

Deming's Philosophy of Transformation: A Christian Critique

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The authors compare Deming's philosophy of transformation with the spiritual transformation that occurs when one becomes a Christian. They suggest that believers can be in partial agreement with Deming, but must embrace a fuller understanding of the depth and implications of biblical metanoia.

Introduction

W. Edwards Deming suggests that the prevailing style of management must undergo transformation, and he asserts that the first step in this process is the transformation of the individual. Deming uses the Greek word *metanoia* to better describe this idea of transformation, a term also used throughout the Bible to suggest repentance and a reorientation of one's life. Deming's idea of transformation (*metanoia*) has both similarities and differences with the biblical notion of *metanoia*.

This paper attempts to examine these similarities and differences through asking the following questions of both Deming's philosophy of management and the biblical record:

What does transformation mean?

What are we to be transformed from?

What are we to be transformed to?

How does the transformation occur?

What are the implications of being transformed?

This paper also attempts (1) to raise the practical questions of where Christians may want to embrace or depart from Deming's philosophy in the actual management of organizations and (2) to examine the Christian view of transformation and its implications for the business world.

A Biography of W. Edwards Deming

A brief biographical sketch of Deming will be helpful in trying to understand his management philosophy. He was born in 1900 and raised in the frontier regions of Wyoming. His formal

education included a B.S. in engineering from the University of Wyoming in 1921, a master's degree in mathematics and physics from Colorado School of Mines in 1924, and a Ph.D. in mathematical physics from Yale in 1927. He worked in such varied places as the Fixed Nitrogen Research Lab, the Census Bureau, and New York University.

Deming first visited Japan in 1947 to help prepare for the 1951 Japanese census. In 1950, he was invited by the Japanese Union of Scientists and Engineers (JUSE) to deliver a lecture course to the "technicians" of Japanese industry. Later that same year, Deming delivered these same lectures to the *kei-dan-ren*, an association of Japan's chief executives. Japanese leaders (both technical and managerial) attribute the impetus for their recent economic success to W. Edwards Deming and the ideas he presented during these lectures.

In recognition of his contribution to the Japanese people, the Japanese government established the prestigious Deming Prize and has awarded it annually since 1951. Two awards are given—one to the individual for accomplishments in statistical

theory and the other to companies for accomplishments in statistical application. Deming is also recognized around the world for his contributions. In ranking "a classic contributor to the field of production and operations management (POM)," the academic POM community named Deming number one (Sower, *et al.* 4).

The cooperative nature of both the people on the frontier and within the farming community made a lasting impression on Deming. He was also highly influenced by Walter Shewhart and Bell Telephone Labs' use of statistical quality control techniques and the stark realities of the Japanese society that greeted him on his first visit just after World War II. There is also some indication that Deming was familiar with Christianity and Christian traditions. His writings mention the problem of parking the car to attend church on Sunday. He comments on St. Paul's acute understanding of systems, and he often quotes the Bible to illustrate or illuminate a point.

Although he was best known as a pioneer in the quality movement throughout the world, Deming was very hesitant to talk about his management

philosophy in terms of total quality management. He usually directed his teachings and conversations toward leadership and change. Peter Senge quotes Deming as saying, "My work is about a transformation in management and about the profound knowledge needed for the transformation. Total quality stops people from thinking" (59).

Transformation

What does transformation mean?

The notion of transformation is found throughout all of Deming's writings and his philosophy of management. For example, the second chapter of his book *Out of the Crisis* is entitled "Principles for Transformation of Western Management." Deming states that the 14 points (Deming's philosophy of management is based on 14 principles) are the basis for transformation of American industry. He later broadens the application to include small and large organizations, the service industry as well as manufacturing, and divisions within a corporation. The second of his 14 points states:

Adopt the new philosophy. We are in a new economic age,

created by Japan. Western management must awaken to the challenge, must learn their responsibilities, and take on leadership for change (Scherkenbach 15).

In discussing this point, Deming asserts that quality must become the new religion (Walton 58). He states:

Point two means in my mind a transformation of management. Structures have been in place in management that will have to be dismantled. They have not been suitable for two decades. They never were right, but in an expanding market you couldn't lose. We will have to undergo total demolition of American style of management, which unfortunately has spread to just about the whole western world (Walton 59).

Even though the notion of transformation is foundational to his philosophy, Deming does not specifically define the term until his most recent book. In *The New Economics*, Deming states:

The first step is transformation of the individual The word *metanoia* is more suitable than transformation. *Metanoia* is a Greek word which means penitence,

repentance, reorientation of one's way of life, spiritual conversion" (95)

Throughout his writings, and especially in his later ones, Deming stresses that this is not just a mid-course correction or a tweaking of current management policy and theory. The use of the word *metanoia* is intentional because Deming believes that Western management and Western thinking is going in the wrong direction. Since the word *metanoia* has spiritual overtones, it is interesting and beneficial to see how the Bible uses this word and the context in which it is used.

The noun *metanoia* and the verb *metanoëo* are used a total of 55 times throughout the New Testament. The English word that it most closely resembles is repentance; it refers to a change of mind. In the Bible, the notion of spiritual conversion and repentance is at the heart of transformation (*metanoia*). The individual, through God's prompting, must turn from sin to the obedience of God's law. It is a complete reorientation of one's life, because sin and God's law are total opposites and God cannot tolerate sin.

There are numerous clarion calls to transformation throughout

the Bible. Previous to Jesus' ministry on earth, John the Baptist called for *metanoia*: "In those days John the Baptist came, preaching in the Desert of Judea and saying, 'Repent, for the kingdom of heaven is near'" (Matthew 3:1-2). At the beginning of his ministry Jesus echoed these same words: "From that time on Jesus began to preach: 'Repent, for the kingdom of heaven is near'" (Matthew 4:17). In Mark 1:14-15, the idea of a movement or reorientation is clear: "After John was put in prison, Jesus went into Galilee, proclaiming the good news of God. 'The time has come,' he said. 'The kingdom of God is near. Repent and believe the good news!'" After Peter healed a crippled man near the temple, he preached to the crowd: "Repent, then, and turn to God, so that your sins may be wiped out, that times of refreshing may come from the Lord" (Acts 3:19).

In attempting to understand the meaning of transformation, it is important to distinguish between individual transformation and corporate or organizational transformation. Deming begins with the individual, but most of his writing describes thinking, behavior, and decisions that must

happen at the organizational level for the transformation of organizations to occur. This is where much of his emphasis on the need for knowledge of systems, variability, interactions, and psychology come into play. Deming sees the transformation of the individual as the necessary precursor to the transformation of the organization. The Scriptures (God's Law) call for institutions to practice justice, families to practice love, and businesses to practice charity and stewardship independent of the transformation of the individual. These norms are all part of the creation order and can be discovered by non-Christians. On a practical level, individual repentance would seem to be the best way for justice, love and stewardship to be promoted.

What are we to be transformed from and what are we to be transformed to?

On an organizational level, Deming states that we should be transformed from the present style of Western management. This style is characterized by a certain mindset found within Western managers, both individually and collectively, in the form of the prevailing management theory. According to Delavigne and Robertson, much

of this mindset has been influenced by Frederick Taylor's theory of scientific management, B.F. Skinner's materialistic determinism, and John Dewey's theories regarding man as merely a machine. This mindset is characterized by a number of underlying assumptions: a belief in management control as the essential precondition for increasing productivity; management control by use of external incentives; a belief in the possibility of optimal processes; a narrow view of process improvement; low-level suboptimization; recognition of only one cause of defects—people; separation of planning and doing; a failure to recognize systems and communities in the organization; and a view of workers as interchangeable, bionic machines. Deming describes those with this mindset as: "living in prison, under tyranny of the prevailing style of interaction between people, between teams, between divisions" (*New Economics* 124). Deming is crystal clear on this point. He perceives the current mindset as extremely harmful to the health of our organizations and repeatedly calls for us to be transformed from our present managerial thinking and practices.

According to Deming's philosophy, we need to be transformed to a new way of thinking, a new perspective and outlook, and a new set of objectives. Individuals need a new way of looking at the world and the implementation of this new perspective in an organizational context will lead to optimization—everyone wins. Deming states that evidence that a company has adopted this new mindset is the implementation of his 14 points. However, the primary problem in trying to implement these points, and thus the lack of success with quality initiatives, is the fact that individuals and organizations have never truly been transformed.

The need for this transformation in management thinking has been made all the more urgent by new theories that have surfaced during the past 60 years that question our understanding of our world (for example, the statistical theories of Shewhart and the chaos theory of Poincaré). Delavigne and

Robertson suggest these theories have led to paradigm shifts in our understanding of the following: certainty about our knowledge; causality; the nonlinearity of system dynamics; the nature of knowledge; variation, randomness and complexity; the repeatability of processes; and the fact that important information may be unknowable. Given this new knowledge, Deming calls us to overthrow our management theories and practices because they are grounded in assumptions

that are wrong and knowledge that is outdated.

According to the biblical record, we are also living in prison, but in this case the tyranny is that of the kingdom of

darkness. Our situation is desperate and sin grips us throughout our entire lives and to the core of our innermost beings. Most importantly, our need for transformation also has an eternal dimension. In Jesus' words: "I tell you, no! But unless you repent, you too will all perish" (Luke 13:3).

But by God's grace, individuals undergo a transformation that takes us from

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the kingdom of darkness to God's kingdom of light. Through Christ's sacrifice on the cross, we are now eternally justified before God and, "Therefore, there is now no condemnation for those who are in Christ Jesus, because through Christ Jesus the law of the Spirit of life set me free from the law of sin and death" (Romans 8:1-2). In our everyday lives, this transformation penetrates us to the very core, although it takes the rest of our lives to work itself out (sanctification). The notion of sanctification has some parallels in the idea of continual improvement—the fact that one never truly arrives. Deming states that noticeable, measurable improvement may take a long time in coming and therefore, the "fruits" of our labors may not be immediately apparent. Nonetheless, the biblical emphasis is that the old form must be shed in order for the new form to take root (see Colossians 3:9-10).

The mental attitude and perspective found in Deming's philosophy and the biblical record have other similarities as well. One such aspect deals with the servant role to be played by management and Deming's view that: "we must throw overboard

the idea that competition is a necessary way of life" (*New Economics* 124). In its place, he calls for cooperation. This compares closely with Christ's teaching in Mark 9:34-35: "But they kept quiet because on the way they had argued about who was the greatest. Sitting down, Jesus called the Twelve and said, 'If anyone wants to be first, he must be the very last, and the servant of all.'"

How does the transformation occur?

According to Deming, "the first step is transformation of the individual. This transformation is discontinuous" (*New Economics* 95). Once the individual is transformed, the transformation can be extended to the situations or systems around him. This transformation requires "profound knowledge," and that profound knowledge comes from outside the system and by invitation (*New Economics* 94-108). To invite this transformation, one has to realize that one is in need or that there is a crisis. Unfortunately, managers usually wait for a crisis to occur instead of dealing with the problems at an earlier stage.

In many ways, our transformation into believers is similar to the process that

Deming describes (or his process is similar to the Christian metanoia). For Christians, our transformation also begins with us as individuals, although God does call us in the covenantal context of our families and churches. We are then called to be a transforming influence within our culture. Our transformation is also discontinuous: "For he has rescued us from the dominion of darkness and brought us into the kingdom of the Son he loves" (Colossians 1:13). Although it is not always the case, a crisis can bring about the realization of the need for transformation. In all cases, we are prompted by the Holy Spirit and therefore realize the depth of our sin and the necessity of our *metanoia*. This is analogous to the profound knowledge that Deming describes.

What are the implications of being transformed?

Deming's notion of transformation and his suggestions for management behavior have much to offer to Christian men and women in the workplace as well as to students preparing for the secular business world. As Christians, however, we must be careful to test all ideas in the crucible of biblical

wisdom.

Similarities between Deming and biblical teaching. Deming makes large claims for the result of being transformed. In many ways they are quite similar to what the Bible suggests will happen to believers when they are transformed as a result of God's grace through the operation of the Holy Spirit. For Deming, the implications of being transformed are significant and extend to all of life. Deming suggests that "once the individual understands the system of profound knowledge, he will apply its principles in every kind of relationship with other people." As a result of this understanding, "the individual, transformed, will perceive new meaning to his life, to events, to numbers, to interactions between people" (*New Economics* 95). In addition, "the result will, in time, be greater innovation, applied science, technology, expansion of market, greater service, greater material reward for everyone. There will be joy in work, joy in learning. Anyone that enjoys his work is a pleasure to work with. Everyone will win; no losers" (*New Economics* 126).

Deming suggests that the transformation he describes will also affect family life. He states:

“In the first place, parents cooperate; both win Transformed, the family will be a living demonstration of cooperation in the form of mutual support, love, and respect” (*New Economics* 75). In summarizing Deming’s philosophy, Delavigne and Robertson state: “A common error concerning W. Edwards Deming is to assume that his philosophy is limited to product and service quality improvement . . . or that he is ‘the prophet of total quality.’ We want to get Deming off the quality shelf, and have him recognized for his contributions to a unique philosophy of life, a world-and-life view that applies to parents, teachers, and other members of communities, in addition to the typical management audience” (8).

In the Bible, the implications of being transformed are of utmost significance and should also extend to all of life. Deming’s ideas about the implications of transformation are in many ways analogous to the notion of the Lordship of Christ. The Bible is explicit in that our transformation in Christ should have an impact throughout all of our life, including our actions. To illustrate, in Luke 3:7-14, new believers ask John the Baptist

“what should we do then” in response to their “transformation.” John told the man with two tunics to share with him who had none, the tax collector not to collect any more than required, and the soldiers not to accuse people falsely and to be content with their pay.

In the short run, that is, our present-day life, the result of our transformation will be not only great joy but also suffering. “But the fruit of the Spirit is love, joy, peace, patience, kindness, goodness, faithfulness, gentleness and self-control. Against such things there is no law” (Galatians 5:22-23). “Not only so, but we also rejoice in our sufferings, because we know that suffering produces perseverance; perseverance, character; and character, hope” (Romans 5:3-4). This element of suffering for righteousness sake is not part of Deming’s notion of transformation, but we know that it is a central part of the Christian life.

The transforming work of Jesus Christ should also have implications on our family life. “Wives, submit to your husbands, as is fitting in the Lord. Husbands, love your wives and do not be harsh with them. Children, obey your parents in

everything, for this pleases the Lord. Fathers, do not embitter your children, or they will become discouraged” (Colossians 3:18-21).

The transformation of individuals from the kingdom of darkness also has profound implications for the creation as a whole. In Romans 8:19-23, Paul writes:

The creation waits in eager expectation for the sons of God to be revealed. For the creation was subjected to frustration, not by its own choice, but by the will of the one who subjected it, in hope that the creation itself will be liberated from its bondage to decay and brought into the glorious freedom of the children of God. We know that the whole creation has been groaning as in the pains of childbirth right up to the present time. Not only so, but we ourselves, who have the firstfruits of the Spirit, groan inwardly as we wait eagerly for our adoption as sons, the redemption of our bodies.

This passage suggests the role that Christians in business can play in liberating the creation and beginning to bring creation into the glorious freedom of the children of God.

Ultimately, the result of the transformation of the individual will be eternal life with God. “Jesus said to her: ‘I am the resurrection and the life. He who believes in me will live, even though he dies; and whoever lives and believes in me will never die’” (John 11:25-26).

Seeing what happens with Christians—people who have been transformed by the Holy Spirit—may give us reason to pause and consider the claims that Deming makes for people who “understand the system of profound knowledge.” If the implications of the transformation that occurs through God’s Spirit take our entire life to complete, we may find that any “transformation” that occurs through Deming’s profound knowledge will be even less visible than the small changes that we often see among Christians. For as Christians we know that “now we see but a poor reflection as in a mirror; then we shall see face to face. Now I know in part; then I shall know fully, even as I am fully known” (1 Corinthians 13:12). In contrast, Deming might argue that quality improvement has not really taken place because a true transformation has not taken place in the minds of Western

management. An argument could be made that Christians have also not been effective in transforming the world because they have not truly been “*metanoiaed*” themselves.

Differences between Deming and biblical teaching. Deming’s view of mankind may be overly positive in light of the message of the Bible. In *The New Economics* (125, see figure and text) Deming suggests that people are born relatively good; it is the system that they live and work within that causes most of the problems and that leads to humiliation, fear, etc. A change in the system will go a long way toward restoring the relative goodness inherent in man. We do not believe the biblical record goes along with this notion. Although we are made in the image of God, the reality of original sin is present so that we are born sinful. By ourselves, even without any negative influences from any system, we will choose sinful behavior. We were created good, however, and through Christ’s redemption, we can return to that original goodness in a partial way. When Christ returns, when we live in the new heavens and the new earth, then we will obtain the perfection that mankind originally had.

Never again will there be in it an infant who lives but a few days, or an old man who does not live out his years; he who dies at a hundred will be thought a mere youth; he who fails to reach a hundred will be considered accursed. They will build houses and dwell in them; they will plant vineyards and eat their fruit. No longer will they build houses and others live in them, or plant and others eat. For as the days of a tree, so will be the days of my people; my chosen ones will long enjoy the works of their hands. They will not toil in vain or bear children doomed to misfortune; for they will be a people blessed by the LORD, they and their descendants with them. Before they call I will answer; while they are still speaking I will hear. The wolf and the lamb will feed together, and the lion will eat straw like the ox, but dust will be the serpent’s food. They will neither harm nor destroy on all my holy mountain, says the LORD (Isaiah 65:20-25).

We believe, therefore, that Deming is too optimistic about what can happen as a result of the transformation that he suggests. First, because it is not the true

transformation that takes place when we come to know Jesus Christ, and second, because he does not see the full impact of sin in the world.

According to Deming's philosophy of management, the knowledge of systems is one component of the profound knowledge required for individuals to be transformed. In evaluating the systems in which workers are subjected to, Deming believes that 85-90 percent of all problems are the result of these systems and not of the workers. As a result, Deming may be letting non-managers off the hook in saying that the system is the primary determining factor for their performance and enjoyment of their jobs. Individual responsibility is stressed for managers but others seem to be controlled by the system. The Bible commands that *all* workers be responsible no matter what the system is; we must be good stewards. "Slaves, obey your earthly masters in everything; and do it, not only when their eye is on you and to win their favor, but with sincerity of heart and reverence for the Lord. Whatever you do, work at it with all your heart, as working for the Lord, not for men, since you know that you will receive an inheritance

from the Lord as a reward. It is the Lord Christ you are serving" (Colossians 3:22-24).

How should Christians react to Deming's philosophy of management? One important issue for all those involved in business is our definition of success. We must be careful not to adopt secular notions of what a successful business or successful business person will achieve. Even though Deming in many ways appears sympathetic to Christian principles, bringing glory to God is not the ultimate objective of his philosophy. In the Sermon on the Mount, Jesus preaches: "So do not worry, saying, 'What shall we eat?' or 'What shall we drink?' or 'What shall we wear?' For the pagans run after all these things, and your heavenly Father knows that you need them. But seek first his kingdom and his righteousness, and all these things will be given to you as well. Therefore do not worry about tomorrow, for tomorrow will worry about itself. Each day has enough trouble of its own" (Matthew 6:31-34).

Jesus' definition of success flips the secular definition on its head:

Jesus called them together and said, "You know that the rulers of the Gentiles lord it over

them, and their high officials exercise authority over them. Not so with you. Instead, whoever wants to become great among you must be your servant, and whoever wants to be first must be your slave—just as the Son of Man did not come to be served, but to serve, and to give his life as a ransom for many” (Matthew 20:25-28).

Another obligation that teachers of Christian students in business have is to impress upon their students the biblical truth that our struggle is at its core a spiritual battle. This is beyond what Deming or others who suggest changes in management philosophy would realize. If we try to serve God in our position as workers and leaders in business, we will meet opposition. This opposition is not merely from people who have different philosophies, but is also from the kingdom of darkness. This is not to suggest that anytime we meet opposition it is from the devil; many times people will resist us because we are indeed wrong. However, when we attempt to serve God, we can be certain of spiritual resistance.

Finally, be strong in the Lord and in his mighty power. Put

on the full armor of God so that you can take your stand against the devil’s schemes. For our struggle is not against flesh and blood, but against the rulers, against the authorities, against the powers of this dark world and against the spiritual forces of evil in the heavenly realms (Ephesians 6:10-12).

In his book *Christ and Culture*, H. Richard Niebuhr suggests a number of different positions that people have held throughout history concerning the relationship of Christ and culture. Each one of these positions has implications for the roles Christians should take in the business world. The position “Christ above culture” would allow Christians to be involved with businesses, but would see these pursuits as subsidiary to the true business of the believer, the salvation of one’s and others’ souls. The primary focus of a Christian with this view will be to use his or her job as a vehicle to witness to others on a personal level. A more extreme view of the relationship is that of “Christ against culture.” In this case a Christian might see business activity as evil in itself and not choose to work in this area. Those who hold the position Niebuhr describes as “Christ of

culture" fail to see any great tension between Christ and our culture as it currently exists, but instead identify Christ in terms of what is best in civilization. Those who maintain this position may fail to cast a critical eye upon American business practices but instead become enamored with businesses that are successful according to traditional measures. The fourth position Niebuhr describes is that of "Christ the transformer of culture." In this view the believer lives "in awareness of the power of the Lord to transform all things by lifting them up to himself" (195). For students hoping to enter the business world, this puts forth the notion of a valuable vocation through which they can transform both business and the world beyond.

In *The New Economics*, Deming discusses what a school of business should teach its students: "A school of business has obligation to prepare students to lead the transformation, to halt our decline, and turn it upward" (146). Christians in business can wholeheartedly agree with this statement and may incorporate some of Deming's principles, but we must go beyond what Deming outlines in his writings on leadership and change and

embrace a fuller understanding of the depth and implications of transformation.

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