There is, in most disciplines, a fairly clear hierarchy of journals and a recognized
process of peer review. … For example, a department chairman at a ranking research
university reported that “in psychology, all that counts is articles in high prestige
journals. Even books don’t count as much.” Another scholar stated: “Economists
have carefully studied publications and have developed a rank order for them. At
research institutions, one must publish in particular journals. Quantitative studies are
better than qualitative studies.” Another scholar told our researcher, “Books are more
important than articles at the Harvard Business School. And the book must get good
reviews” (29).

Just as the establishment stage is colored by the completion of the dissertation, the
advancement stage is a race toward tenure. The faculty member wishes to attain some kind of
meaningful achievement and is painfully conscious of the kinds of scholarship respected by his institution. Even in colleges and universities whose mission is primarily teaching, research expectations are growing. Faculty at most four-year institutions feel some pressure to demonstrate scholarship. One professor expressed his frustration to me over an informal coffee session:

Once I had the dissertation behind me I thought it would be easy, but I'm not sure where to go from here. I followed the advice of one of my doctoral professors and made a file titled “Future Research Projects.” Now I have a file with a lot of great ideas, but I am lost as to where to start. I need someone to help me focus, to help me find direction.

Faculty during this stage must receive help focusing, or they will lose the research momentum they had while working on their dissertation. During this period, colleagues, department chairs and faculty development centers can help the professor determine what kind of scholarship he/she wants to pursue. Recently, a professor came by our Center for Faculty Development to talk with me about publishing. Feeling somewhat pressured by a new emphasis on scholarship in her department, she shared with me how she had been hired because of her professional experience—to teach practical applications of her content area—not to produce scholarship. As we talked, I realized that producing scholarship for a refereed journal was beyond her skills and desire. Her passion was clearly helping teachers improve their teaching. I asked her about trade publications for practicing teachers, and she brought a few to my office. As we looked through them together, a light bulb came on. “I could write these kinds of articles,” she said. She had found her niche, a place where she could be successful and make a difference in her profession. At some institutions, these applied articles might not be counted as scholarship; however, I hope the academy will see a broader acceptance of and increased value for different kinds of contributions to academic disciplines.

It is critical at the advancement stage for the professor to make some progress in the area of scholarship. If the faculty member isn’t progressing, the chair or mentor should attempt to clarify the reasons for lack of performance. Reasons may vary, but lack of effective research skills, expenditure of an inordinate amount of time on teaching, inability to prioritize tasks, and lack of funding are common reasons for prolonged research efforts.

**Maturation Stage.** The third stage of career development is maturation. During this period, usually post-tenure, the faculty member comes to a plateau. He or she may hold onto career successes and help with less experienced colleagues. However, dissatisfaction could start to set in during this period and the faculty member may need redirection and new challenges. It is important that mature faculty are not dismissed; they still have many good productive years left.

Maturation can be the most rewarding phase for academicians. By this time, faculty have a clear focus on the kind of scholarship that best fits their education and interests, have had some success with presentations and/or publications, and have research goals mapped out for the future. The mid-career scholar is often the most prolific and carries tremendous influence in the department and university. Because of an awareness of the pending stage of withdrawal, maturing professors seek balance between career and family and at the same time have confidence in their abilities and contributions to their discipline.
While this stage is the most rewarding, it can also be extremely frustrating for many scholars. During the maturation stage, faculty become keenly aware of their shortcomings. They tend to compare themselves with the "stars" of the institution or their discipline and may not feel up to standard. Boyer writes, "It is unrealistic to expect all faculty members, regardless of their interests, to engage in research and to publish on a regular timetable. For most scholars, creativity simply doesn't work that way" (27). Many professors publish very few articles, but may involve themselves in scholarship by giving presentations and being active in professional organizations. Recently a new faculty member joined the Education Department at my university. Her dissertation was on a topic related to the research of a senior faculty member. Once their similar interests were discovered, they applied for and received an internal research grant and embarked on a joint research project. Their work culminated in a presentation at a regional university, thus generating ideas for further research.

New faculty can help jumpstart the research productivity of seasoned faculty and prevent mid-career professors from retiring from scholarship prematurely. Establishment and advancement level faculty, eager to learn the ropes and gain credibility in their professions, would be wisely paired with elder faculty. The synergy created by 40-50-somethings working alongside 20-30-somethings can produce exemplary scholarship and build close relationships. Chairs, faculty development professionals and peers can also play a critical role in identifying research support opportunities. Maturing faculty will feel valued when used in training, guiding, influencing, or directing others. Self-confidence, good interpersonal skills, and derivation of satisfaction from others' accomplishments are necessary for successfully surviving this career stage.

Withdrawal Stage. The final stage, withdrawal, marks the beginning of the end of the faculty member's career. During this stage, faculty are preparing to leave. They may be letting go of organizational attachments while feeling a sense of accomplishment and fulfillment. These faculty members are confident of their positions and secure in their jobs. They have earned the right to be heard and therefore are in a position to make things happen.

Motivating faculty members who are withdrawing is a challenge. While they may not be actively involved in research, most still enjoy sharing their research. Including them on scholarship panels and small group research discussions is valuable both to their personal self-esteem and to other faculty. Because elder faculty no longer feel the need to compete for funding, credibility, time, or other resources, they can help encourage younger scholars. Administrators can help them see that working with other faculty and sharing their past research adds to the legacy they will leave behind.

While post-tenured, pre-retirement faculty members are sometimes seen as doing little more than showing up to teach classes, the reality is that many faculty in the withdrawal stage have not thrown in the towel yet. The seasoned faculty member's analytical and problem-solving skills are usually highly developed, and these can add a mature perspective to the new scholar. Their contacts can help the novice faculty member network in his/her field. Paired with an energetic 20- or 30-something, these seasoned faculty members can give them historical perspective and share wisdom from the trenches.

Career stages help us understand our colleagues, and success in each of these stages is dependent upon three key players: the department chair, who is in the best position to identify faculty strengths and weaknesses; the dean, who must be sensitive to workload and resource challenges; and faculty development personnel, who provide guidance, training, strategic
research planning and other forms of support for faculty. In the past, the academic life has been an isolated life. As we consider the soul of scholarship, we must consider the importance of collegiality. One way to help develop scholars while supporting collegiality is through scholar mentoring.

Scholar-Mentoring and a Community of Dialogue

Parker Palmer in *The Courage to Teach* talks about the culture of fear that permeates academic life. Faculty feel disconnected from one another, and the divisiveness created by the competitive race for research money, promotion and tenure pits faculty against faculty. Rather than being a solitary, competitive activity, the best scholarship brings faculty together and mutually reinforces their efforts in research and teaching. Faculty, usually fiercely independent, must admit they need each other when it comes to scholarship development. Establishing mentoring programs is one way to provide opportunities for faculty to collaborate formally in their research efforts.

There is no formula for scholar-mentors, and a quick perusal of mentoring literature poses no clear model for what works. Little has been written about academic scholarship-mentoring except in professor-student relationships. Department or unit leaders should consider carefully the people and processes that best fit their culture.

*The People*

Scholar-mentoring relationships can happen spontaneously and be informal in nature. This is the most productive and beneficial way for mentoring to take place; however, administrators often have to help the process, and having a formally structured mentoring program in place is critical. The chair, dean or anyone responsible for faculty development can select research mentors. Because scholar-mentors will be a new concept to many, it is wise to hand-select the first group of participants and invite them to an informational meeting to discuss the purpose and expectations.

The pairing of scholar-mentors is challenging and must be carefully considered. It may be difficult to pair faculty with similar interests for long-term relationships, especially at smaller colleges where there may be only one Russian literature or media effects scholar. If this is the case, professors should seek relationships within their professional organizations, whether at the state, regional or national level.

Excellent scholar-mentors can come from any of the four career stages; however, faculty in the maturation and withdrawal stages have the most time to devote. They also do not have the added pressure of competing with their mentoree for institutional dollars. The best mentors are optimistic, encouraging and straightforward. They have the best interest of their mentoree in mind and therefore are not shy about giving constructive criticism and helping faculty find venues for completed research.

*The Process*

Successful mentoring is an ongoing process and involves a strong commitment on the part of the mentor and the mentoree. It is generally agreed that good mentoring includes a regular discussion of goals and expectations, flexibility that allows for different work styles and work schedules, and tangible measures of success or accomplishment. The responsibilities of the mentor can range from simple encouragement to participation as an equal partner in the
research process. Ideally, the mentor should support quality research that leads the scholar toward publication. The mentor can work with the scholar to identify and acquire additional skills which enhance the ability to produce scholarship. The successful scholar-mentor relationship will employ various approaches, including the following:

1. Visit with young colleagues and discuss areas of interest.
2. Encourage faculty to publish from dissertation.
3. Help faculty explore different possibilities for presentations/publications in field and match their style to the various publications.
4. Discuss how to rewrite conference papers into journal articles, and how to identify appropriate journals in the field for publication.
5. Help new scholars perfect the craft of submitting abstracts for presentations.
6. Encourage faculty members to submit work to state, regional and national conferences.
7. Develop learning circles to explore grant opportunities.
8. Share relevant articles/research.
9. Help mentorees develop strategies to build on their research.

The scholar-mentor also can help faculty with task management. A common complaint in academe is not having enough time to do research. I remember a conversation I had with my mentor, Dr. Faye Julian, Dean of Undergraduate Academic Affairs at the University of Tennessee. We were talking at a professional conference and I lamented the lack of time to do research. Fresh from completion of my Ph.D., I had accepted a chair position and for two years had pored myself into the administrative tasks needed for my job. I knew my skills were getting rusty, but didn’t see how I could fit one more thing into my day. She replied with great wisdom, “Kina, write about what you do. Write about being a department chair.” As a result of her encouragement, I combined my theoretical knowledge of communication theory with my practical experience as chair of the communication arts department and began writing for The Department Chair Newsletter and other publications.

Administrators and faculty developers can help nurture mentors and mentorees by providing opportunities for the pairs to share their experiences in public forums. Some scholar-mentor programs will result in joint research projects, while others will help faculty build relationships and respect for different research topics and research methods. Stipends for scholar-mentors can provide incentive for recruiting new mentors, but the motivation for continuing as a mentor will come from within.

While scholar-mentoring is a formal way to pair those with common research interests, the ideal situation would be the emergence of a community of dialogue. The new generation of scholars craves collaboration and community. The common academic lore that academic research is a solitary activity is not supported by the literature. Creswell (1985) found that the most productive and cited writers in academe spend as much time networking with colleagues as they do writing. A tenured painting professor at Union University in Jackson, Tennessee, attended a faculty development session on scholarship and reminisced about his graduate school days. “I would get up in the morning and paint the entire day,” he said. “Others who shared the studio with me made comments about my work, and faculty were ready and willing to critique what I was doing. That’s what I miss most about graduate school—the community that helped me be productive.”
Parker Palmer would most likely understand the meaning in that faculty member’s reflection—and perhaps we all do. In order to discover the soul of scholarship, professors need a community that encourages the kind of productivity that comes from formal and informal faculty interaction. I envision a community where dialogue is prevalent, energizing and productive. I experienced this community while writing this paper. I discussed the concept of soul informally with my Christian Studies colleagues and offered my writing to a communications professor within my discipline and a history colleague outside of my discipline for formal criticism. Their comments and suggestions motivated me to revise, refine, and rethink. This paper is stronger as a result of the respect and trust my colleagues and I share. A spirit of helpfulness and collaboration is imperative for creating a community of dialogue.

To understand and practice the soul of scholarship, academicians need a paradigm shift. We need to come down from our lofty perches in our ivory towers and reach out to our colleagues. I offer three strategies to guide campus leaders in changing their department, school, and university culture.

- Foster collaboration, not competition. Resources in higher education are sparse. Only a handful of scholars will receive competitive grants, be chosen for coveted release time to write, achieve entry into the top journals in their field, and be recognized nationally for their work. There are never enough spoils to go around, and good scholars don’t always receive the reward they need. Competition is inevitable, but leaders can work hard to squelch the ills of jealousy and competition. To foster a culture of collaboration, administrators can earmark some research money for collaborative projects, some large development funds can be divided into smaller awards so more faculty can take advantage of them, and departments can hold colloquia for their majors where faculty work together to plan and share research projects.

- Strive to encourage, not discourage. Academicians are known for being critical and cynical. Reaching for the soul of scholarship means intentionally looking for opportunities to encourage your colleagues. Constructive criticism is valuable when asked for and given appropriately, but when unsolicited, it halts research productivity. Look for opportunities to ask colleagues how their research is progressing, to send notes or e-mails when you read about a publication or presentation they have given, and to offer suggestions when prompted. The act of encouragement takes little time and is free. It does take some energy on the part of the encourager, but increases energy for the encouraged.

- Value diversity, not dissention. Research in the academy can be as different as the individual personalities of the professors. My research looks very different from the research of the theatre professor in my department, and my university’s definition of scholarship may be quite different from scholarship at other universities. It is easy for scholars in different disciplines to lapse into criticism and create dissention among colleagues. Much of the criticism is based on a lack of understanding of different fields of study. Faculty development personnel and deans can provide both formal and informal opportunities for scholars to share their research with each other. Interdepartment and cross-campus learning communities can also be established to discuss research and develop research goals.
In conclusion, a new value in scholarship is to envision and relate to the whole scholar—to the soul—a culmination of the scholar’s passion, action, and heart. And as we relate to these scholars as individuals, considering their career stage, we bring them together in community with an emphasis on scholar-mentoring programs and venues for scholarship-sharing. This community of scholars will then work together to establish research principles, programs and processes that reflect an interest in the people behind the product—the soul behind the scholarship.

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**References**


Miles Vandahurst Lynk:
West Tennessee’s Black Pioneer of Medicine

by Mary Platt

DR. MILES V. LYNK

To borrow a phrase from the renowned writer Charles Dickens, “It was the best of times, it was the worst of times.” It was the best of times because the Civil War had come to a close and black citizens were trying, through hardship and endurance, after slavery, to establish their rightful place in these United States of America. It was the best of times because emancipation brought about new attitudes as the former slaves encountered new opportunities and privileges. It was the worst of times for those who felt it best to remain with their former owners because this seemed to be the most logical thing to do. William Coleman, for example, who lived in Jackson, Tennessee, was afraid of working for a stranger and knew of no white man who might hire him. He was forced, therefore, to beg permission from his owner to keep working for just room and board. Coleman was one of four million former slaves wandering around in the defeated South. Although some blacks received land in the South under the Southern Homestead Act of 1866, the impression that every ex-slave would receive “forty acres and a mule” as a gift of the government never became a reality (Robinson 210-211). There were a few so attached to their owners that they ignored their freedom as long as they could.
Miles Vandahurst Lynk, a pioneer of medicine for the black race, was born in West Tennessee (near Brownsville) in June 1871. His parents, Mary Louis and John Henry Lynk, were born slaves and were not in a position to give him the education he desired. However, at the close of the Civil War, they took private lessons in reading and writing and became proficient in reading the Bible; they were both members of the Southern Methodist Episcopal Church before the Christian Methodist Episcopal Church was organized.

The sudden death of Miles’ father left his mother with no visible means of support, but she remembered God’s word from Psalm 146: “The Lord preserveth the strangers; He relieth the fatherless and widow.” A woman of deep Christian faith, she was encouraged by these words as she raised her children and took care of the fifty-acre farm. By the age of eleven, Miles was the head of the farm.

For Miles Vandahurst Lynk, it was the best of times because at the early age of thirteen, he was able to home-school himself, along with some public schooling. With the limited education he received from public school and home schooling, he passed the teacher’s examination. Because of his age, he could not use his certificate. Determined to teach, he set out to the next county to find employment. The opportunity presented itself, and with a certificate of good moral character, signed by a white man, he could be employed. It was William Lynk, his parents’ former slave master, who referred Miles to Colonel Bradford, an ex-confederate soldier (Lynk 23). Also at age thirteen, he became interested in becoming a physician. After a year of tutoring with a local doctor, Dr. J. C. Hairton, he entered Meharry Medical College in Nashville. At the age of nineteen, he graduated second in a class of thirteen. After graduation, he announced that he would open a practice in Jackson, Tennessee. Family and friends from Haywood County advised him not to because of the climate for blacks following the Civil War. However, he opened his practice as planned and found the atmosphere in Jackson to be just the opposite of what he was told, receiving a favorable response. Miles introduced himself to the leading physicians and pharmacists and communicated with them his intent to practice scientific and ethical medicine. He was often called by white physicians to consult with them on important cases.

The first black medical journal published in America was founded and edited by Miles Lynk, at the age of twenty-one. The first issue was published on December 1, 1892, a monthly called The Medical and Surgical Observer. When the new medical journal arrived at the Library of the Surgeon General’s Office in Washington, DC, the staff wrote “Only Negro M. J. in America” at the top of the serials-received book. The first issue included three articles: “Case of Malarial Fever,” by G. W. Rolerfort, M.D.; “Chronic Metritis—Its Etiology and Treatment,” by M. Vandahurst Lynk, M.D.; and “Amputation at the Wrist Joint,” by James M. May, M.D. Despite the lack of financial support, The Medical and Surgical Observer was published monthly for two years. It was a journal that recognized the necessity for a higher standard of medical education and whatever was conducive to its advancement. The purpose of the journal was twofold: to promote the science of medicine by stimulating research, and to bring unity and self-awareness to black medical professionals (53). The journal received written contributions from both black and white physicians.

This premier issue was published in Jackson, Tennessee, by Miles Vandahurst Lynk, M.D. Monthly subscriptions were available for $2.00 per year, in advance, and $1.00 per year, in advance, for students. The Medical and Surgical Observer was devoted to the interests of
medicine, dentistry and pharmacy. The journal included original communications, which were articles submitted by black physicians throughout the United States, with as many as three or four articles per issue. Included also were excerpts from articles re-printed from other medical journals such as the St. Louis Medical and Surgical Journal and The Medical News, editorials, book reviews, news items, and personals.

Included in the journal were advertisements for black medical schools such as Leonard Medical School at Shaw University in Raleigh, N.C., and Meharry Medical Department of Central Tennessee College, Nashville, Tennessee. Additional advertisements included listings for medical supplies, equipment, services, and subscriptions. Subscriptions and revenue from advertisements were essential to the survival of the journal, which ceased publication with the last issue, dated January 1894. This final issue, according to Todd L. Savitt in the Journal of the National Medical Association, did not explain or announce the suspension of operation. However, much can be said as to why the journal ceased. The most revealing reasons were the decline of advertisements, the reduced subscription price, and the scarcity of original articles.

With history in the making, nearly three years after the founding of the medical journal, a medical organization for black physicians was organized in Atlanta, Georgia, in 1895. Three men were instrumental in its formation—Miles V. Lynk; R. F. Boyd, professor of Clinical Medicine of Meharry Medical College; and Prof. I. Garland, Commissioner of the Negro Department of the Cotton State and International Exposition. With Dr. Garland presiding, the name given to the organization was The National Association of Colored Physicians, Dentists, and Pharmacists. Dr. Boyd was elected as its first president. In 1903, the name of the association was changed to the National Medical Association, and the official journal for the association was called The Journal of the National Medical Association.

Again, it was the best of times for Miles V. Lynk, a man of vision who approached Bishop Isaac Lane, President of the Trustee Board at Lane College, and asked if he could bring a law school to the college. Bishop Lane responded that if Lynk would be personally responsible for all expenses, then the law class could be taught at Lane. With this promise from the Bishop, Miles found an instructor to teach, the prominent Memphis lawyer H.R. Sadler. Miles then developed a standard three-year law curriculum and began to recruit members for the class (60).

Enrolled in the first class were J. F. Lane, professor at Lane College, later president; G.A. Payne, principal, Jackson Public School; C. A. Leftwich, teacher at Lane College; Rev. R. E. Hart, pastor of C.M.E. Church; Rev. J. H. Grant, pastor of A.M.E. Church; J. H. Trimble, U.S. letter carrier; C. R. Neely, public school teacher; Sanders Jordan, industrialist; and M.V. Lynk. Law classes began June 1, 1900, with daily classes held at Lane College or in Lynk’s office.

After nine months of study, according to Attorney Sadler, Miles Lynk was ready for examination to be admitted to the Bar. A motion was made to the Circuit Court of Madison County that a committee of the Bar be appointed to examine Miles Lynk to determine if he were morally and mentally fit for admission to the Bar. The Examining Committee included A.W. Stovall, C.E. Pigford, and R. I. Chester, all prominent attorneys. Judge Taylor and Chancellor A. G. Hawkins questioned Lynk to satisfy both the letter and the spirit of the law. According to the minutes of the Circuit Court of Jackson, Tennessee, dated February 13, 1901, Wednesday morning, at 9:00, presiding Judge J. M. Taylor ordered that M. V. Lynk be duly licensed to practice law in the courts of Tennessee.
Again, it was the best of times for Miles Lynk, for this time he learned through a survey he had conducted that facilities for training members of his race for the medical field were inadequate. There was an urgent need for more and better trained black doctors and lawyers. In Tennessee, facilities for white students were plentiful, but as he was concerned to note the lack of such facilities for blacks, he decided to do something about it. He approached black citizens of Jackson such as Rev. R. E. Hart, pastor of the C.M.E. Church; Mr. J. H. Trimble, postman; and Drs. J. L. Light and S. H. Broome, physicians. They applied to the State of Tennessee and were granted a charter of incorporation with liberal powers to conduct a school in the name of the University of West Tennessee. He and the group then looked for a site and facilities for the school. A four-room house with a concrete basement was contracted, and they sent printed announcements to prospective students stating the school would open September 15, 1900.

Miles and his wife mortgaged their home to purchase equipment and furniture for the school. The school was to teach medicine (a four-year course), dentistry (a four-year course), pharmacy (a three-year course), law (a three-year course) and nurse training. There were more than thirty students representing six states enrolled in dentistry, medicine, pharmacy and law. Emphasis was placed upon thoroughness of preparation before the University placed its stamp of approval upon the students.

The school operated in Jackson, graduating three classes in medicine, one in dentistry, one in pharmacy and one in law. All of the graduates passed several state board examinations and were licensed to practice. The students organized a medical society, The M. V. Lynk Medical Society, which met every Saturday afternoon. The first officers of the Society were A. W. Thomas, president, and W. M. Paxton, secretary. This organization gave students an opportunity to discuss medical subjects and thus broaden the scope of their information. Other student organizations included the Young Men’s Christian Association, the Alpha Literary Society, the Athletic Association, and the Vandahurst Musical Quartette.


From its inception, the University attracted students from as many as twenty-two states and foreign countries, including British West Indies, Colombia, Japan, Liberia, the Republic of Panama, the Philippines, and Trinidad. However, the University finally closed its doors in 1923 in Memphis, Tennessee, due to financial reasons. During the twenty-three years of existence (1900-1923), it graduated two hundred sixty-six students. Some of its graduates became renowned physicians, such as Dr. Willard M. Lane, assistant professor of surgery at Howard University, and Dr. John S. Perry, president of the Medico-Chirurgical Society of Washington, D. C. (63).

On May 11, 1941, the Bluff City Medical Society celebrated Lynk’s fifty years in the practice of medicine. His wife, Bebe (Steven) Lynk, worked alongside him for fifty-five years to
support his many accomplishments. After her death in 1948, he got married again in 1949, to Mrs. Ola Herin Moore, a graduate of Tuskegee Institute. Miles died on December 29, 1957, at the age of 86 in Memphis. He is buried in Memphis’ New City Park (“Tennessee’s Legendary Physician” 5).

The first black medical schools in the South were Howard University School of Medicine (1869) and Meharry Medical School (1876). These schools were initially established for the sole purpose of training black doctors to tend to the health needs of their race. “National academic requirements for the M.D. degree required only two years attendance at prescribed lectures with a school year lasting 5-6 months” (Watson 24-25).

In Tennessee by the turn of the century, there were six medical schools established: (1) The Knoxville College Medical Department (1895-1900), formally called the Colored Department at the University of Tennessee; (2) Knoxville Medical College (1900-1910), an independent institution organized in the city of Knoxville after the Knoxville College Medical College closed its doors; (3) The Hannibal Medical College (1889-1896), which was located in Memphis with a racially mixed faculty and graduated five students; (4) Chattanooga National Medical College (1899-1908); (5) Meharry Medical College (1869-ongoing); and (6) Medical Department of the University of West Tennessee (1900-1923), which graduated over two hundred students with thirty-seven percent (37%) passing the State Medical Boards. Only one of these colleges is still in existence, Meharry Medical School in Nashville.

In 1909, Abraham Flexner made a visit to the University of West Tennessee Medical Department to gather data in order to publish a report to the Carnegie Foundation on medical education in the United States. His report revealed the following information about the University: the entrance requirements were nominal; there were forty students in attendance; there were fourteen teaching faculty, all of whom were professors; fees were $2000; the chemistry, pharmacy, and microscopy laboratory facilities had meager equipment, while otherwise the rooms were bare; the students had access to eight to ten beds twice weekly in a small hospital nearby; and there was a dispensary in the school building. Flexner strongly suggested that the University be closed because it could not make any contribution of value to the goal of properly trained physicians, which could only be done by good schools (Flexner 181,305).

Yes, it was the best of times and the worst of times, but in spite of some hard times, Miles V. Lynk was able to overcome many obstacles and accomplish many goals. He left behind a legacy that helped organized black medicine throughout the United States. A man of many talents, his literary ability has not yet been mentioned. He also edited a magazine on black history, literature, and culture and established a publishing house to print and sell books and magazines. He also authored several books.

One cannot help but be inspired by Miles Vandahurst Lynk; his success was due to his faith in God, his desire to help his race, and his humble beginning.
Works Cited

*Circuit Court Minutes.* Jackson, Tennessee, February 13, 1901.


*Medical and Surgical Observer.* 1 Dec. 1892:1-3.

*Medical and Surgical Observer.* 1 May 1893:124-125.


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